SDG 17
PARTNERSHIPS FOR THE GOALS

Ali Watson, Managing Director, The Third Generation Project (University of St Andrews)

Scott Strachan, Teaching Fellow, Department for Electronic and Electrical Engineering, University of Strathclyde
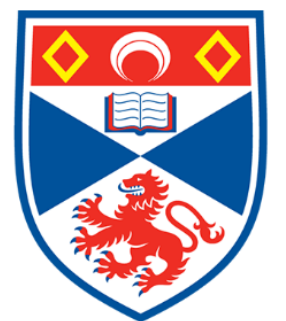
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The Alliance for Sustainability
Leadership in Education

SDG 17
PARTNERSHIPS FOR THE GOALS

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The Alliance for Sustainability
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Prof. Ali Watson, OBE
School of International Relations
Managing Director, Third Generation Project

University of St Andrews

THE
THIRD
GENERATION
PROJECT

Rethinking Rights, Informing Change

University's first think tank

Based in the School of International Relations

Focused on the human rights implications of climate change – causes + effects

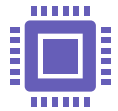Community-oriented and collaborative

Outputs reflect concerns and priorities of communities and peoples

Designs projects that educate for change

Focus on 3 strands of programming

The Third Generation Project

Breaking the 4th Wall of Climate Migration

Bringing Collaborative Narrative Production into Scottish Classrooms

- Funded by National Geographic and the Global Challenges Research Fund

- Focus on Somaliland and Kenya and how climate change is leading to migration and displacement in vulnerable communities

- Collection of multimedia materials for use in Scottish classrooms

- UNESCO: 'Education is an essential element of the global response to climate change. It helps young people understand and address the impact of global warming, encourages changes in their attitudes and behaviour and helps them adapt to climate change-related trends.'

The Emerging Researchers Programme

- Educating the next generation of researchers

- Replacing a standard intern programme with an approach that educates a small number of St Andrews students in the critical research skills that are so vital to TGP's approach

- Students are taught by a range of researchers – from outside IR too

- After they 'graduate' from the programme, they use their skills to focus on their interests, supervised and supported by a TGP staff member

- 'a university within a university'

THE THIRD GENERATION PROJECT

JUANITA BARRETO MONJE – EMERGING RESEARCHER 2019-2020

" TGP provides a great opportunity to understand a world in continuous transformation, particularly as it does so, not only through a collective platform of shared knowledges, but also by listening to those who embody the experience through their daily lives. "

A new programme that involves a special investigation spearheaded by TGP researchers

Aim is to provide research results in the form of a 'White Paper' – a policy paper that outlines TGP research findings and educates policymakers and the wider public about a specific issue of interest to the TGP remit

Offer research services to organizations who cannot afford to do their own research and would like in-depth research outputs

We're currently bringing our team together for the first of these

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In 2025 the global student population in Further and Higher Education will reach more than 260 million

- (Goddard, 2011)

Agenda 2030

"Taking the SDGs from the United Nations into countries and leveraging the **potential of young people** to get them on the agenda is very important." *– Amina J. Mohammed, the United Nation's Deputy Secretary General*

"All of our hopes for a better world rest on young people"

- Secretary-General, António Guterres'

*"Universities can **harness their unique access to large concentrations of young people** to directly contribute to all the SDGs"* – Monash University (SDSN Member)

Creative

Energetic

Optimistic

Global

Idealistic

Meaningful Contributions

Challenging

Given our unique access to this relatively untapped research resource, and our responsibility to educate, equip, inspire and mobilise our students NOW to meet the global challenges facing our global society…

How can we best partner with our students now and in the future to leverage this potential to its full in the pursuit of the SDGs?

