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A Guide to Curricular Integration

Embedding Participatory Community Development in Higher Education

Practical suggestions for incorporating participatory local development learning experiences into university curriculum.

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Foreword

Welcome to this specialized resource on curricular integration, designed specifically for the integration of educational materials on **participatory community development** into university curricula.

Our journey began with locally conducted **design thinking sessions**, which paved the way for the design of innovative curriculum proposals focused on community development. Following this, **co-design sessions** further developed these ideas into a **curriculum prototype** featuring open educational resources such as interactive books and videos that cover key topics such as participatory community engagement, community pedagogies, and reflective practice.

This material discusses the **theoretical underpinnings** of curricular integration and offers concrete **examples** and **case studies** on how these open educational resources can be effectively woven into higher education curricula to enhance learning experiences. The document includes a spectrum of integration approaches—from connected to networked models—each crafted to meet the unique educational needs and goals of participatory community development.

The examples provided are drawn from actual **implementations** across the PROMENHANCE partnership, providing insights into both the successes and challenges encountered. These case studies serve as a practical toolkit for educators, administrators, and curriculum designers aiming to enrich their educational practices in this vital area.

We trust that this guide will inspire innovative approaches to teaching and learning, fostering a more integrated and reflexive educational environment.

Meet the consortium

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What is curricular integration?

In recent years, universities and colleges have been dealing with changes in the job market, mainly due to advancements in technology (Aoun, 2017; Brankovic & Cantwell, 2022; Harrison et al., 2022; Kamp, 2020). These changes mean that graduates need to have not only specific technical skills but also a dedication to ongoing learning and a keen awareness of societal issues (Aoun, 2017). The challenges we face today are complex and require solutions that draw on various fields and types of knowledge (Roehrig et al., 2021). This need leads to the idea of curriculum integration, which is based on the understanding that real-world issues often span multiple disciplines, unlike the separated subjects usually found in schools.

Curriculum integration involves connecting different subjects in a way that helps students see how everything fits together to form a bigger picture. Curriculum integration refers to the idea or process of bringing the content of different subjects together, which have traditionally been treated as distinct and separate (Kreijkes & Greatorex, 2024). This approach ties different areas of knowledge together and makes learning relevant to real-life situations. The goal is to merge various subjects to achieve broad educational goals, not just the goals of one specific subject, focusing on learning that really matters (Fan et al., 2021).

Fogarty and Pete (2009) highlighted that the main purpose of an integrated curriculum is to identify the heart of curriculum planning and break down the barriers between subjects to create meaningful and cohesive learning experiences. Essentially, all approaches to designing curricula aim to help students grasp and link the knowledge they gain to the practical challenges they will face (Aranda et al., 2020; Herschbach, 2011; Kertil & Gurel, 2016).

What is curricular integration?

James Beane, a key proponent of curriculum integration (1993, 1997, 2005), sees it as fostering learning that is relevant and centered around topics that both teachers and students find significant.

Recently, the approaches to combining different subjects in education have been so diverse that Klein (Frodeman et al., 2017) grouped them into three categories:

