

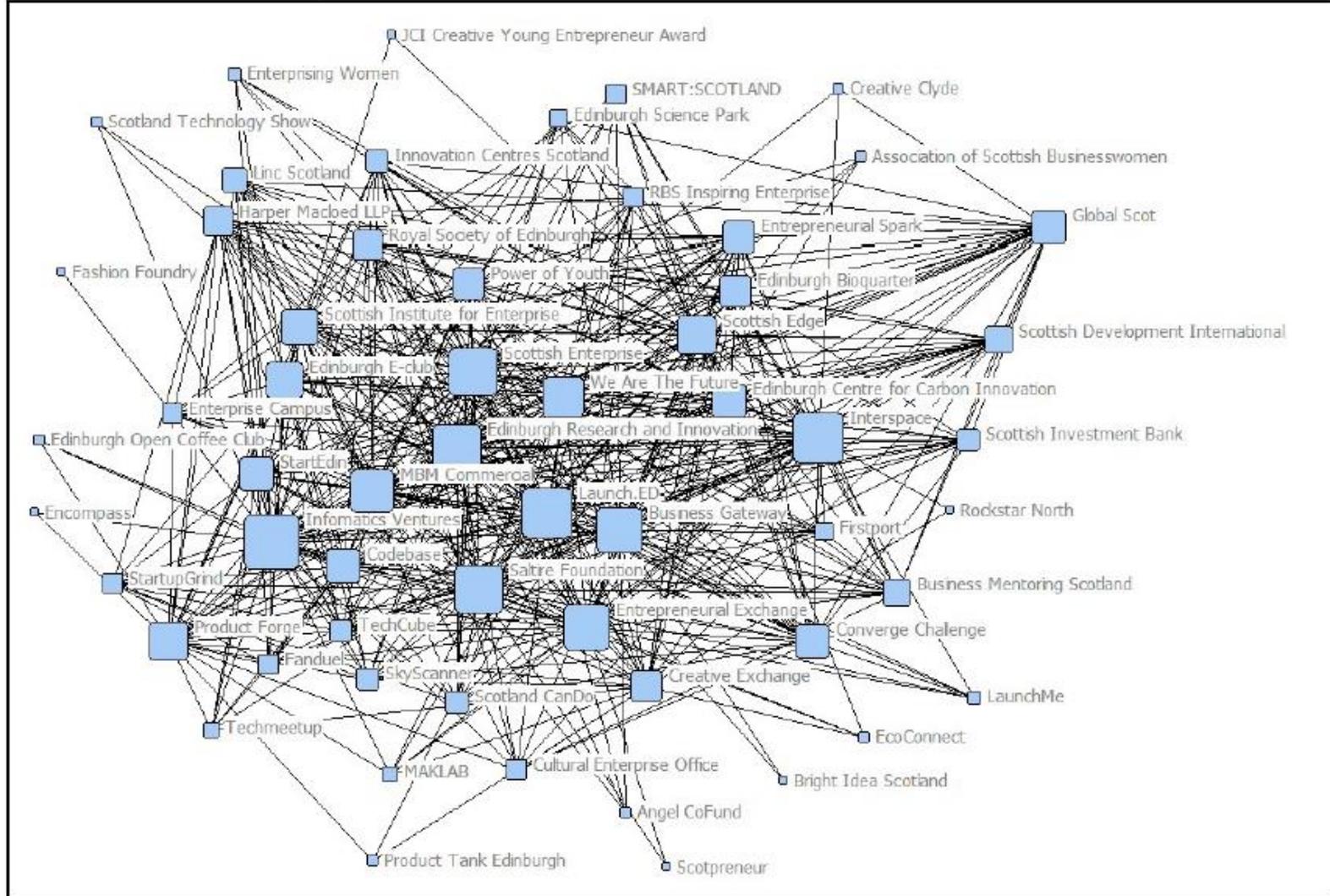
One SISA Fits All

scottish 
institute for
enterprise

Outline for this Session

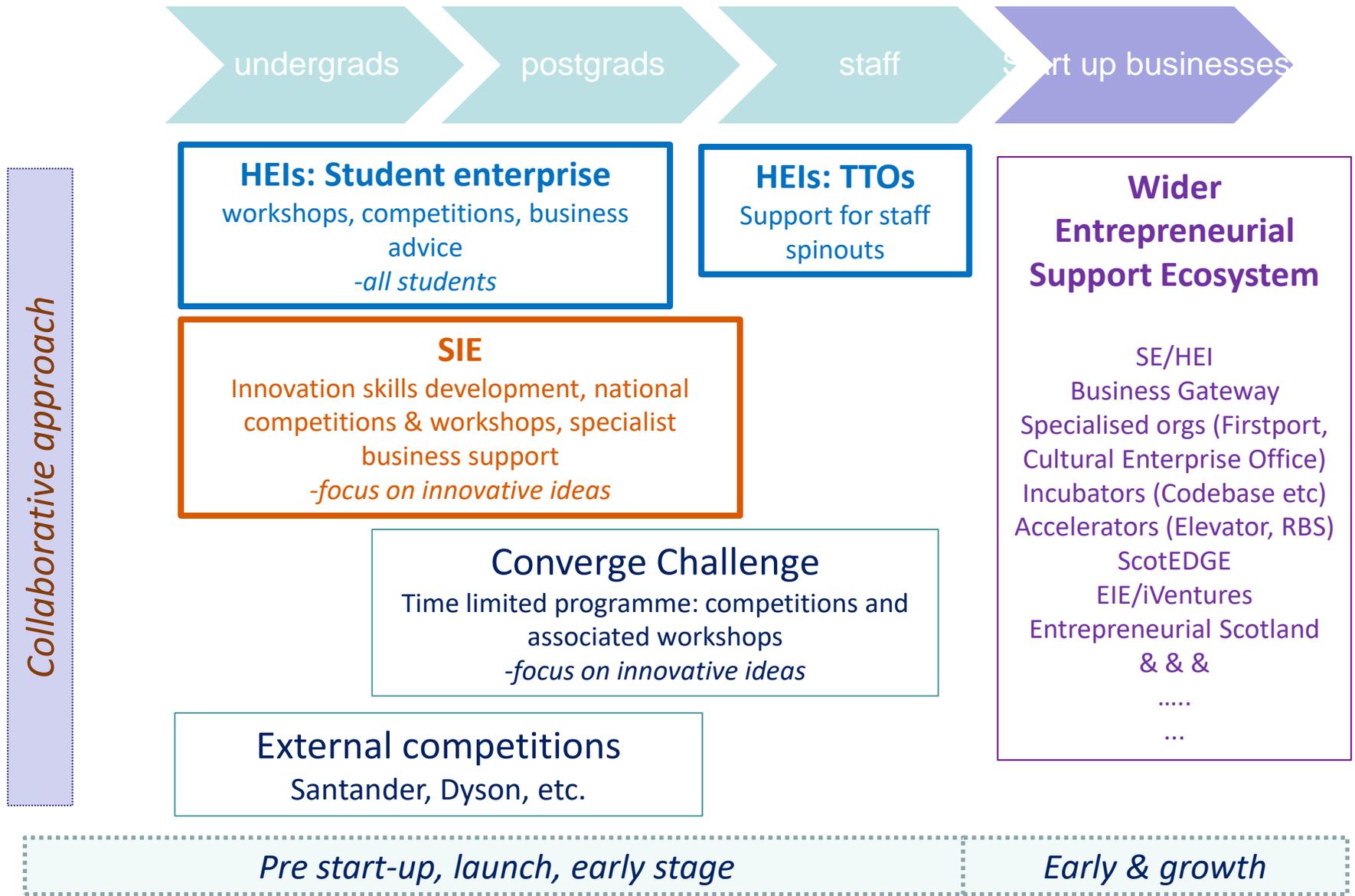
- The ecosystem – where are the opportunities for differentiation and collaboration
- SISA – a new initiative from SIE that is focusing on one particular part of this ecosystem.

The entrepreneurial support ecosystem - *its complicated*



Spiegel, Ben (U. Edinburgh): *Whitepaper on Edinburgh's Entrepreneurial & Support Ecosystem*

Enterprise/Entrepreneurial Support in HE



SIE's Innovation Skill Development Programme

Developing a students capacity and confidence for innovative thinking for :

- Workplace Innovation
- New Venture Creation

Achieved by...