Education for Sustainable Development and the SDGs

Learning to Act, Learning to Achieve

Policy Brief
Advancing ESD Policy
January 2018

University of
Strathclyde
Glasgow

"Education will be the lynchpin of a sustainable development agenda whose success relies on individuals, throughout their lifetime, acquiring relevant knowledge and developing positive attitudes to address global challenges".[1]
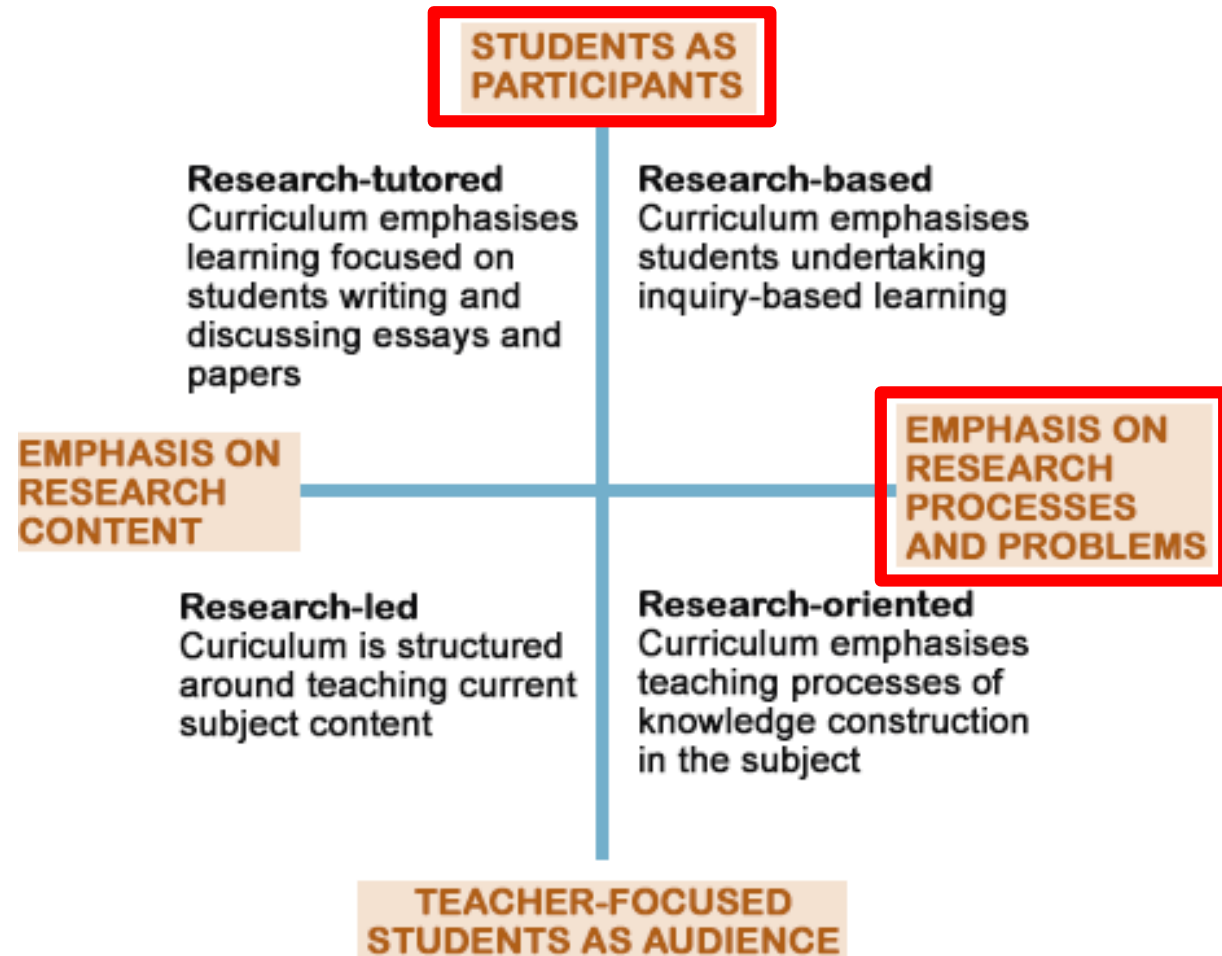
"advance the change in teaching and learning processes, bringing in approaches that 'stimulate pupils to ask questions, analyse, think critically and make decisions,' that are cooperative rather than competitive and that are more interactive, exploratory, action-oriented, problem-based, experiential and transformative learning"

What innovative methods exist for embedding **Education for Sustainable Development** in undergraduate curricula?

