Post-secondary Education and the Development of Skilled Workforces:

Comparative Policy Innovation in Brazil, Finland and the U.S.
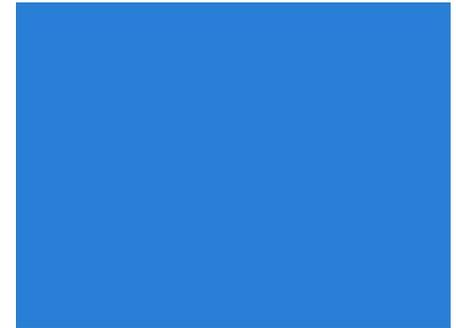
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Regions of Innovation: Technological and Scientific
Networks as Drivers for Socio-Economic Development Panel

24th World Congress of Political Science
July 28, Poznan, Poland

Georgia Tech | Center for Advanced Communications Policy
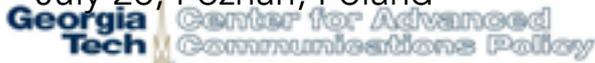
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+ Overview

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+ Frames: Key Diversity Perspectives

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Introduction:
Innovation, Education, and Workforce Development
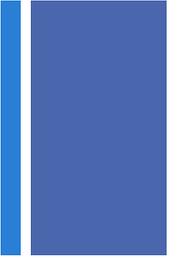
- **Importance of post-secondary learning in a global economy**

- **Shift from "education" to learning/training approaches that match employer needs to workforce skills – new partnership synergies**

- **Status Quo, doing the same thing is not working**

- **Revolt of the stakeholders (bottom-up drivers of change)**
  - **Learners, Employers, Institutions, Technological Innovators**

- **Policy as a tool for driving innovation and change**

Skills and Education
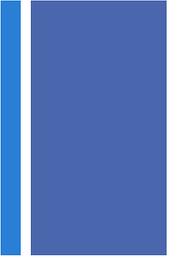
- Equating "skill" with educational attainment is a typical indicator — representative of the dysfunction present in current policy approaches

- Continuum of learning: Technical Training -> Advanced Skills -> Higher Ed

- Coding training, alternative credentialing and other postsecondary skills acquisition – decouples analytic skills and learning from traditional university settings/approaches

- Breaking the mold –innovative approaches that focus on skills and workforce readiness as an equally valuable outcome to traditional university education

Technology, Innovation and Workforce Trends
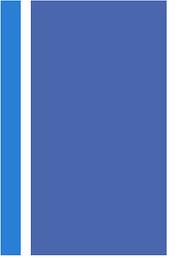
- Technological change simultaneously raised the demand for skill and automated routinized worker tasks ("teched" out of a job")

- Advances in ICTs make mid-skill routinized tasks easy to automate (e.g. repetitive manufacturing work), lowering the labor market demand for affected individuals

- ICTs allow work to be re-constructed into a set of activities or tasks that occur at the point in time when they are needed to complete an objective

- Skilled trade workers provide rapid prototyping capabilities & efficient implementation of innovation in the manufacturing process – they can rapidly observe and address inefficiencies in the manufacturing process

- Their shrinking ranks, reduce economic options for national growth as well as as opportunists for employment

Postsecondary Policy Innovation Model
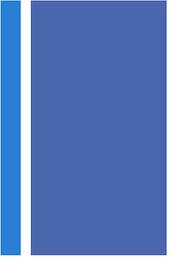
- **Context and level:** Policy conceptualization, development, implementation. Impact of geography, state policy initiatives, networks of intellectual and human capital

- **Domain:** Post-secondary education policy covers technical/professional & occupation specific skills, with overlapping stakeholders & potentially competing policy objectives

- **Resources:** Public sector funding (Federal/national, regional, local), to public-private partnerships, to private corporate (mostly training oriented), to third sector funding

- **Actors:** the interests involved – institutional, students, employers, public sector

- **Approaches:** policy mechanisms, "levels" and processes available to use

- **Barriers:** cost, both to the learner as well as to other stakeholders, technological barriers, awareness of system constraints, resistance to change, risk aversion

- **Policy feedback mechanisms:** Measures of efficacy, e.g. learner performance, and data analytics of learners, changes in workforce composition, employer satisfaction.

+ Comparative Summary – U.S.

- Workforce development, and policy, is a mosaic of approaches, actors, and incentives that tend to encourage change and experimentation

- Regulation and control devolves to subnational entities (states and regional authorities)

- Innovative impetus has been economics (cost-cutting) as well as in response to need for better match between skill development and employer needs

- Technological innovations are central

+ Comparative Summary - Brazil
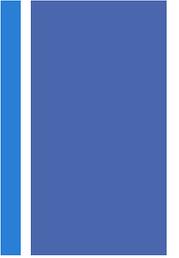
- Postsecondary education policies in Brazil are centralized and under direction of national government

- High level of social inequalities in the country

- Principal challenge is to include workers with low level of education in the system providing better possibilities of insertion in the labor market

- Economic and political crises (post – 2014) have affected programs due the reduction of financial resources directed to the program implementation.

Comparative Summary – Finland

- Post-secondary education and the development of skilled workforces is a multi-centric system of programs with a distinct focus on competence-based qualifications

- Pressures of globalization and internationalization, are factors encouraging innovative approaches to workforce development.

- Policy changes encouraged independence of institutions, "expecting the higher education institutions to operate as entrepreneurs in a global market"

- State remains the primary funder, therefore institutions are still subject to a level of state steering

+ Policy Innovation
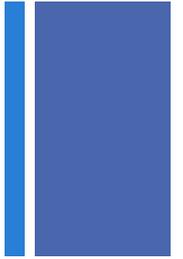
- **Three main lessons for effective workforce development policy:**

  - **Policy interventions should focus on developing alternative learning/training approaches (e.g. information technology driven, alternative delivery and participation modalities), including new learning environments and opportunities**

  - **Workforce development should focus on broadening post-secondary partnerships of various stakeholders, including employers, public institutions, employees (and trade unions), and non-profit organizations**

  - **Re-examination of the nature and range of work related activities, new approaches develop better better fit between technology enabled work (and contexts) and the skills and availability of 21st century workforces**

+ *Fin*

Workforces, like learning, do not occur in a vacuum. Effective policy approaches proactively anticipate needs and design for effective, successful development.

Coda
"Die ich rief, die Geister / werd ich nun nicht los."
(From the spirits I have called / I now cannot rid myself)
Goethe: "The Sorcerer's Apprentice"

+ Thanks!

Still curious about workforce and advanced skills training, technology policy, or collaborative policy design?

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