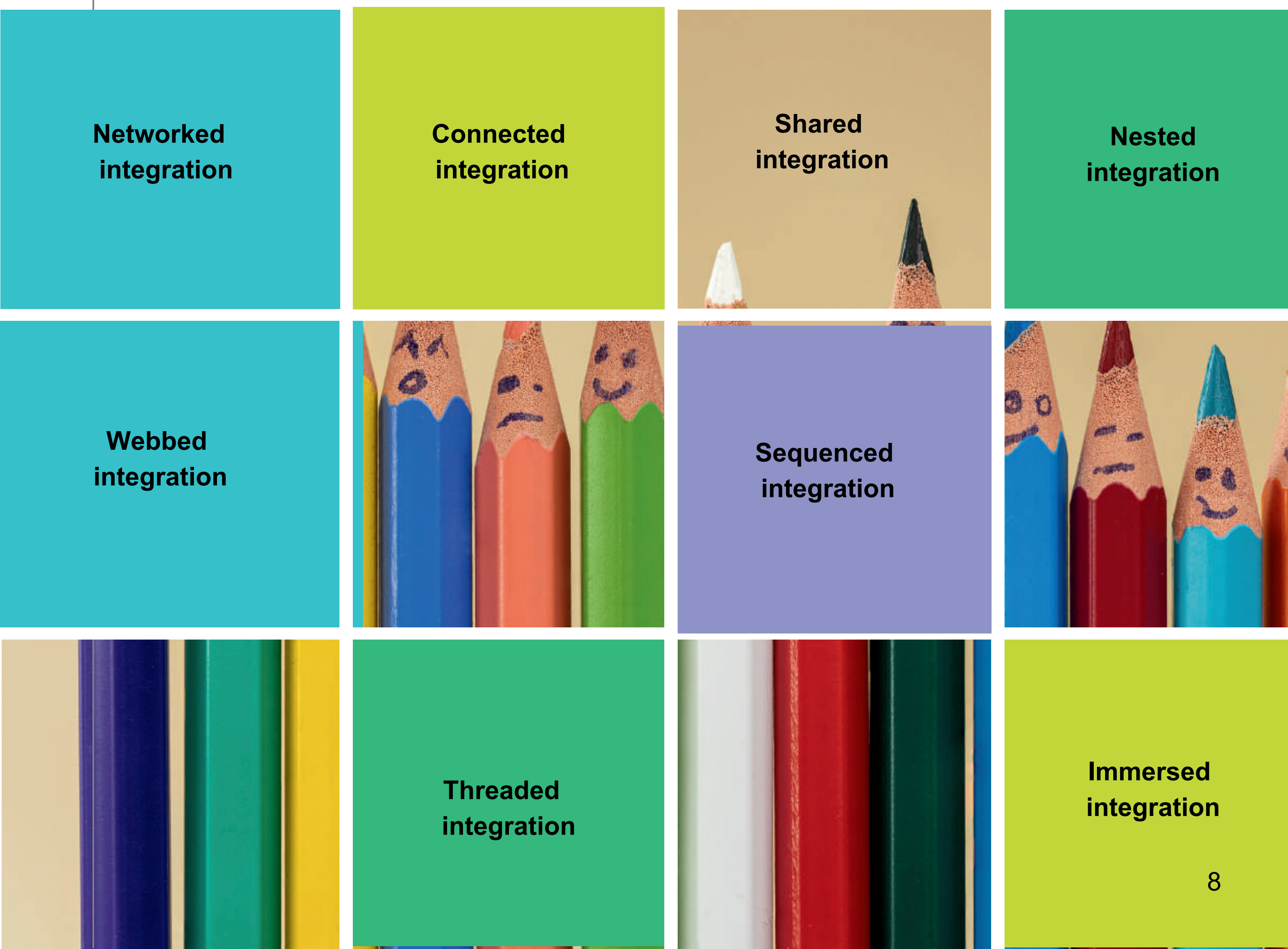
- **multidisciplinary**, which supports cooperation between disciplines without actually blending their distinct content;
- **interdisciplinary**, where there is some mixing of subject boundaries, but these boundaries still exist; and
- **transdisciplinary**, where traditional disciplines aren't the focus anymore. Instead, real-world problems or similar issues take center stage, making the lines between subjects much less distinct (Garcia-Huidobro, 2018).

In this material, our approach focuses on **interdisciplinary integration**, but the open educational resources created by the consortium can be used in multidisciplinary and transdisciplinary approaches as well.

Models of curricular integration

Curricular integration is an educational approach that blends learning objectives and content from different disciplines to offer students a more coherent and connected learning experience. There are several models of curricular integration, each designed to cater to different educational goals and institutional contexts. These vary in the extent of integration and are grouped into approaches of integrating within single disciplines, across several disciplines, within learners themselves and across networks of learners (Kreijkes & Greatorex, 2024).

Networked integration "involves processes of collaborative, co-operative and collective inquiry, knowledge-creation and knowledgeable action, underpinned by trusting relationships, motivated by a sense of shared challenge and enabled by convivial technologies" (Networked Learning Editorial Collective, 2020). European university alliances can serve as an example of a networked curriculum. These alliances represent collaborative efforts among universities across Europe to enhance the educational experience by creating interconnected programs and sharing resources.