Research-Based Education (RBE)

Relationships between Research and Teaching

Developing research-based curricula in college-based higher education

Mick Healey, Alan Jenkins and John Lea

The Higher Education Academy

March 2014

STUDENTS AS PARTICIPANTS

Research-tutored
Curriculum emphasises learning focused on students writing and discussing essays and papers

Research-based
Curriculum emphasises students undertaking inquiry-based learning

EMPHASIS ON RESEARCH CONTENT

EMPHASIS ON RESEARCH PROCESSES AND PROBLEMS

Research-led
Curiculum is structured around teaching current subject content

Research-oriented
Curriculum emphasises teaching processes of knowledge construction in the subject

TEACHER-FOCUSED STUDENTS AS AUDIENCE

(Healey, 2009)

Research-Based Education (RBE)

Research-Based Education, where students become research active, undertaking research and inquiry

- (Griffiths, 2007)

Students are encouraged to become **'knowledge producers'** as opposed to **'consumers'** in tackling **real-world problems**

- (Healey and Jenkins, 2009)

Research and Teaching Nexus… VIP4SD

RESEARCH

Research on the SDGs

Interdisciplinary and transdisciplinary research

Innovations and solutions

National & local implementation

Capacity building for research

EDUCATION

Education for sustainable development

Jobs for implementing the SDGs

Capacity building

Mobilising young people

OPERATIONS & GOVERNANCE

Governance and operations aligned with SDGs

Incorporate into university reporting

EXTERNAL LEADERSHIP

Public engagement

Cross-sectoral dialogue and action

Policy development and advocacy

Advocacy for sector role

Demonstrate sector commitment

University of Strathclyde Glasgow

Research-Based Education (RBE)

Research-Based Education (RBE)

