



Professor David Rae

Developing an entrepreneurial ecosystem for learning: leadership, culture, inclusion and external engagement

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CENTRE FOR ENTERPRISE AND INNOVATION





### Rationale for this session

- Learners need to appreciate and navigate the *entrepreneurial ecosystem* to develop successful innovations and potential new ventures
- How can we connect entrepreneurial learning and mindset to enable successful performance in the entrepreneurial ecosystem?
- How accessible are our ecosystems for learners, innovators & nascent entrepreneurs?



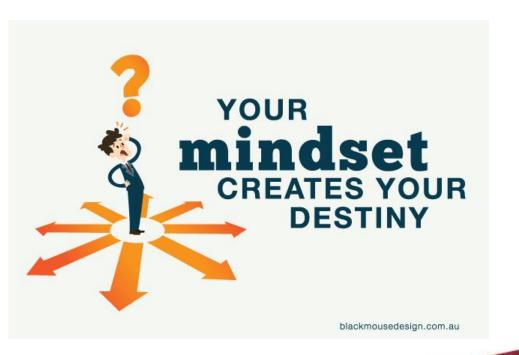
## **Agenda**

- Definitions: entrepreneurial mindset & ecosystem
- Some recent & some useful models
  - Entrepreneurial learning & mindset
  - Entrepreneurial university
  - Entrepreneurial ecosystem
- How can we expand entrepreneurial mindsets within the ecosystem?
- Questions for discussion

## **Entrepreneurial mindset:**

The set of attitudes, skills and behaviors that students need to succeed academically, personally and professionally

Thinking as an entrepreneurial person



## **Entrepreneurial learning: mindset & capability**

- Enterprise & entrepreneurship are increasing in all educational subjects and levels.
- Learned experientially, but hard to 'teach'.
- Entrepreneurial learning centres on creating, discovering and acting on opportunities.
- Connects personal emergence (confidence, identity & mindset) with capability development (skills & behaviours).
- Moments of unplanned serendipity, 'discovery', 'crisis' & 'decision' occur in a naturalistic approach to entrepreneurial learning





EntreComp provides a valuable competence framework for skills, behaviours & actions

## Entrepreneurial mindset, competencies and effectiveness

#### Entrepreneurial mindset

Personality and social identity
Ambition, motivation and goals
Personal confidence and resilience
Self-discipline and personal organisation
Extending beyond perceived limitations
Tolerance of ambiguity and risk
Reflection on failure - to go forward
Ethical, social and sustainable values



A learning process towards effectiveness

Entrepreneurial mindset: thinking in new ways

How can you develop your mindset?

What competences do you have?

How can you work towards effectiveness?

## Entrepreneurial awareness

Understanding what enterprise means to me

## Entrepreneurial effectiveness

Independent self-direction
Goal setter
Goal evaluator and reviewer
Opportunity leader
Data evaluator
Business generator
Value enhancer
Value evaluator
Market orientation
Media communicator



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Enterprise and Entrepreneurship Education:

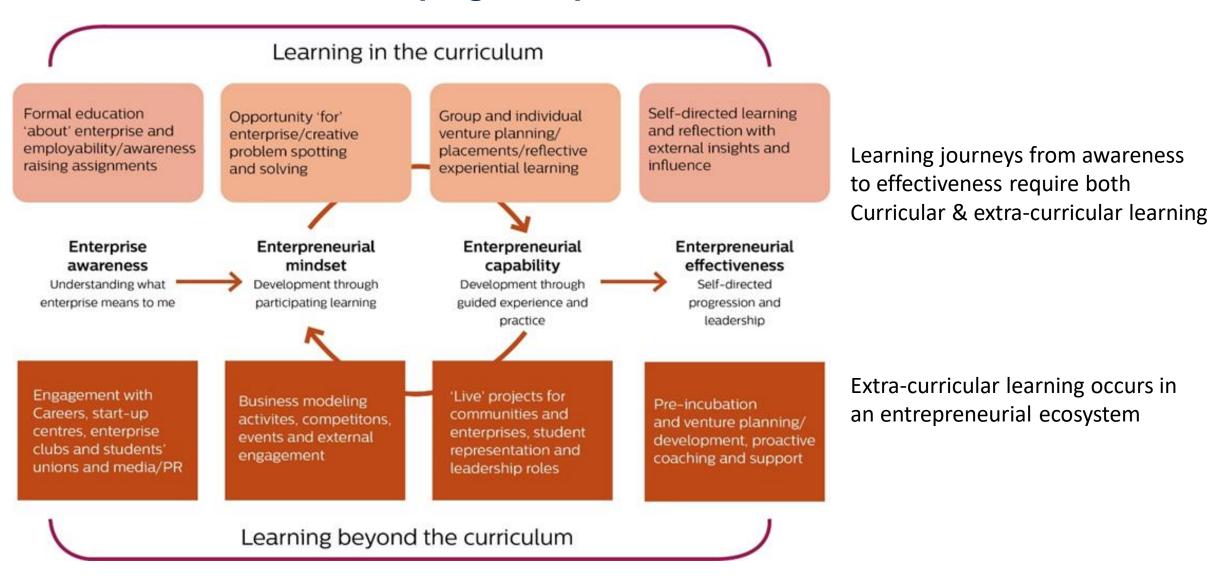
Guidance for UK Higher Education Providers