Models of curricular integration

Connected integration

Shared integration

Nested integration

Connected Integration Model. Connected integration in curriculum design refers to structuring course content so that topics and concepts are explicitly linked both within and across academic years. This approach ensures that ideas are not only presented sequentially but are also connected in a way that emphasizes their relationships. It fosters a deeper comprehension by showing how different pieces of knowledge interconnect and build upon each other, facilitating a more cohesive and integrated learning experience. For example, in a *Teaching practicum* Master's course concepts and theories about the role of schools within educational ecosystems are integrated. Service-learning is employed as a pedagogy to actively engage students with communities. Through this approach, students conduct needs analyses, provide targeted services, manage projects, and reflect on these processes to deepen their understanding and apply theoretical knowledge. Moreover, students build new bonds of interest with other experts (e.g., community partners) through networking (Fogarty & Pete, 2009).

Nested Integration Model refers to how we are explicitly nesting life skills and process standards into core curricular content. Within each subject area, the teacher targets multiple skills: a social skill, a thinking skill, and a content-specific skill. For example, in a class on computer-aided design and manufacturing (CAD/CAM) software, students learn to use these tools and the instructor also encourages them to develop their visualization skills through direct practice. Additionally, the course includes a segment on ergonomics where students design furniture for future educational environments (Fogarty, & Pete, 2009, p. 40).

Shared Model: Shared planning takes place in two disciplines in which overlapping concepts or ideas emerge as organizing elements (Fogarty & Pete, 2009). For example, a faculty member from public administration might work with a social work expert to co-teach a module where participants study case management within the context of policy development, allowing them to explore overlapping themes like social welfare and government policy.

Models of curricular integration

Sequenced integration. Topics or units of study are rearranged and sequenced to coincide with one another. Similar ideas are taught in concert while remaining separate subjects. In the PROMENHANCE project, the undergraduate students and early-carrer professionals took the e-learning course *Collaborative futures* and then participated in a winter school to apply the knowledge in practical contexts.

Webbed integration: Webbed curriculum represents the thematic approach to integrating subject matter. In higher education or adult education, a thematic approach might link subjects through a central theme like "Sustainable Urban Development." Students might take courses in urban planning, environmental studies, and public policy, with each course tying back to the central theme by exploring different aspects of sustainable cities, creating an interconnected learning experience.

Threaded integration. involves weaving overarching themes or big ideas, such as critical thinking, problem-solving, or community development skills, across various modules or subjects. This metacurricular approach emphasizes the consistent application of these core competencies throughout different areas of study.

Immersed integration. In the immersed model, learners deeply engaged in a particular field naturally begin to merge disciplines on their own. They approach all content through the perspective of their personal interests and expertise, independently drawing connections between their specialized area and new knowledge they encounter (Kreijkes & Greatorex, 2024). For instance, instructors could recommend the e-learning *Collaborative futures* to their students for self-paced learning.

Immersed integration

Threaded integration

Sequenced integration

Webbed integration

Planning for curricular integration

The "*Collaborative Futures*" curriculum prototype, developed as part of the PROMENHANCE Project, offers an innovative approach to mastering participatory community development. Building on Jacobs' phases of curricular integration (1991), we offer a set of recommendations for integrating this e-learning course into already existing curriculum.

Research Phase:

- Internal Research: Assess current course offerings to identify potential overlaps and integration points with the "Collaborative Futures" curriculum. This involves reviewing course objectives, content, and learning outcomes to ensure alignment and to avoid redundancy.
- External Research: Engage with other institutions that have adopted similar curricula and participate in academic conferences focused on community development. This will provide insights into best practices and innovative teaching methods.

Proposal Development:

- Curriculum Review and Enhancement: Select a module or topic that could be enriched by integrating elements from the "Collaborative Futures" curriculum. Focus on areas such as community engagement, project management, community pedagogies, refelctive practice, and advocacy which are core to the prototype. Decide on the type of integration that could be most beneficial.
- Approval Process: Present the enhanced curriculum proposal to departmental boards and curriculum committees for feedback and approval. Once approved, prepare for pilot implementation by developing necessary resources.

Pilot Implementation:

- Implementation and Monitoring: Launch the pilot program within selected course, incorporating the "Collaborative Futures" modules. Monitor the implementation process closely, collect data, and solicit feedback from both students and other parties involved in the pilot (e.g., community partners).
- Adjustments and Evaluation: Based on the feedback, make necessary adjustments to the curriculum integration. Evaluate the effectiveness of the pilot in achieving desired learning outcomes and enhancing student engagement.

