

# Embedding Education for Sustainable Development in the Curriculum.

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# Presentation outline

1. Education for Sustainable Development (ESD) – the UW context.
2. SAPs project – module mapping findings.
3. SAPs project – interview findings.
4. Conclusions and future directions.

# **1; Education for Sustainable Development (ESD) – the University of Worcester context**

# ESD – the United Nations SDGs

- 2015 UN introduced the SDGs aiming to achieve a more sustainable future by 2030 through tackling key environmental, social and economic challenges.
- 17 goals are underpinned by 169 targets
- SDG 4 - Quality Education - target 4.7 a goal in itself and a key mechanism for achieving all of the SDG goals.

*SDG 4.7: By 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development.*

- Reinforced through the UNESCO global framework: **Education for Sustainable Development: Towards achieving the Sustainable Development Goals**, also referred to as '**ESD for 2030**'.



<https://www.un.org/sustainabledevelopment/sustainable-development-goals/>



# QAA & Advance HE (2021) Education for Sustainable Development Guidance

“We believe that every HEP should adopt the guidance and embed ESD across the curriculum. If we as educators are serious about preparing our students for the future, we must embrace ESD and ensure that every graduate has not only the knowledge and skills but the attributes that will enable them at least to cope and ideally thrive in the face of the multiple challenges they will face across their life course in the 21st century. Chief among these challenges is the interlinked climate and ecological emergency that will bring profound changes to many of the things we currently take for granted. Students with an ESD knowledge will know that the social and economic domains of sustainability depend upon the environment for which there are limits. Social and economic ambitions are constrained by these planetary limits.

We exhort vice-chancellors and principals to support and enable its implementation. Your current and future students expect nothing less of you.”



<https://www.qaa.ac.uk/the-quality-code/education-for-sustainable-development#>

# UW Learning and Teaching Strategy

## Learning and Teaching Strategy 2020 - 2025

- ESF one of the five areas of focus and impact
- Social responsibility one of the five graduate attributes
- Culture – “encourage students and staff to contribute to social transformation and the United Nations Sustainable Development Goals.”

### Education for Sustainable Futures

The University has a national reputation in relation to education for sustainable development and we are committed to strengthening and extending this, as reflected in our endorsement of the United Nations Sustainable Development Goals Accord.

We will do this by embedding our graduate attributes in the curriculum, with all courses implementing these through their discipline lens, and ensuring curricula reflect and align with our values for inclusion, internationalisation, ethical and socially responsible global citizenship.

We aim to ensure our graduates help transform communities and society for the better. The impact of this will be seen in the currency of our curricula and the confidence of our graduates to make a difference.

UNIVERSITY OF WORCESTER  
**LEARNING AND  
TEACHING STRATEGY**  
2020-2025  
INSPIRED FOR LIFE



# Student demand for ESD: SOS-UK Sustainability Skills Survey

Students are interested – NUS (SOS-UK) longitudinal surveys:

- 12 years in a row, over 85% of students want their institutions to be doing more on sustainable development,
- 66% want to learn more about it.
- <https://www.sos-uk.org/research/sustainability-skills-survey>



**88%** say they agree their place of study should actively incorporate and promote sustainable development



**79%** would like to see sustainable development actively incorporated and promoted through all courses



**66%** say sustainable development is something they would like to learn more about

421 students from the University of Worcester responded to the 2022-23 survey – sustainability skills important to them and want them built into courses, placements, assessments and volunteering.