#### Entrepreneurial competencies

Creativity and innovation
Opportunity recognition, creation
and evaluation
Decision making
Implementation through leadership
and management
Reflection/Reflexivity into action
Communication and strategy
Digital, data and media

**QAA 2018** 

## **Developing entrepreneurial effectiveness**



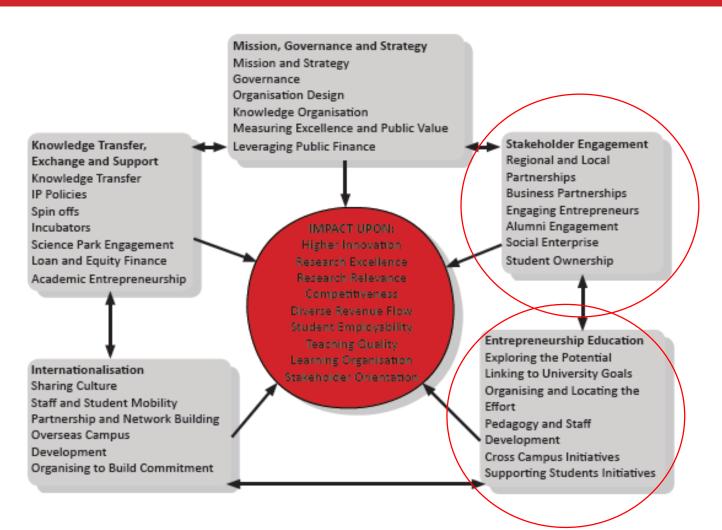
# The Entrepreneurial Ecosystem



Using the entrepreneurial university and ecosystem as learning environments

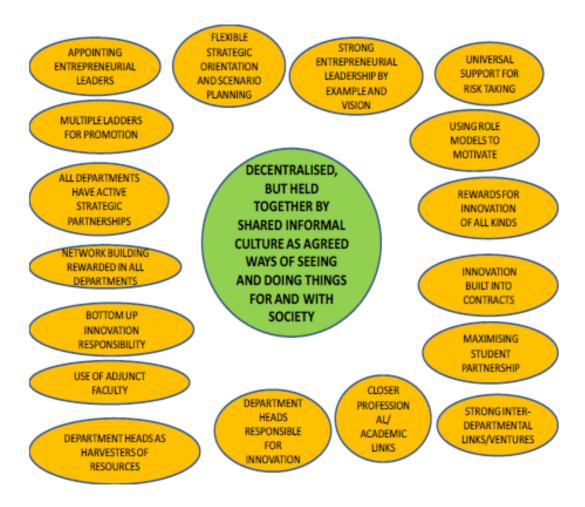
## A functional model of the Entrepreneurial University

Exploring Synergies in Entrepreneurial University Development The Potential Contribution to Key Strategic Goals