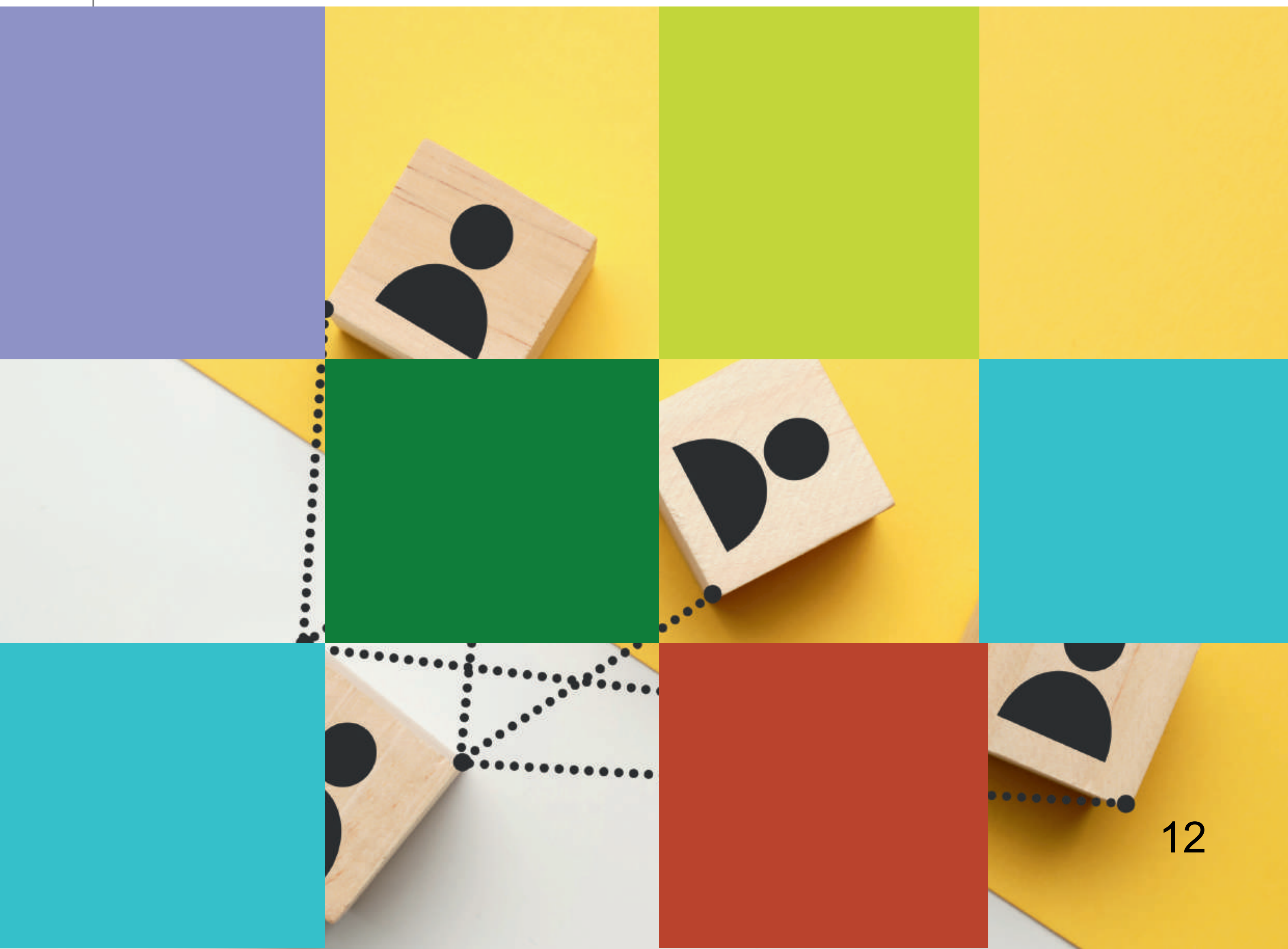
Full Implementation:

- Sustainability and Continuous Improvement: Establish mechanisms for continuous feedback and curriculum updates to ensure the program remains relevant and effective. Consider partnerships with external community organizations to enrich the curriculum and provide practical learning opportunities for students.