- Running workshops across a range of courses and disciplines to demonstrate how innovation and enterprise can be embedded in the curriculum.
- Running staff workshops to facilitate development of new initiatives and passing on SIE resources.

Context : The Innovator's DNA



INSIDE OUT Problem solving •
Empathy . Good communication •
Collaboration
Dealing with limited information
Team player

OUTSIDE IN

Market trends • Changes in technology
Friends and family • Social trends
Scientific progress • Political trends
Things that annoy you ..



**Innovation & Enterprise
Programme**



scottish **sie**
institute for
enterprise

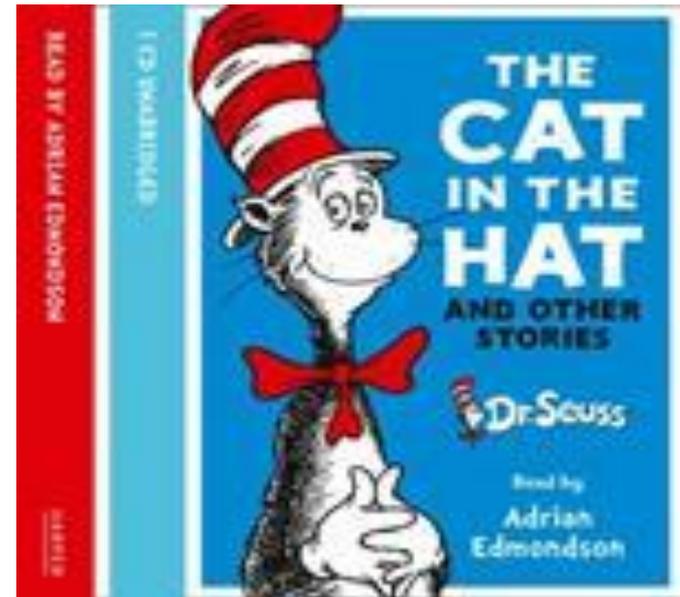
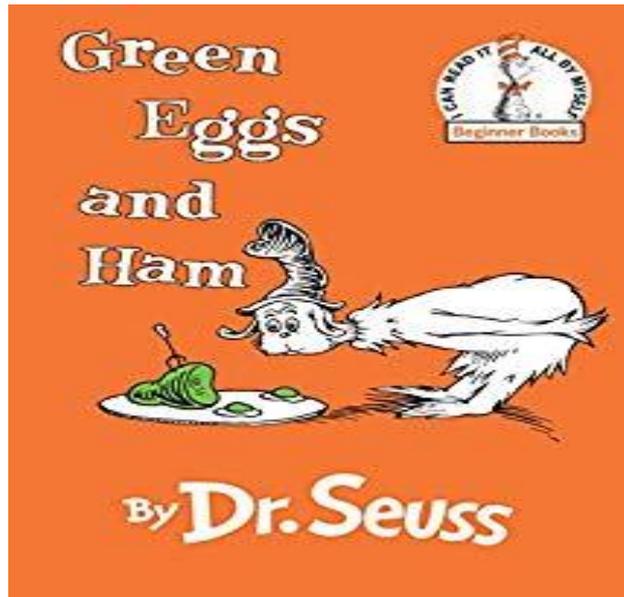


