Intersecting Research between Pro-Nursing and Eduworks Network

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Overview

Introduction to Eduworks

- Eduworks is a MCA-ITN funded under the FP7 framework
- Objective:

  "train talented early-stage researchers in the socio-economic and psychological dynamics of labour supply and demand matching processes at aggregated and disaggregated levels"

- Comprises of
  - 12 Early Career Researchers
  - 3 Experienced Researchers
  - 6 Primary Research Institutions from 5 Countries
  - 13 Associated Partners
  - 3 Data SME participants (CELSI, Corvinno, Netpositive)

Introduction to Eduworks

eduworks
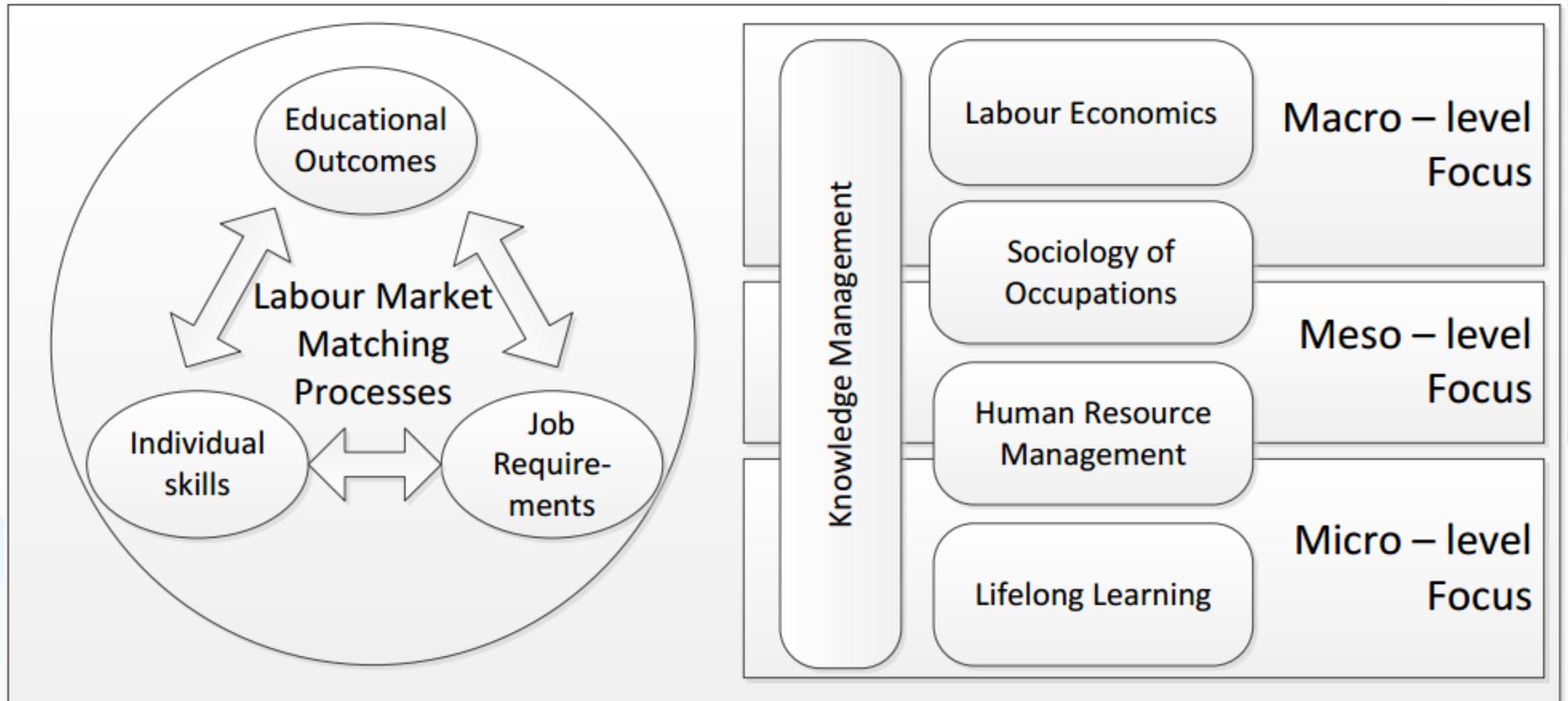
Case study 1: Tasks and wages

- "Task implementation heterogeneity and wage dispersion" by Visintin, S., Tijdens, K., Stienmetz, S., & De Pedraza, P. (2015).