Designing for success

To ensure the successful integration of the "Collaborative Futures" learning activities and educational resources into higher education and adult curricula, we have developed a set of case studies and integration proposals.
These materials are designed to showcase practical examples and effective strategies for incorporating the "Collaborative Futures" curriculum into various educational settings.

Each case study highlights specific integration techniques and outcomes from different disciplines, providing educators with actionable insights and guidance.



Recommendation no 1: Laying the Groundwork for Participatory Community Development in a COIL Context

Organization & Authors: Dionisia Koutsi @ Commonspace co-op
Type of curricular integration: Networked & Webbed

Short description

Module 2 “Theoretical Foundations” is a core subject related to local development planning and can be integrated in several interdisciplinary university curricula at master level. A proposed type is the one of COIL (Collaborative Online International Learning) Courses which can be realised by the hybrid participation of university students of more than 2 universities, is proposed fostering collaboration across institutions and fields. This supports its integration in existing master programmes as an optional course or subject. The course structure introduces students to key concepts of sustainable cities and communities, including place-based design, sustainable solutions and participatory planning. Aiming to bridge distinct fields, the module builds interdisciplinary skills in climate resilience, inclusivity, and human-centered planning, equipping students with the necessary background to tackle complex planning challenges.
Student engagement is enhanced by the course’s hybrid format, which can also include hands-on workshops and fieldwork, providing practical experience in real-world settings. Learning outcomes reflect strong competencies in sustainable and participatory planning, intercultural collaboration, and evidence-based design. While scheduling and hybrid interaction presents challenges, flexible participation options will help address these issues.

Competences				
Theoretical Foundations	Community Assessment and Analysis	Planning and Strategy Development	Community Engagement and Participation	Project Management and Implementation
Collaboration and Networking	Advocacy and Political Engagement	Capacity Building and Empowerment	Reflective Practice and Professional Development	

Recommendation no 1: Laying the Groundwork for Participatory Community Development in a COIL Context

Organization & Authors: Dionisia Koutsi @ Commonspace co-op
Type of curricular integration: Networked & Webbed

Reflection on challenges

A proposed collaborative hybrid course has several difficulties, which involves the matching of academic calendars of different universities and the facilitation of meaningful collaboration of participants in a hybrid format but at the same time it also ensures a significant advantage for the learners. Hybrid format ensures flexible participation not only for students but also from external professionals, creating a basis for dialogue and interaction among different types and levels of professionals.

Additional resources

Examples of implemented courses of this nature can be found in Greece as the InPlanEd project, Erasmus+:
Project website: https://www.inplaned.eu/

Open Learning Platform: https://helios.ntua.gr/course/view.php?id=6190&lang=en

Recommendation no 2: Strategic Foundations for Sustainable Development: Integrating Planning and Strategy in Higher Education

Organization & Authors: Lusófona University
Type of curricular integration: Networked & Webbed

Short description

Territorial planning principles vary by region, but understanding planning theories enables the design of community-focused development strategies, regardless of administrative differences. Module 4 - Planning and Strategy Development - aims to prepare participants to understand and apply territorial planning and management tools, focusing on their purpose, design, and implementation. It emphasizes sustainability, strategy monitoring through management indicators, and adapting to country-specific standards while fostering a broad understanding of territorial planning systems. Recommended curricular integration methods are webbed - the course uses a thematic approach centred on territorial planning and sustainable development, connecting topics such as stakeholder participation, strategic community planning, impact indicators, and sustainability principles, and networked, as this module emphasizes community engagement, collaborative planning, and integration of global and local perspectives.

Both webbed and networked models promote active learning through exploration, application, and collaboration, fostering deeper engagement compared to passive methods. By connecting learning to real-world issues and personal interest and their focus on interdisciplinary connections, these models trigger intrinsic motivation and broaden students' perspectives, increasing curiosity and understanding of how concepts interrelate. Additionally, a hybrid course delivery model enables participants to balance their learning with other commitments and accommodate a geographically dispersed audience, making the course accessible to more learners.