Involves interdisciplinary, collaborative working and learning between students of different year groups and research staff on 'real' research objectives, delivering impact.
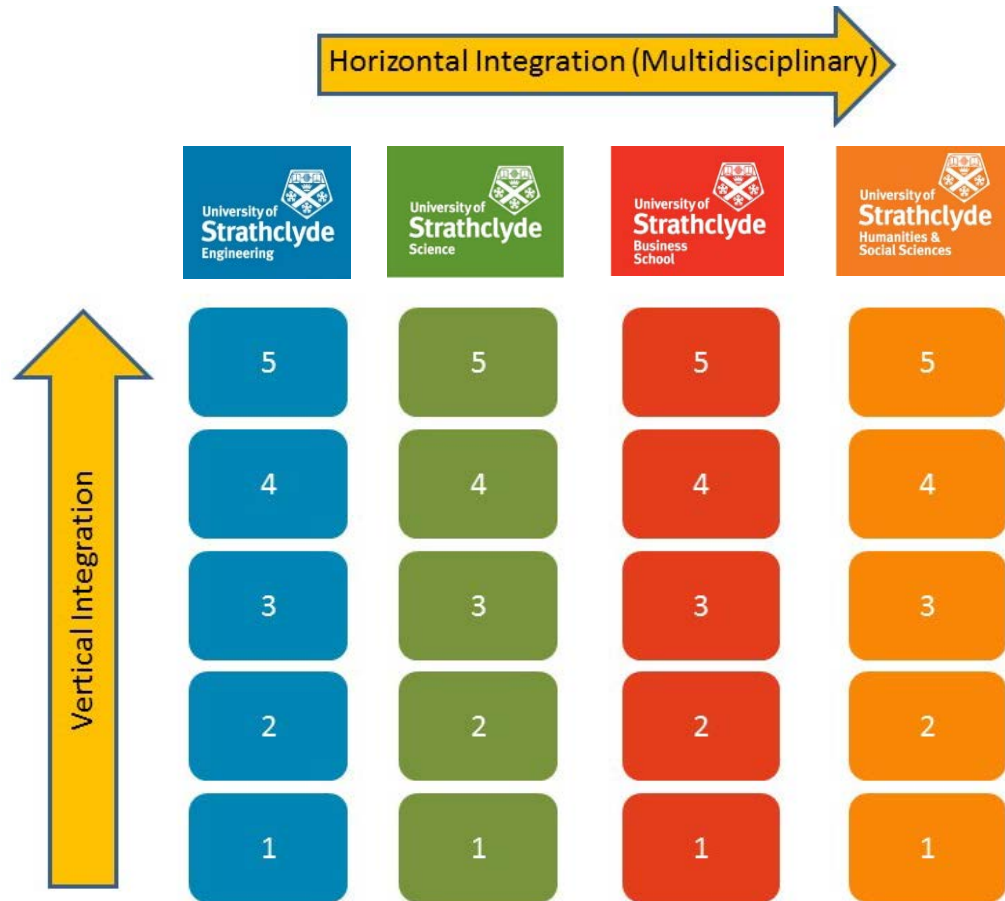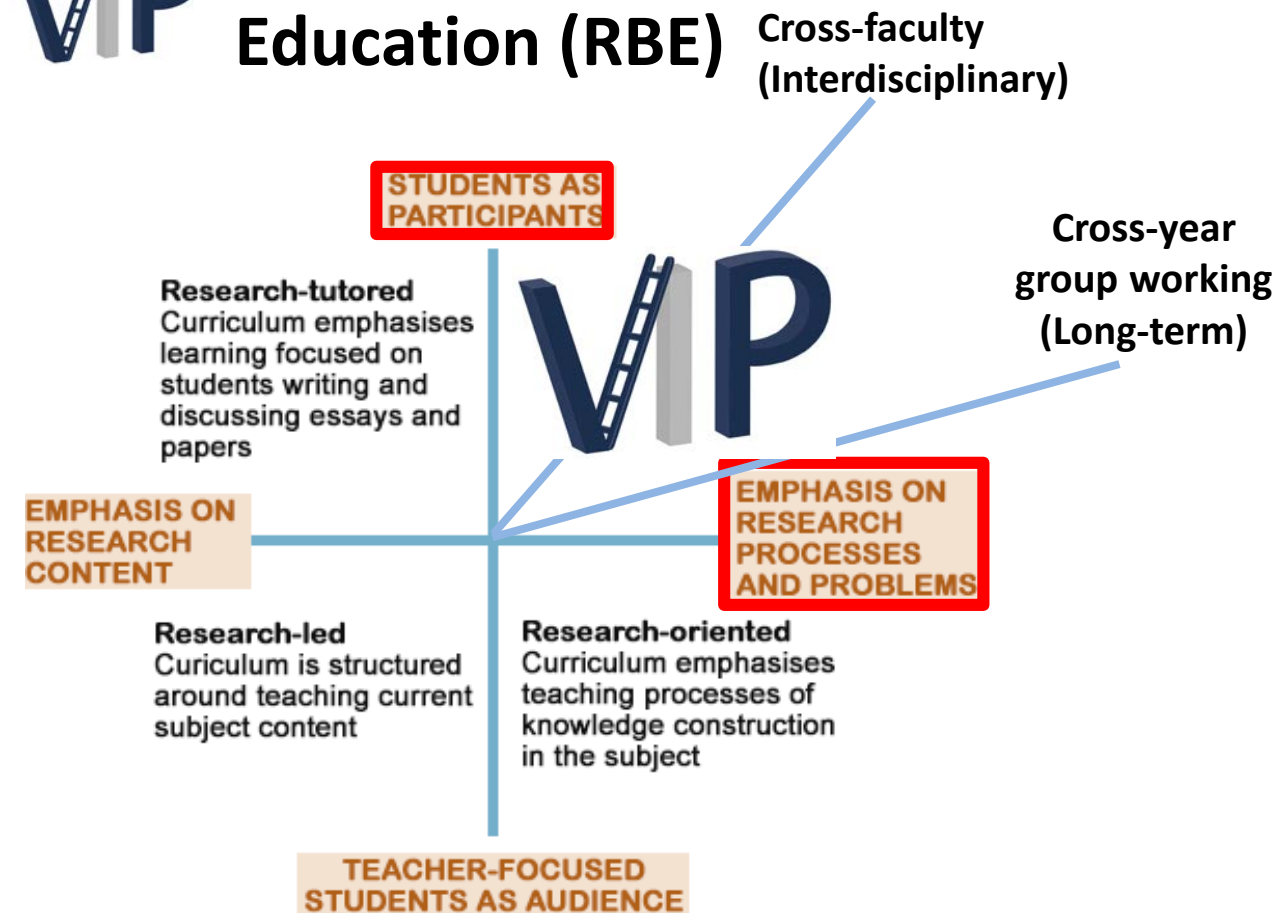
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Vertically Integrated Projects

Research-Based Education (RBE)

Cross-faculty (Interdisciplinary)

Cross-year group working (Long-term)

STUDENTS AS PARTICIPANTS

Research-tutored
Curriculum emphasises learning focused on students writing and discussing essays and papers

EMPHASIS ON RESEARCH CONTENT

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TEACHER-FOCUSED STUDENTS AS AUDIENCE

Where did VIP originate?