Responding
to **OUTSIDE IN**
influences

INSIDE OUT



Oh The Places You'll Go



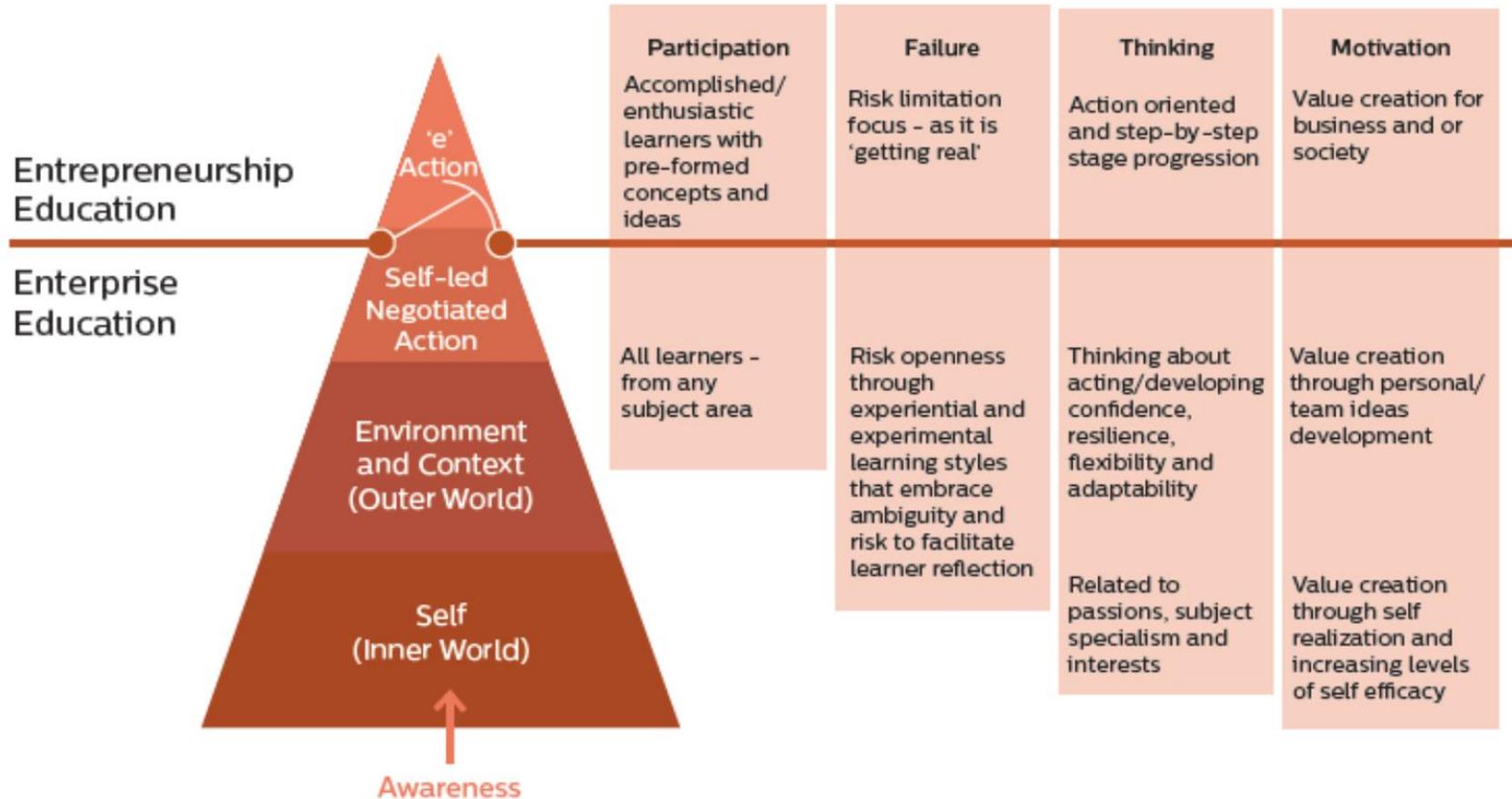
‘Improved my teamwork skills and communication, helped me to think about how new ideas could be realised and the process needed to do this, prompted me to think about my future and how I can influence it’

SIE Workshop Feb 2018

‘Got me thinking about ways in which I could bring my dream field of study into the future and with technological advancements’