Future Implications: The course can drive impactful community development by equipping participants with the skills to design inclusive, sustainable plans that adapt to evolving local needs and align with global goals like the SDGs, ensuring ongoing relevance and preparing learners to continuously apply and refine their knowledge in diverse contexts.

Recommendation no 2: Strategic Foundations for Sustainable Development: Integrating Planning and Strategy in Higher Education

Organization & Authors: Lusófona University
Type of curricular integration: Networked & Webbed

Competences				
Theoretical Foundations	Community Assessment and Analysis	Planning and Strategy Development	Community Engagement and Participation	Project Management and Implementation
Collaboration and Networking	Advocacy and Political Engagement	Capacity Building and Empowerment	Reflective Practice and Professional Development	

Reflection on challenges

Teaching strategy concepts to audiences without prior experience in strategic planning and project management presents a significant challenge. To address that, course content was structured to start with foundational concepts and gradually progress, emphasizing the importance of contextual variations by using practical examples relevant to the audience’s context to ensure engagement and demonstrating how strategic planning adapts to different cultural, social, or economic conditions, empowering participants to apply these principles effectively in their unique environments.

Recommendation no 3: Project Management Essentials: Integrating Best Practices into Local Development Initiatives

Organization & Authors: Lusófona University
Type of curricular integration: Connected

Short description

The Project Management and Implementation module provides a comprehensive introduction to project management, equipping participants with the knowledge and skills needed to effectively plan, execute, monitor, and close projects. Through a structured exploration of the project life cycle, students will learn how to define project scope, allocate resources, manage risks, and communicate progress using industry-standard tools and techniques
A connected integration model is recommended as this module focus on core concepts within a field of knowledge. The course emphasizes project management fundamentals, such as planning, execution, risk management, and reporting. Each concept builds on and integrates with the others to provide a comprehensive understanding of project management.
Engagement can be more effective when students perceive how each topic builds on previous ones. By presenting a unified, interrelated structure, and exploring the specifics of Local Development Projects, the course ensures students see the value and purpose of each topic within the broader framework, making the learning experience more engaging and meaningful. Regarding the course delivery model, a hybrid delivery can enable participants to balance their learning with other activities and include a geographically dispersed audience, making the course accessible to a broader audience.

Future Implications: Skilled individuals trained in project management can lead efficient and impactful local development projects, effectively addressing economic, social, and environmental needs. Their skills will enable them to manage projects across diverse contexts, contributing to community resilience, and long-term societal improvements. Better planning, execution, and monitoring will foster professionalism and accountability, building confidence among stakeholders.

Recommendation no 3: Project Management Essentials: Integrating Best Practices into Local Development Initiatives

Organization & Authors: Lusófona University

Type of curricular integration: Connected

Competences				
Theoretical Foundations	Community Assessment and Analysis	Planning and Strategy Development	Community Engagement and Participation	Project Management and Implementation
Collaboration and Networking	Advocacy and Political Engagement	Capacity Building and Empowerment	Reflective Practice and Professional Development	

Reflection on challenges

Engaging students in learning project management concepts while motivating continuous learning can be challenging. The course's phased structure, aligned with the project life cycle, builds confidence by introducing concepts progressively, from initiation to closing. Collaborative approaches like group projects, role-playing, and scenario-based exercises can enhance engagement, though time and delivery model constraints may limit their use. By integrating tools such as Gantt charts, risk matrices, and aspects related to local project deployment can demonstrate the real-world application of theoretical concepts, making learning relevant.

Recommendation no 4: Integrative Approaches in Community Engagement: A Summer School Experience

Organization & Authors: S-nodi
Type of curricular integration: Networked and Webbed

Short description

The Summer School on Community Engagement, held in Torino from June 3-7, 2024, is part of the LTT Activity under the HECSOs project, financed by the Erasmus+ Program of the European Union. This educational initiative targets both undergraduate and graduate students, as well as professionals in the fields of urban planning, public administration, and social work, emphasizing practical immersion in community engagement.

The curriculum employs a networked, webbed, and sequenced integration approach, facilitating an interdisciplinary linkage between theoretical knowledge and practical applications in a collaborative milieu. This integration is particularly suited for the complex and dynamic field of community engagement, allowing participants to apply diverse academic concepts in practical, real-world contexts.

