

Entrepreneurship Education as a Catalyst of Innovation Ecosystem

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Regional crisis in the background

- **D**eclining and aging population
- **D**rastically declining industrial output due to paper industry closures since 2006
- **D**ive from the top GDP per capita region in Finland to the near bottom, also low R&D intensity
- Desperate need for innovation, new businesses, and economic restructuring but functional, political, and cognitive lock-ins impede change

Tulkki 2012



Strategic response of KYUAS

Reinvention of university's role from inside-out as an entrepreneurial university

Re-envisioning the context according to the innovation ecosystem model

Revitalizing education through entrepreneurship education, that is, engaging students more and in a larger scale



Photo by KYUAS Communications



NQF (and EQF) as guides to future competencies in the evolving professions*

Learning(-to-learn) competence

Workplace/community/network competence

Innovative competence

Ethical competence

International competence

EQF= European qualifications framework NQF=National qualifications framework

Photo by Anastasia Sulce





Most important elements of an innovation ecosystem – probably the trickiest, too

Culture No. 1

Individualistic

Celebrate

Failure

Entrepreneurship No.2 – should select young and enthusiastic, internationally skilled to be educated and networked

Labour pool

Education

Network

Bill Aulet, 2008. How to Build a Successful Innovation Ecosystem: Educate, Network, and Celebrate

Other elements of innovation ecosystem

Demand

- Economy
- Big companies
- Other companies

Invention

- Universities
- Corporate R&D
- Open innovation

Funding

- Debt
- Equity
- Full range of options

Infrastructure

- Physical
- Services (public, private)

Government

- Regulations
- Taxes/incentives
- Laws (bankruptcy)

Bill Aulet, 2008. How to Build a Successful Innovation Ecosystem: Educate, Network, and Celebrate



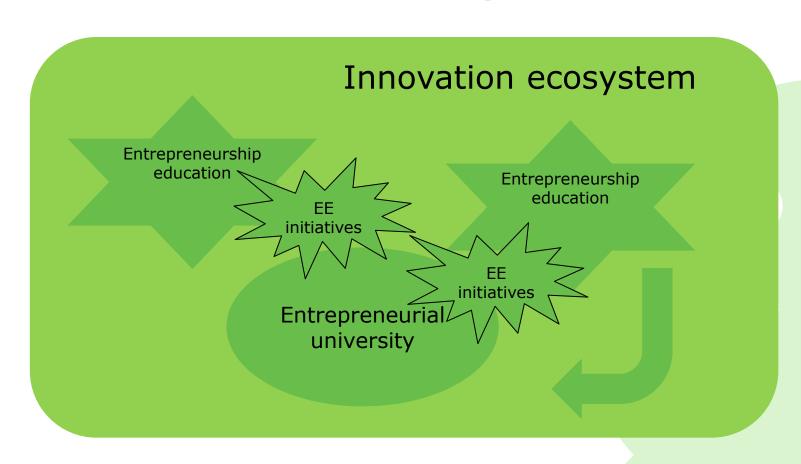
Innovation ecosystem from the point of view of the characteristics of learning networks

	Seeking new things	Utilizing existing things
Organizational learning	Mapping new possibilities	Exploiting established items
Purpose of network	Access to new information and finding potential new partners	Developing capabilities and sharing knowledge with partners
Local structure	Clusters, ecosystems	Communities or connections between organizations
Compatibility of knowledge	New, complementary	Similar to earlier, expanding
Learning	By listening to "buzzing"	By doing things together
Type of innovation	Radical or groundbreaking	Gradual
Manner of innovation	Open or public innovation, user-driven innovation	Closed innovation

Neuvonen-Rauhala 2012, adapted from Vasara et al. 2009.



EE as a catalyst of innovation ecosystem = mobilization of student power





The spectrum of EE at KYUAS

t-led entrepreneurial initiatives

Photo by Hugh Clack

Offering facilities and support for student-led entrepreneurial initiatives and start-ups

Networking students, businesses, organisations, entrepreneurs around common themes, business ideas, and new ventures

Networking students from different disciplines around business ideas and new ventures

Developing one's own business alongside studies (including student owned co-ops as learning environments)

Developing one's own business plan as part of studies

Exhibiting and engaging entrepreneurs as role models

Doing projects with companies as part of courses/studies

Teaching entrepreneurial attitude and behaviours

Teaching business subjects also to non-business students



Interdisciplinary EE model at KYUAS*

IV Level 5 %: making it happen

Supporting students' ventures together with ecosystem partners (development agencies, financiers, consultants, international networks, etc.)

III Level 10 %: developing existing business plans

Business sparring (or "Collaboration Academy")

Preparing for exiting university

II Level 20 %: deepening entrepreneurial skills through intensive interdisciplinary work and authentic development projects

Photo by Hugh Clack

Conceptualization, User-driven innovation process, Innovation management

Business planning, commercialization

I Level 100 %: opportunity recognition, ideational skills, dealing with uncertainty, risk management, entrepreneurial culture

From idea to innovation, Project competence

^{*}All the levels executed in interdisciplinary groups (business, design, media, social services, healthcare, engineering, maritime)



(Critical) questions about EE's role as a catalyst of innovation ecosystem



Photo by Anastasia Sulce

How to win over students (and parents) with more traditional educational backgrounds?

How to maintain quality on a university scale?

Can the organization of EE become too expensive for the university?

How to get lecturers and professors into the right collaborative mode without fear of loosing expert status?

Even more critically, is the proliferation of EE a sign of ever increasing administrative forces, and the difficulty of sustaining new ventures and SMEs without university connection?





Photos by Hugh Clack and Anastasija Sulce