SIE Workshop Oct 2017

For SIE



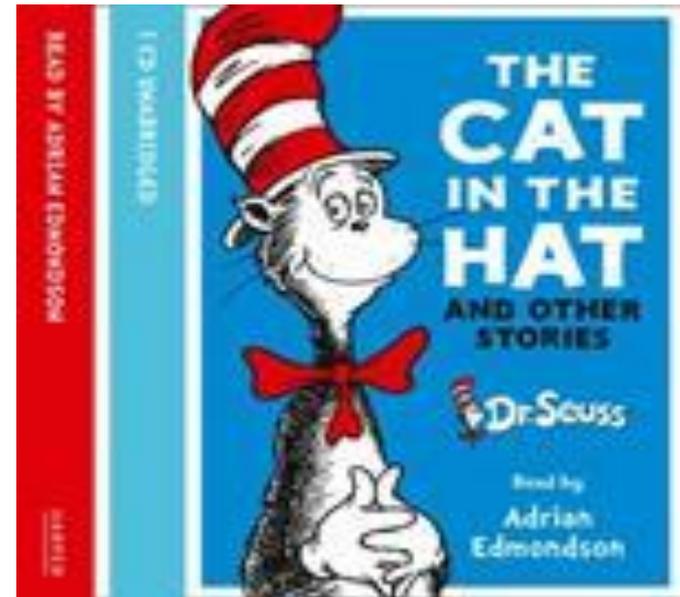
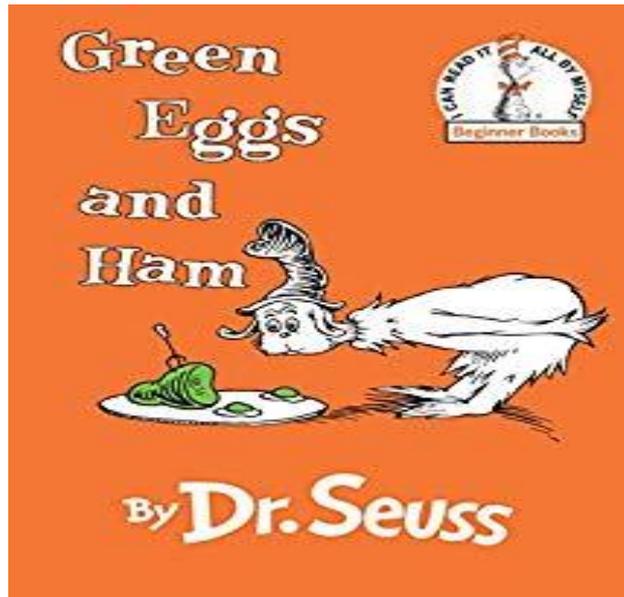
Ref: *Enterprise and Entrepreneurship Education: Guidance for UK Higher Education Providers*. QAA, Jan 2018

Insight

Process is more important than the outcome. When the outcome drives the process we will only ever go where we've already been. If process drives outcomes we may not know where we're going, but we will know we want to be there.

Incomplete Manifesto for Growth : Bruce Mao

Oh The Places You'll Go



Why do we Need to Imagine the Future?