Students enroll in the *Collaborative Futures* course and then attend interactive lectures, hands-on workshops, and direct field experiences with local organizations. Tools such as stakeholder analysis maps and community engagement canvases are used alongside teaching strategies that emphasize participatory learning and reflection on real-world challenges and opportunities in community engagement.

An innovative aspect of this integration is the use of an experiential pedagogy based on a "learning by doing" approach, where theoretical discussions are immediately followed by practical, community-based applications. This approach is designed to reinforce learning through active participation and to foster a deep understanding of the impact of community engagement strategies in diverse settings.

Recommendation no 4: Integrative Approaches in Community Engagement: A Summer School Experience

Organization & Authors: S-nodi

Type of curricular integration: Networked and Webbed

Competences				
Theoretical Foundations	Community Assessment and Analysis	Planning and Strategy Development	Community Engagement and Participation	Project Management and Implementation
Collaboration and Networking	Advocacy and Political Engagement	Capacity Building and Empowerment	Reflective Practice and Professional Development	

Reflection on challenges

On of the main challenge is how to guarantee that learners access the resources and the course with a common understanding of basic elements and specific language so that the contents can be fully useful for both students with some previous knowledge of the topic and students with no previous confidence on the themes addressed and analyzed.

Recommendation no 5: Weaving Participatory Development into Higher Education: A Multidisciplinary Curriculum Initiative

Organization & Authors: Università Degli Studi Di Torino
Type of curricular integration: Webbed

Short description

The Curriculum Development Workshop on October 17th, 2023, highlighted an innovative approach to integrating participatory development into higher education curricula.

This integration, classified as "Webbed," interlinks various disciplines—such as political science, anthropology, sociology, architecture, design, and community psychology—to foster a comprehensive understanding of participatory local development. The primary aim is to update and refine professional profiles within public administration and civil society organizations (CSOs) by introducing interdisciplinary tools and cross-sectoral studies.
The curriculum targets higher education students and professionals, focusing on the principles and practices of participatory development. This includes community engagement, participatory planning, and inclusive decision-making techniques. Students learn through a "learning by doing" methodology, which emphasizes hands-on experiences and active engagement, enhancing the learning process by connecting theoretical knowledge with practical applications.

Key components of the curriculum include facilitating communication, conflict resolution, and analyzing case studies of successful participatory development projects. This approach not only aims to enhance individual competencies but also seeks to build communities of practice capable of sustaining long-term, participatory territorial development processes.

Recommendation no 5: Weaving Participatory Development into Higher Education: A Multidisciplinary Curriculum Initiative

Organization & Authors: Università Degli Studi Di Torino

Type of curricular integration: Webbed

Competences				
Theoretical Foundations	Community Assessment and Analysis	Planning and Strategy Development	Community Engagement and Participation	Project Management and Implementation
Collaboration and Networking	Advocacy and Political Engagement	Capacity Building and Empowerment	Reflective Practice and Professional Development	

Reflection on challenges

Implementing a multidisciplinary curriculum on participatory development presents key challenges, including harmonizing diverse academic disciplines, preparing faculty with the necessary interdisciplinary teaching skills, and securing robust institutional support. Additionally, engaging students in hands-on learning and developing appropriate assessment methods are critical hurdles that need addressing to ensure both the effectiveness and sustainability of the curriculum.

Recommendation no 6: Cityscapers: Crafting the Blueprint for Sustainable Urban Evolution

Organization & Authors: National University of Science and Technology POLITEHNICA Bucharest
Type of curricular integration: Connected and Webbed

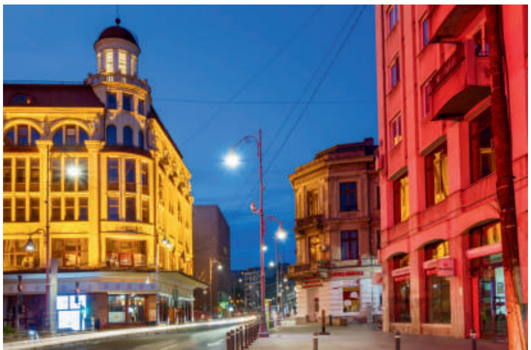
Short description

The "Cityscapers" course offers a transformative educational journey for students and professionals interested in the innovative field of smart urban development. Designed for both undergraduate and graduate levels, this course attracts urban planners, architects, policymakers, and all who are passionate about shaping sustainable cityscapes. The course aims to equip participants with the skills necessary to design, analyze, and implement smart urban projects that prioritize sustainability, community, and innovation. The ultimate goal is to prepare learners to contribute effectively to the urban planning sector, driving advancements in creating more livable, resilient, and inclusive cities.