1101 Students

80 VIP Projects
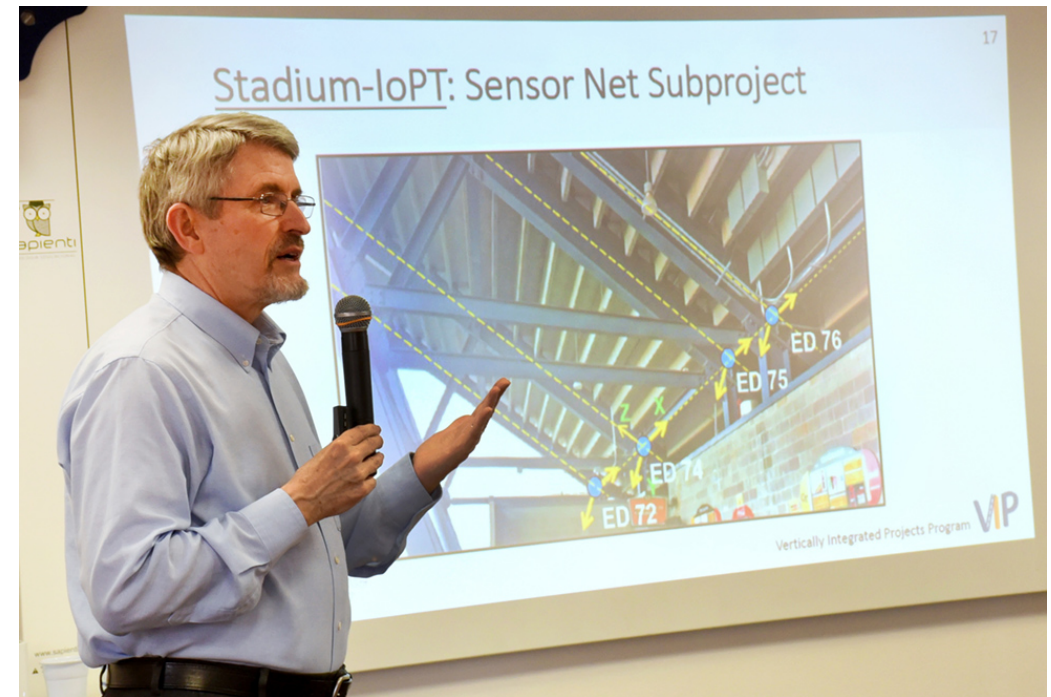
Prof Ed Coyle

The VIP Consortium: 35 Members So Far....

United States (24)
- Arizona State University
- Boise State University
- Colorado State University
- Drexel University
- Florida International University [URM]
- **Georgia Tech**[AAU,1]
- Howard University [URM]
- Iowa State University[AAU]
- **Morehouse College**[URM,1]
- New York University[AAU]
- Notre Dame
- Polytechnic Univ of Puerto Rico[URM]
- Purdue University[AAU,1]
- Rice University[AAU]
- Stony Brook University[AAU]
- Texas A&M University [AAU,URM, 1]
- UC Davis[AAU,URM]
- University of Delaware
- **University of Georgia**
- University of Hawaii[URM]
- University of Michigan[AAU, 1]
- University of Washington[AAU]
- VA Commonwealth University
- Virginia Tech

International (11)
- Inha University (Korea)
- Malmö University (Sweden)
- Natn'l Dong Hwa University (Taiwan)
- Natn'l Ilan University (Taiwan)
- Riga Technical University (Latvia)
- Universidad del Norte (Colombia)
- Universidad ICESI (Colombia)
- Universidad Mayor (Chile)
- Univ. of New South Wales (Australia)
- University of Pretoria (South Africa)
- University of Strathclyde [1] (Scotland)

Pending (5)
- **Georgia State University**
- NCA&T University[URM]
- Reykjavik University
- Tuskegee University [URM]
- UNICAMP
- Universidad de Chile

LEGEND:

AAU: Member Institution (9)

URM: Underrepresented Minority Institution (7)