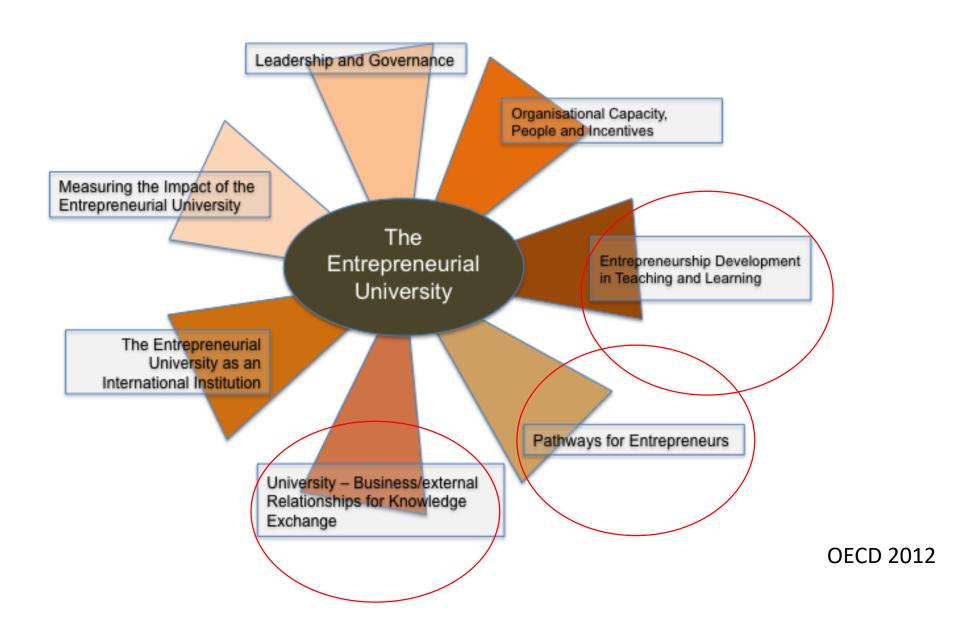


Gibb 2012; NCEE 2013

#### ORGANISING THE UNIVERSITY FOR ENTREPRENEURSHIP



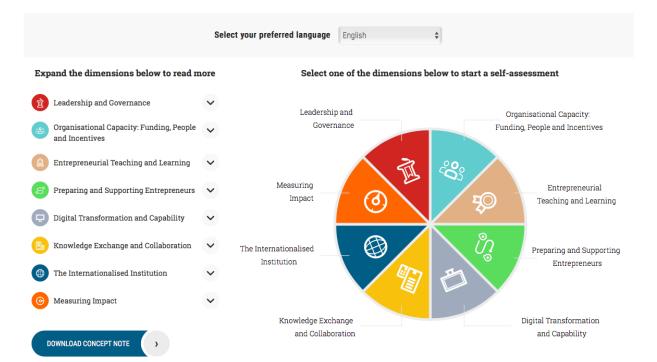
## **OECD** guiding framework for entrepreneurial universities





### What is HEInnovate?

- A self-assessment tool for higher education institutions who wish to explore their entrepreneurial / innovative potential
- The simple purpose of helping higher education institutions identify their current situation and potential areas for action
- Eight broad areas, under which are statements for self-assessment







## What is the entrepreneurial ecosystem?

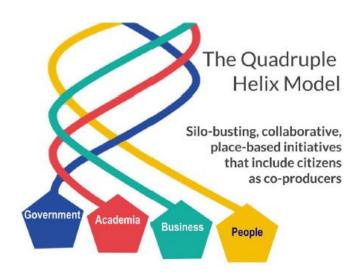
'a set of interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship within a particular territory'. Stam & Spiegel 2016

Figure 1. Key elements, outputs and outcomes of Entrepreneurial Ecosystem

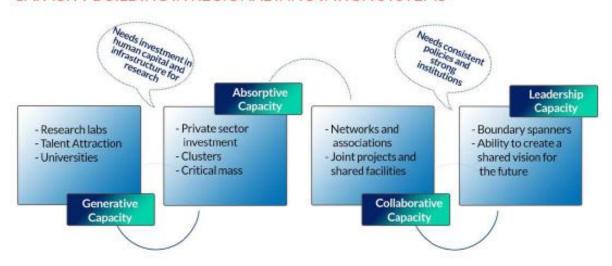


Value creation Productivity Employment Well-being Outcomes Income Entrepreneurial activity Entrepreneurial High-growth Outputs start-ups employee activity start-ups Entrepreneurial Ecosystem Elements Systemic conditions Framework conditions