Mary Smith: Spitalfields, London 1936

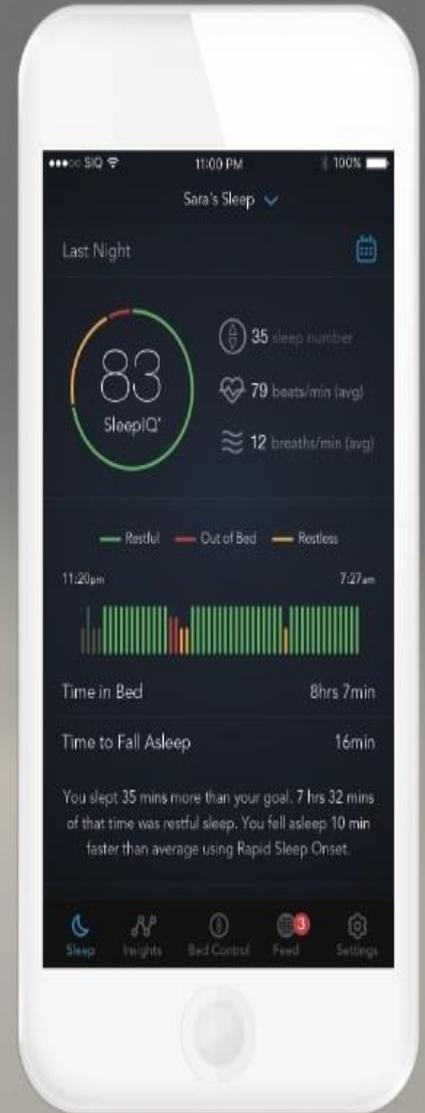
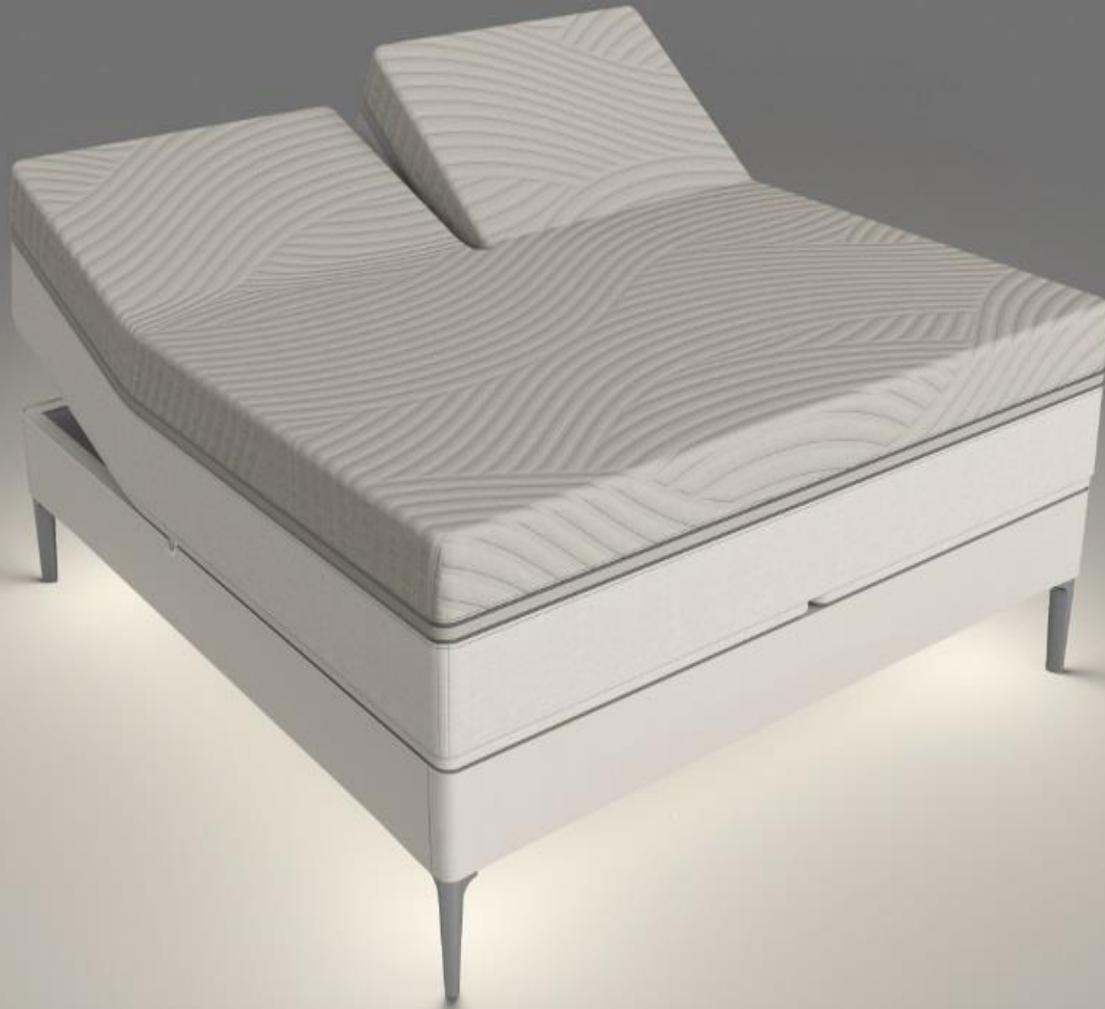


Replaced by



Rate of Technology Adoption





The Future Ready Process

‘No one can predict the future but you can think about it systematically and turn uncertainty into inspiration, creativity and resilience’

Bob Johansen : Get there Early

New collaborations

- **Academics** - future facing modules/pedagogies and future skill development
- **Employers** – the future facing skills they require or want insight into what they will need.
- **3 Innovation Centres** harnessing the innovation of Scotland's students and preparing them for entering the workplace to change it



Scottish Innovative Student Awards

***‘The future begins first in imagination,
then in will, then in reality.’***

Barbara Marx Hubbard - Futurist



Delivered by the Scottish Institute for Enterprise, with support from DHI, CENSIS and DataLab.

The Innovation Centres



The Digital Health & Care Institute brings together people and organisations in the health and social care, charity, technology, design and academic sectors to develop new ideas for digital technology that will improve the delivery of health and care services for the people of Scotland.