1: Program in place prior to Consortium establishment (5)
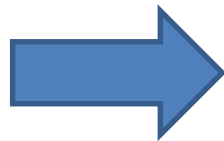
Bold: State of Georgia Institutions (3)

"Education is not the learning of facts, but the training of the mind to think." – Albert Einstein
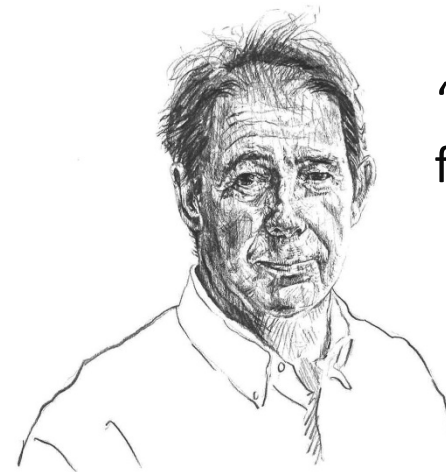
Education for Sustainable Development Goals

Learning Objectives

ESD refers to the pedagogical approach of learning about and developing cross-cutting competencies and skills needed to work on achieving SDGs

- Systems thinking competency
- Anticipatory competency
- Normative competency
- Strategic competency
- Collaboration competency
- Critical thinking competency
- Self-awareness competency
- Integrated problem-solving competency

Also what employers want...

Education for Sustainable Development Goals — Learning Objectives

ESD refers to the pedagogical approach of learning about and developing cross-cutting competencies and skills needed to work on achieving SDGs

"we should be preparing students for the work of the world, not just the world of work"

