Bologna, February, 14 2024

Research Project: Database on university students for mapping students' skills, students' sustainability competencies, job market needs and graduates' employability.

<u>**Description and research objective**</u>

The research project is connected to the PNRR GRINS Project - Spoke 3: Households' Sustainability – WP2 Database on university students. The research project seeks to analyze the role of Higher Education Institutions (HEIs) within the public value framework, moving beyond the New Public Management paradigm (Moore, 1995, 2013, 2014). Focused on the post-NPM era, the project emphasizes societal outcomes over mere efficiency, considering HEIs as contributors to public value (Broucker et al., 2017; Steccolini, 2019; Bracci et al., 2019). Specifically examining the institutional mission of "teaching," the project investigates the impacts on students, encompassing social and economic dimensions (FPA, 2020). With a focus on employability, the research explores the relationship between students' competencies and skills and job-market requirements (Aragon-Correa et al., 2017; Figueiró and Raufflet, 2015). It also addresses the increasing demand for socially and environmentally responsible behaviors, suggesting the need for new sustainability-related competences (Haigh et al., 2015; Banerjee, 2011).

Collaborating with consortium universities and public/private institutions, the project aims to map students' skills and align them with companies' competency needs. It extends a methodology for mapping sustainability skills and develops a comprehensive database integrating various variables (Paletta et al., 2019; Paletta and Bonoli, 2019). Sub-objectives include generating a codebook, implementing surveys on students' skills, creating a dashboard on employability themes, and producing scientific output, including literature reviews on research themes. The project demonstrates a comprehensive approach to understanding and enhancing students' employability within the broader context of societal and economic impacts.

The project aims to achieve the following specific objectives:

1. Collaborate with project partners to design and implement a survey assessing students' skills. Transform academic course syllabi into a structured map of disciplinary and multidisciplinary knowledge and skills. Feed this information into a data platform, providing valuable insights for academic governance and placement offices. Pilot Project with Companies: Develop and execute focus groups and surveys as part of a pilot project involving collaboration with companies. Collect information on job-market requirements to facilitate the alignment of students' skills with industry needs.
2. Collaborate with project partners to develop the Codebook on the university students' dataset. This step set the stage for research themes related to external and internal dynamics affecting employability with a focus on transversal skills, included sustainability
3. Collaborate with project partners to develop a Dashboard focusing on research themes related to employability dynamics, with an emphasis on transversal skills, including sustainability.
4. Generate scientific output in terms of a literature review on the research themes and articles investigating the skills needed for sustainability and the progress of higher education institutions in providing them.

Required competencies:

Master's degree in Statistics, Computer Science, Computer Engineering Data Science, Economics, Management Engineering, Management.

We are seeking a candidate with experience big data transformation management and analysis

The proposed project will have a duration of **21 months**.

The research objectives include team work with partnered universities, participation to team meetings, group work with partnered universities, management of privacy issues.

Composition of the research group

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Giulia Leoni (Department of Management, University of Bologna)

Publications relevant to the research project

Alimehmeti, G., Fia, M., & Paletta, A. (2024). The sustainability-to-employment pipeline: the impact of SDG-related curricula on graduates' employability. «STUDIES IN HIGHER EDUCATION», 1-15.

Fia M., Ghasemzadeh K, Paletta A. *How higher education institutions walk their talk on the 2030 Agenda: a systematic literature review*. «HIGHER EDUCATION POLICY», 2022.*Online first*

Degli Antoni, G.; Fia, M.; Sacconi, L., *Specific investments, cognitive resources, and specialized nature of research production in academic institutions: why shared governance matters for performance,* «JOURNAL OF INSTITUTIONAL ECONOMICS», 2021, n.d., pp. 1 - 22

Facchini C.; Fia M., *Public Sector Reform in Italian Higher Education: The Governance Transformation of the Universities — A Comparison Among Perceptions of Rectors and Department Chairs*, «HIGHER EDUCATION POLICY», 2021, 34, pp. 560 - 581

Paletta A.; Bonoli A., *Governing the university in the perspective of the United Nations 2030 Agenda: The case of the University of Bologna*, «INTERNATIONAL JOURNAL OF SUSTAINABILITY IN HIGHER EDUCATION», 2019, 20, pp. 500 – 514

Paletta A.; Fava F.; Ubertini F.; Bastioli C.; Gregori G.; Camera F.L.; Douvan A.R., *Universities, industries and sustainable development: Outcomes of the 2017 G7 Environment Ministerial Meeting*, «SUSTAINABLE PRODUCTION AND CONSUMPTION», 2019, 19, pp. 1 – 10.