- Analyzed10 occupation-specific tasks across hundreds of occupations and thousands of individuals from US online data

- Key findings relevant to nursing:
  - Nursing assistant professionals: Low variability in wages correlated to increased task homogeneity
  - "task-related theories, which have demonstrated their ability to explain employment structure and evolution over time, can also help in explaining wage variation"
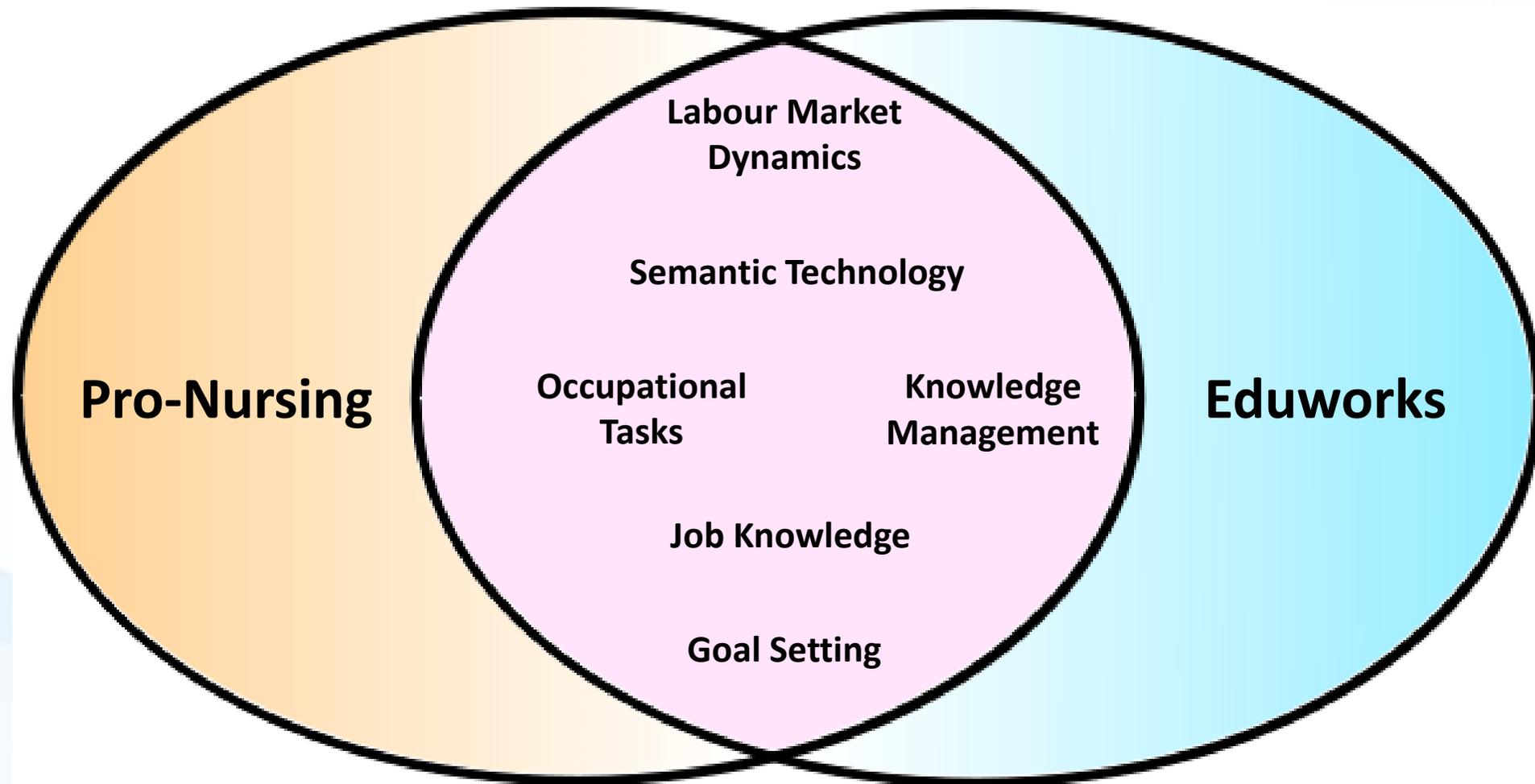
Case study 2: Skills requirements in health

- "Skills Requirements for the 30 Most-Frequently Advertised Occupations in the United States - An analysis based on online vacancy data" by Beblavý, M., Fabo, B., & Lenaerts, K. (2016)

- 40,127 and 96,937 advertisements analyzed for medical assistants and nursing assistant positions respectively

- Key Findings:
  - Nursing and medical assistant roles have both strong market demand and in turn, strong demand for specialized skills training
  - Medical assistant advertisements frequently required stress-resistance as a characteristic of the applicant
  - Factor analysis revealed nursing positions required specialized training, licenses, ability to learn, and flexibility

Case study 3: Labour market driven learning analytics

- "Labour Market Driven Learning Analytics" by Kobayashi, V., Mol, S., & Kismihók, G. (2014)

- Research objective:

  Develop an application that presents derived labour market information alongside student activity/performance data to guide students as they navigate toward their desired employment

- Key findings:

  - Proposed methods for linking educational data to employment data
  - Determine current demand for skills and the type of education and experience companies are looking for in job-seekers

Intersections of Eduworks and Pro-Nursing

- Contextualised case studies from Eduworks maps to relevant Pro-Nursing dimensions
- Big data provides increasing resolution of micro-level activities and individual labour markets such as nursing
- Goal setting and recommenders for appropriate learning materials relates to the objectives of Pro-Nursing
- Need to generate a list of common data-sets (variables) between the two projects
- Future collaborative research on applying the methods of job knowledge analytics and semantic technology