VIP4SD at Strathclyde… projects in pipeline

>200 students

13 VIP4SD projects
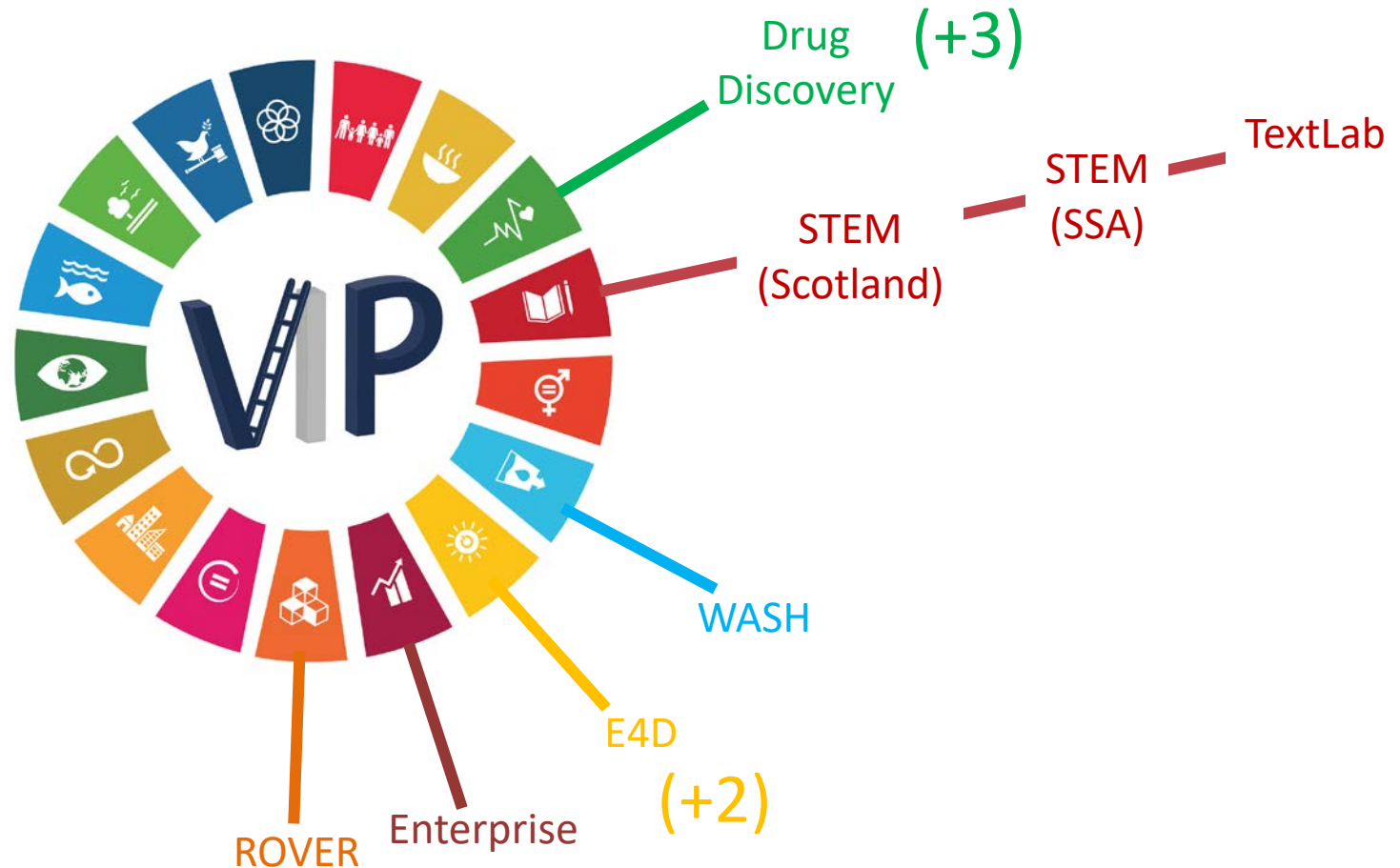
Drug Discovery (+3)

TextLab

STEM (SSA)

STEM (Scotland)

WASH

E4D (+2)

ROVER

Enterprise

SUSTAINABLE DEVELOPMENT GOAL 7
Ensure access to affordable, reliable, sustainable and modern energy for all

University of Strathclyde Glasgow

14 students

E4D

Support The Gambia Solar Project
www.strath.ac.uk/give2gambia

Energy
for
Development (E4D)

E4D

SUSTAINABLE DEVELOPMENT GOAL 7
Ensure access to affordable, reliable, sustainable and modern energy for all

...tion without ...ty

...ess to electricity

"Energy is the **golden thread** that connects economic growth, increased social equity, and an environment that allows the world to thrive."
– Former UN Secretary-General Ban Ki-moon

SUSTAINABLE DEVELOPMENT GOAL 7
Ensure access to affordable, reliable, sustainable and modern energy for all

Global problem in need of effective and innovative engineering solutions…

2017

2019

SE4D

2019 Energy for Development VIP4SD Expedition

Engineering students bring solar power to another school in The Gambia

28 July 2019   Share: in 🐦 f

Research into skin collection of blood chemistry from babies seeks to replace invasive blood sampling

Strathclyde named Sunday Times Good University Guide Scottish University of the Year 2020

Engineering students from the University of Strathclyde have installed a solar-powered energy system in another school in The Gambia.

Emma - "The people were incredibly grateful for the power that the team installed and described how beneficial it would be. The lighting would allow night classes to be held and the fans would create cooler environments to learn in."

"The highlight was seeing the obvious difference electricity was going to make to the school. The whole experience has really reinforced my reason for coming to university to become an engineer – to help people."

Callum - "It's a strange contradiction – to place technology appearing old with people living first lives. Providing electricity for the school ideally means so much for the children, parents and staff. Ceiling fans make the classrooms far more bearable; and so provides for lighting and that's long distances for learning."

"People in the school have homes, plays grounds for cooking food, using open fire and walking long distances to get water from open wells.