## The Quadruple Helix Ecosystem & beyond....



#### CAPACITY BUILDING IN REGIONAL INNOVATION SYSTEMS



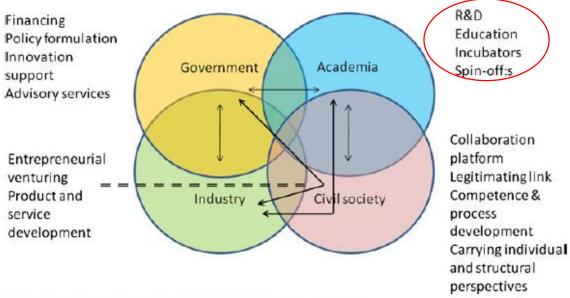
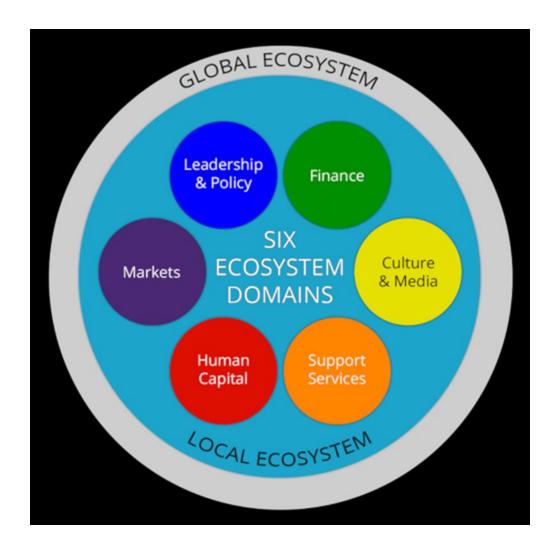


Fig. 3 Developed notion of a Quadruple Helix innovation system

Lindberg, Lindgren & Packendorff 2012

### Where are the learners?

Source: J. Goddard. Towards a place-based science and innovation strategy for England: a role for universities? A paper for the BEIS Advisory Group on Smart Specialisation and Innovation Audits. Isenberg's concept of the Entrepreneurial ecosystem





### Domains of the Entrepreneurship Ecosystem



Isenberg, D (2011) The entrepreneurship ecosystem strategy as a new paradigm for economy policy: principles for cultivating entrepreneurship, Babson Entrepreneurship Ecosystem Project

Source: Isenberg, 2011.

#### The Corporate Innovation Ecosystem: Understanding the Players, Tensions, and Key Strategic Questions



Why is corporate innovation so difficult? A broad coalition of players, inside and outside of your organization, must be aligned for real innovation to take hold—and the different constituencies don't always share the same motivations and incentives. Use this map and the discussion questions below to engage the players, start conversations, and build a shared understanding of common goals, so that you can work together to make meaningful progress.

#### THE CORE

The core business is the source of profits and power. When it's doing well, there's little hunger for real innovation. When it's struggling, the first impulse is to cut costs rather than invest in new products and services. Without long-term support from executives in the core, innovation efforts fail.

#### (1) CEO and Leadership Team

At some companies, a sole C-level executive is the key innovation cheerleader. Innovation groups benefit from broader support throughout the core business, though it's best to avoid creating a 20-person innovation committee that can find plenty of reasons to kill promising projects.

#### 2 Business Units

Business units tend to want incremental ideas that can deliver revenue in the short-term, rather than disruptive innovations that might undercut the current offering.

#### (3) IT, Finance, HR, and Marketing

- Some of these functions can slow the momentum of innovation teams, dwelling on risks or following
- standard procedure." Some may feel they should own
- innovation. It's best to start cultivating allies early rather than late.

#### (7) Corporate Development

"Buying innovation" through acquisitions is something many companies prefer over organic innovation, though the price can be steep and integration can be a challenge.

#### Research and Development

Companies with long-standing R&D groups sometimes feel frustrated. Should all ideas about the future of the business come from R&D? These groups can also be insular and reluctant to source solutions from outside the company. But R&D done right can attract top talent and create competitive advantage.

#### Sales and Support

Sales can be a rich source of insights about customer problems, which innovation groups would be wise to address. The sales and support teams can also gripe about selling something that's tough to support, priced too low, or relies on a different business model.

#### O DISCUSSION QUESTION:

What incentives can you put in place for these constituencies to embrace new ideas and help launch them, rather than poking holes and withholding resources?



#### **NEW INNOVATION INITIATIVES**

Innovation initiatives tend to sit at the edge of the business, without the same resources or attention as the core.

#### Innovation Theater

Coming soon...the splashiest spectacle you've ever seen! Watch the CEO pass out trophies. Marvel as a visiting keynote speaker shares the secrets to brilliant ideas in 60 minutes or less. It can be exciting the first time around, but will people return for the sequel?

#### (11) Innovation Labs and Incubators

At their best, innovation labs create a new place for exploring new technologies, building prototypes, and collaborating with customers. At their worst, they're Disney-esque showcases intended to impress visitors and prospective hires.

#### (12) Corporate Accelerators

With the right structure and marketing, accelerators can attract startups working in your industry, and potentially spark investments, pilot tests, and partnerships.

#### (13) Skunk Works

Insulated from near-term demands, this crew can focus on "blue sky" projects with major potential. The risk? Insufficient support from the core business when it's time for launch.