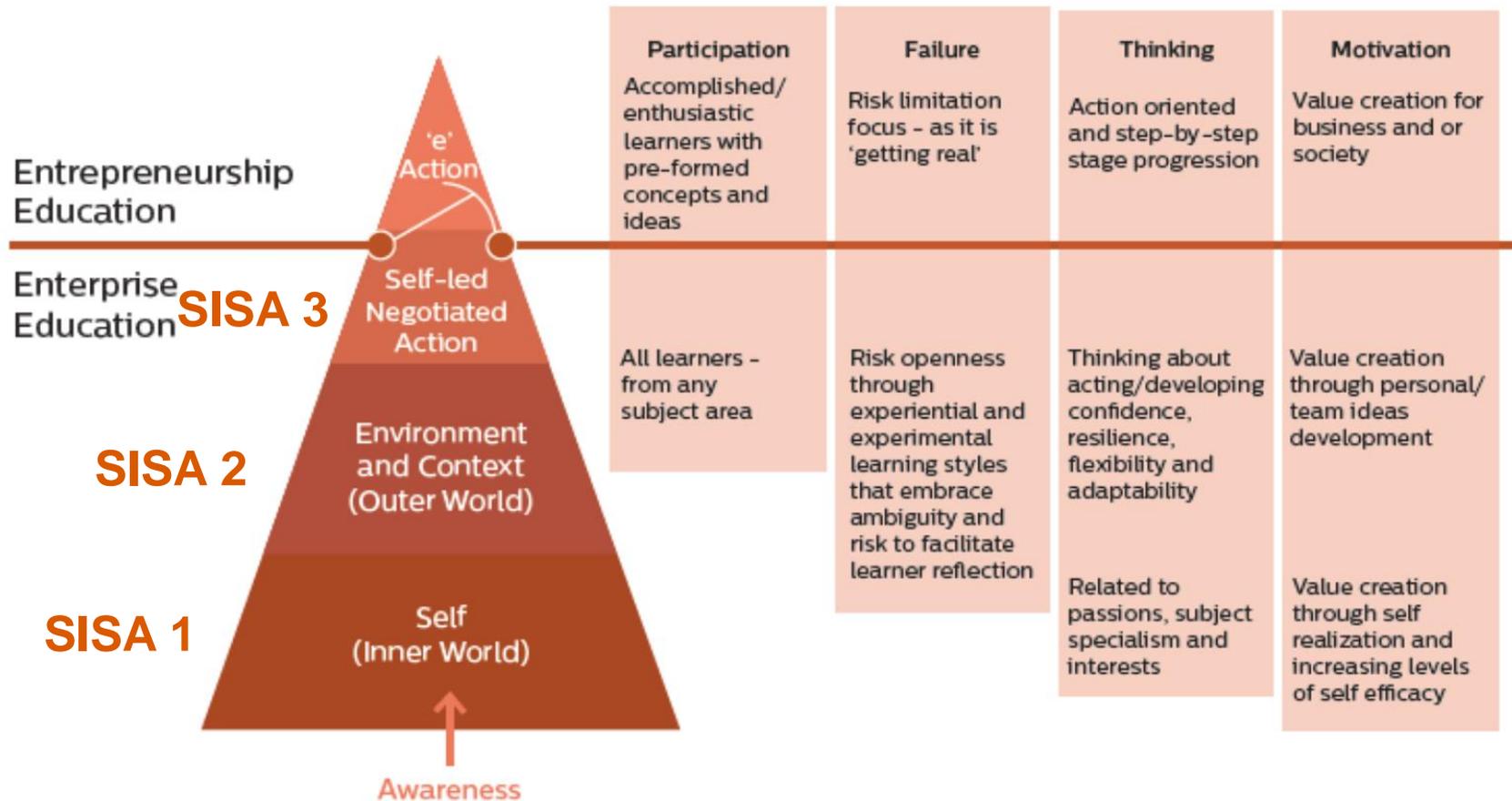


CENSIS is a centre of excellence for Sensor and Imaging Systems (SIS) technologies and aims to enable leading industry innovators and world-class university researchers to collaborate at the forefront of market-focused SIS innovation, developing products and services for global markets.



The Data Lab enables industry, public sector and world-class university researchers to innovate and develop new data science capabilities in a collaborative environment. Its core mission is to generate significant economic, social and scientific value from data.