Sustainable Energy for Development VIP

SE4D

Student Experience ☑
Teaching and Research ☑
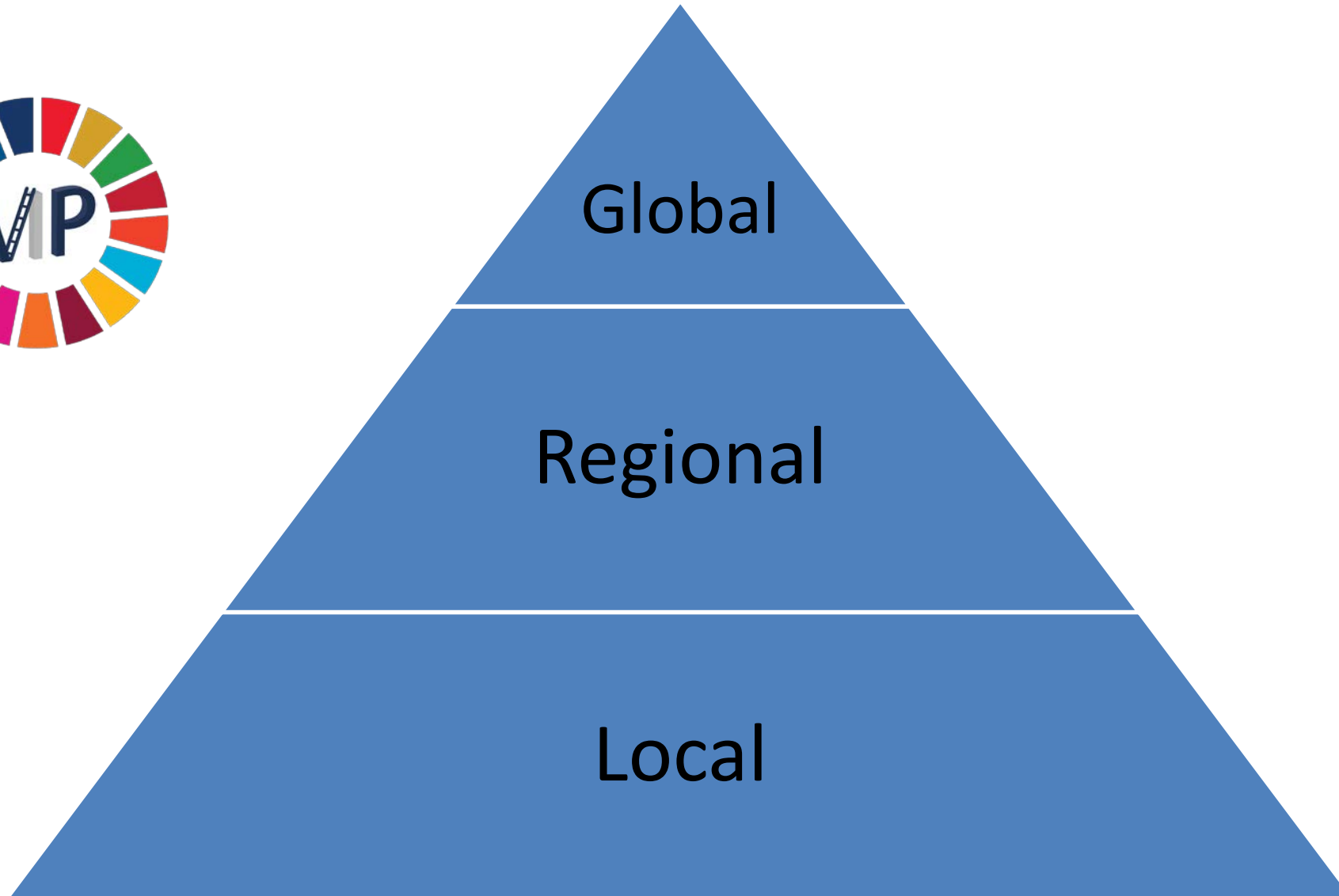**Impact** ☑

for Sustainable Development Conference 2019

2019/20 Student Conferences

Global

Regional

Local

Challenges and Institutional Support

- ESD policies must not only give authority for the implementation of ESD, they also need to ensure the necessary institutions, resources and capacities for its effective delivery – practical support required to address challenges of:
  - Academic regulations,
  - Changes required to existing curriculum – finding/creating VIP4SD pathways through degrees.
  - Degree accreditation requirements,
  - Staff engagement and resource,
  - Student recruitment

"Policy makers, curriculum developers, school administrators, assessment experts, and teachers as these important stakeholders hold the key to the successful development and mainstreaming of ESD curriculum"

– UNESCO ESD Policy Brief
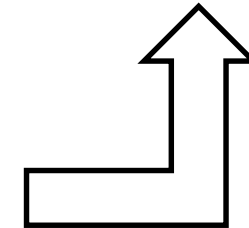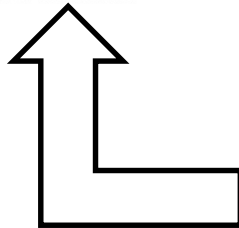
17 PARTNERSHIPS FOR THE GOALS

Join Us!

VIP for Sustainable Development

SUSTAINABLE DEVELOPMENT GOALS

University of Strathclyde Glasgow

scott.strachan@strath.ac.uk