#### DISCUSSION QUESTIONS:

What is the expected outcome from your innovation initiative, over what timeframe? What resources will you need?

#### STARTUP ECOSYSTEM

- With so many internal meetings, it can be tough for executives to
- escape the building. Innovation teams seek to change that
- dynamic by creating new ways to connect with startups,
- university researchers , venture capitalists, and even solo
- inventors who may supply winning solutions to a crowdsourcing competition.

#### DISCUSSION QUESTIONS:

How can you reduce the friction of working with outsiders, and position your company as the "collaborator of choice" in your industry?

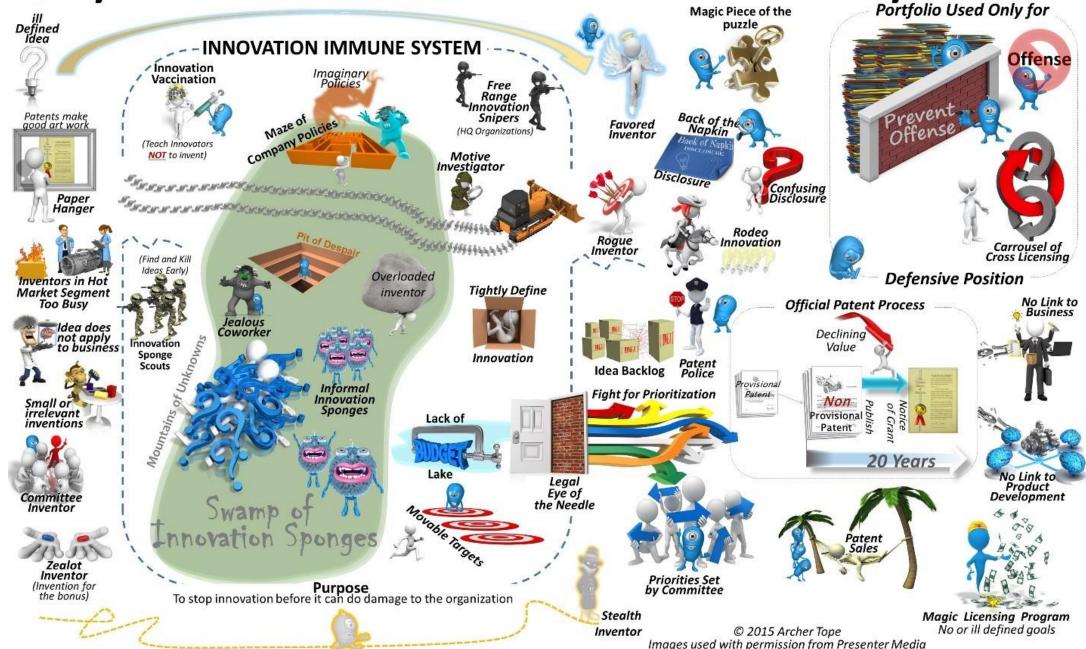
#### CUSTOMERS

At most companies, sales and marketing departments feel like they "own" the customer relationship, but a growing number of companies embracing the concepts of "lean startup," "design thinking," or "customer co-creation" are allowing more employees to interact with customers. Even when this doesn't result in new revenue, it can strengthen customer loyalty, which is always a win.

#### DISCUSSION QUESTIONS:

What barriers exist to bringing customers into the innovation process? How can you quickly and cheaply test new concepts with them?

# Dysfunctional Innovation Ecosystem





How do we ensure student learning and participation are at the heart of the entrepreneurial ecosystem?



## How do we develop entrepreneurial ecosystems for learning?

- Community leadership: academic and business with learner participation
- Culture: open values & system connecting science & society
- Inclusive: welcoming & accessible for new entrants & learners
- External engagement: Learning experiences should involve routine participation in the ecosystem
- Planned & naturally occurring contacts between learners, entrepreneurs & professionals
- Challenges, competitions, projects, Hackathons & other social innovations
- Student-led organisations: Enactus, Enterprise Societies, Start-Up Networks & clubs
- Outcome: learners can choose to become participants in the community

### **Questions for discussion**

- Can you map your entrepreneurial ecosystem?
- How do learners, innovators & nascent entrepreneurs perceive the ecosystem?
- How can they enter it?
- How accessible and learner-friendly do they find it?
- How are people from minorities welcomed?
- How can entrants find who & what they need?
- How efficient is the system in producing combinations of people [capabilities] innovation [knowledge] resources [money & facilities]?
- How productive is the system in generating start-ups, licences, deals?

## Thank you!

I look forward to your discussion

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