The Context: SISA framework



Ref: *Enterprise and Entrepreneurship Education: Guidance for UK Higher Education Providers*. QAA, Jan 2018

Why SISA?

The businesses of the future require founders and employees to have innovation and enterprise skills such as creativity, problem solving and the ability to communicate well.

Participating in SISA will enhance students' ability to embrace the opportunities and challenges of the Fourth Industrial Revolution as innovative employees or as future entrepreneurs.

The SISA provides an opportunity for students to:

- recognise the innovation skills developed within the curriculum (level 1)
- build on these skills and apply them to societal challenges in multidisciplinary teams (level 2)
- demonstrate an intent to innovate and take action (level 3).

SISA – the process

Level 1 – Future Thinkers

- Runs *Sept 18 – Feb 19*
- Experiential learning, students demonstrate key competencies
- Delivered in curriculum by SIE or by academics (methodology approved by SIE)
- On-line reflection to demonstrate learning leads to Level 1 certificate.

Level 2 – Innovation Catalysts

- Application process, must have Level 1 certificate
- National one day workshop (x2): *24th Nov 2018 & 23rd Feb 2019*
- Students demonstrate key innovation/entrepreneurial skills, work in multidisciplinary teams to tackle societal challenges

Level 3 – Innovation Champions

- Application process (*Feb- Mar 2019*), must have completed level 2
- Demonstrate learning and ability to innovate. Action oriented
- Opportunities to engage with Innovation Centres
- Ongoing support from SIE to enhance skills.

Level 1: Future Thinker

AIM: To help students discover more about themselves and their sense of purpose and skills, and to give them the confidence and skills to use these to engage with the external environment.

Learning outcomes: On completion of Level 1, students will be able to understand creative thinking and innovation techniques and their impact on the future.

Innovative Competencies

- Self-awareness and self-efficacy
- Flexible and adaptable, seeing alternative perspectives
- Opportunity recognition
- Creative problem solving
- Collaboration
- Communication



Level 2: Innovation Catalysts

AIM: To give students the opportunity to use their capacity for innovation (level 1 competencies), and to craft new solutions to some of Scotland's economic and social needs working in multidisciplinary teams.

Learning outcomes: students will be able to: demonstrate an ability to participate in a structured group task in a multidisciplinary team; apply innovation and foresighting skills and the use of creative techniques to explore extended problem solving; evaluate ideas; and present a proposal in a structured, coherent discussion.

Innovative Competencies

- Able to cope with ambiguity and uncertainty
- Able to draw on views of others to develop and enhance work
- Employs visualisation and flexible planning skills to articulate ideas
- Influencing, communication, negotiation
- Innovation and intuitive decision making
- Ethical and sustainable thinking
- Civic and social responsibility



Level 3: Innovation Champion

AIM: To identify students who demonstrate innovative behaviours that have the potential to make something happen. They may do this via pursuing their idea via a student project, further academic research, extracurricular activities or a potential business opportunity, etc.

This is a highly competitive stage, during which students will have to demonstrate evidence that they are innovative and action orientated.



Benefits to students

Level 1: recognition of enhanced innovation skills leading to increased employment opportunities

Level 2: recognised for advanced innovation skills and contribution to society

Level 3: demonstrated applied innovation skills leading to potential for value creation (entrepreneurial or societal)

Outcomes/Impact

FE/HE Institutions

- Curriculum has innovation skills embedded
- Student feedback contributes to learning enhancement agenda
- Strengthen relationships with Innovation Centres
- # of participating students seen to be demonstrating 21st Century skills
- Level 3 award recipients become Innovation Champions for the Institution
- Seen as forward looking, an exciting place to study
- Students develop into Future Ready, highly employable graduates

Innovation Centres

- Strengthen relationships with HE/FE Learning & Teaching
- Opportunity to support/influence curriculum
- Undergraduates aware of sectoral opportunities
- Fresh ideas to take forward
- Nurture talent, retain skilled students in Scotland

Apply at: www.sie.ac.uk/SISA

“Informative, fun, practical and a great opportunity to meet new people. Highly recommend!”

“Really thought provoking - lots of food for future thought.”

“Great collaboration between innovative sectors. Good having experts within these fields to provide professional insights and help.”

“Brought out a new spark for idea generating which I didn't know I had.”

Quotes from ‘17/18 Level 2 participants