This microcredential employs a connected and webbed curricular integration approach. By connecting fundamental and advanced concepts across multiple urban development disciplines, the course ensures a holistic understanding of how different elements of city planning interact and complement each other. This integration is pivotal for addressing the multifaceted challenges of modern urban environments.

Participants engage in a comprehensive curriculum that includes lectures on green transportation and sustainable buildings, workshops on data-driven urban planning, and hands-on projects with local communities. Each element is designed to reinforce the core competencies of smart city development, emphasizing sustainable, efficient, and sociable urban spaces.

A standout feature of this microcredential is its emphasis on experiential learning through field projects and collaboration with city officials and planners. This real-world application is supported by advanced technological tools and data analytics, preparing participants to face current and future challenges in urban development dynamically.



Recommendation no 6: Cityscapers: Crafting the Blueprint for Sustainable Urban Evolution

Organization & Authors: National University of Science and Technology POLITEHNICA Bucharest
Type of curricular integration: Connected and Webbed

Competences				
Theoretical Foundations	Community Assessment and Analysis	Planning and Strategy Development	Community Engagement and Participation	Project Management and Implementation
Collaboration and Networking	Advocacy and Political Engagement	Capacity Building and Empowerment	Reflective Practice and Professional Development	

Reflection on challenges

On of the main challenge is how to guarantee that learners access the resources and the course with a common understanding of basic elements and specific language so that the contents can be fully useful for both students with some previous knowledge of the topic and students with no previous confidence on the themes addressed and analyzed.

Recommendation no 7: Designing learning for and with communities

Organization & Authors: National University of Science and Technology POLITEHNICA Bucharest
Type of curricular integration: Connected & Nested

Short description

The *Teaching Practicum* course at the National University of Science and Technology POLITEHNICA Bucharest is an example of integrating *Collaborative Futures* into a curriculum focused on service-learning and digital empowerment. Offered as part of the Master of Science Program in Engineering Education and Teaching, the course is particularly active at the *Ion Iorgulescu* Secondary School in Argeș County.
This course effectively incorporates the "Nested" type of integration into its curriculum. This model involves embedding service-learning components within the core curriculum, focusing specifically on digital empowerment and STEM subjects such as robotics, virtual reality (VR), and 3D printing.
In this nested integration, pre-service teachers engage in service-learning projects aimed at increasing student engagement and interest in STEM subjects like robotics, virtual reality (VR), and 3D printing. Through these initiatives, students apply their engineering knowledge and develop essential pedagogical skills such as learning design, assessment techniques, classroom, and team management. The hands-on approach ensures that pre-service teachers are well-prepared to foster engaging and inclusive learning environments. This approach ensures that the service-learning experience is deeply connected to their primary educational goals, fostering a cohesive learning experience that aligns practical application with academic theory.
Furthermore, the tools outlined in Module 10 of the *Collaborative Futures* course are utilized in the reflection process. These tools, which include the Reflect Matrix, Value Proposition Canvas, and Experience Map, are integral to helping students articulate and analyze the impact of their teaching, thereby enriching their understanding of both the theoretical and practical components of their education. This comprehensive use of reflective tools ensures that students can monitor their progress and gain insights into their personal and professional development throughout the course.

Recommendation no 7: Designing learning for and with communities

Organization & Authors: National University of Science and Technology POLITEHNICA Bucharest
Type of curricular integration: Connected & Nested

Competences				
Theoretical Foundations	Community Assessment and Analysis	Planning and Strategy Development	Community Engagement and Participation	Project Management and Implementation
Collaboration and Networking	Advocacy and Political Engagement	Capacity Building and Empowerment	Reflective Practice and Professional Development	

Reflection on challenges

Despite many successes, there were challenges. One significant issue was the initial reluctance of some pre-service teachers go to that school. Additionally, logistical challenges such as transportation and available equipment occasionally hindered the smooth execution of service-learning projects.

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