# SDG Teach In 1<sup>st</sup> – 31<sup>st</sup> March 2023



SDG TEACH IN  
TOP 10 INSTITUTION 2023

PUTTING THE SDGS AT THE HEARD OF EDUCATION

 STUDENTS  
ORGANISING FOR  
SUSTAINABILITY  
UNITED KINGDOM

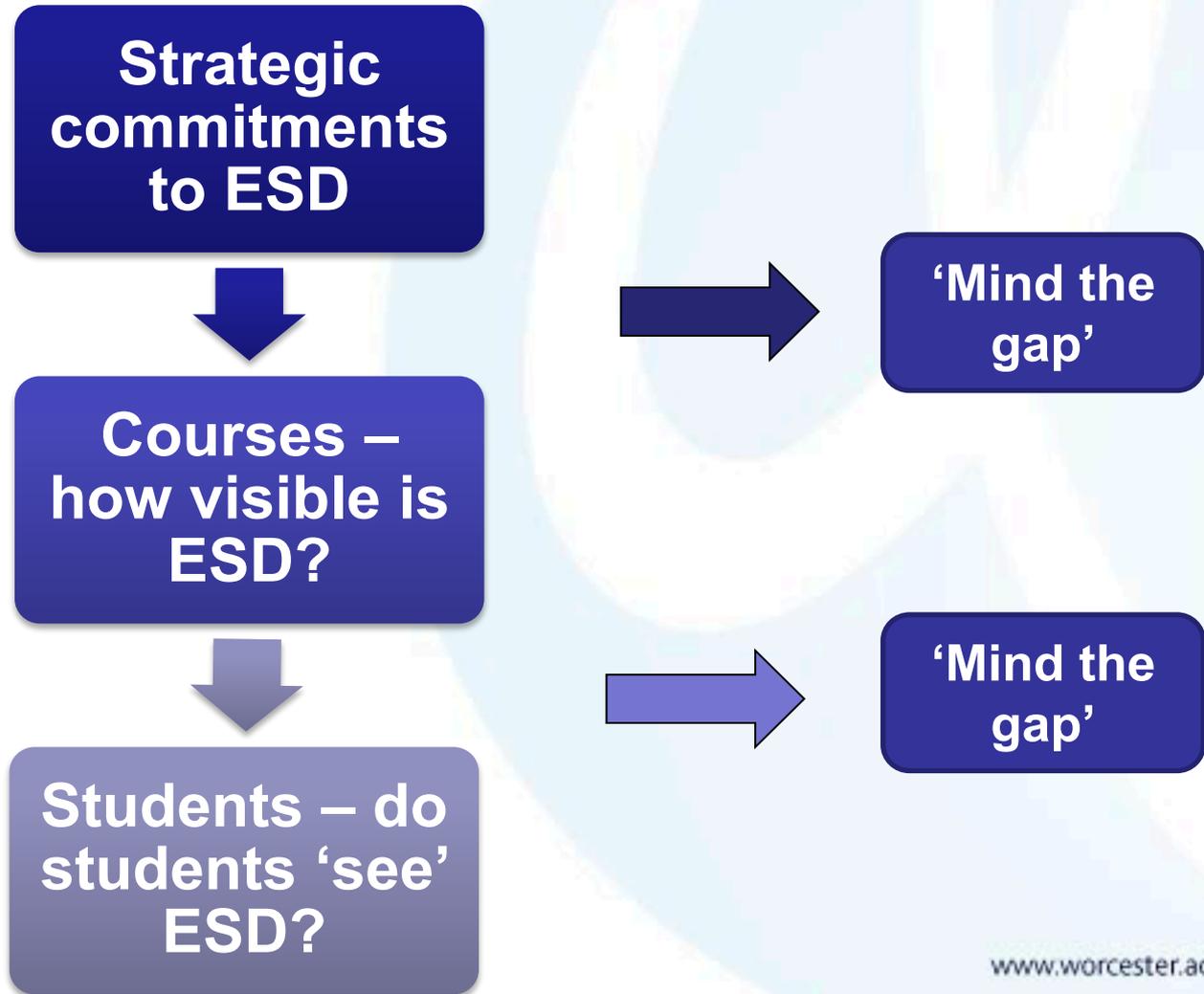
March 2023  
#SDGTeachIn  
@sosukcharity

The graphic features a teal background with two circular icons of the 17 Sustainable Development Goals (SDGs) in various colors. The text is centered and uses a mix of white and dark teal colors. The SOS logo is a white square with the letters 'SOS' in a stylized font.

**At Worcester 41 staff pledged, reaching 4374 students (48% of the student body).**

<https://www.sos-uk.org/project/global-goals-teach-in>

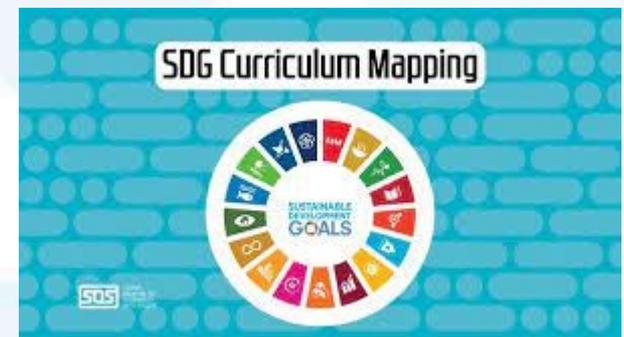
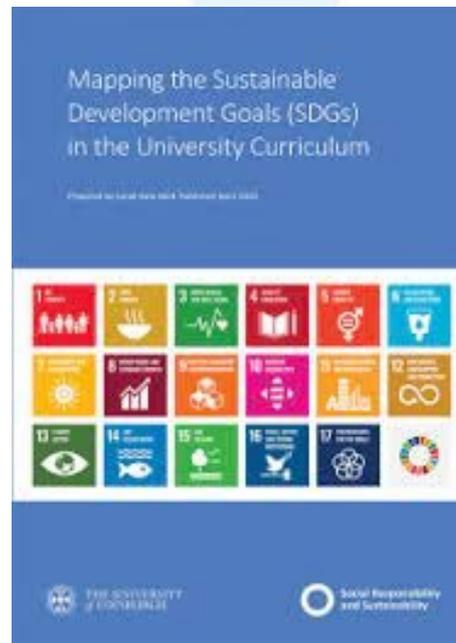
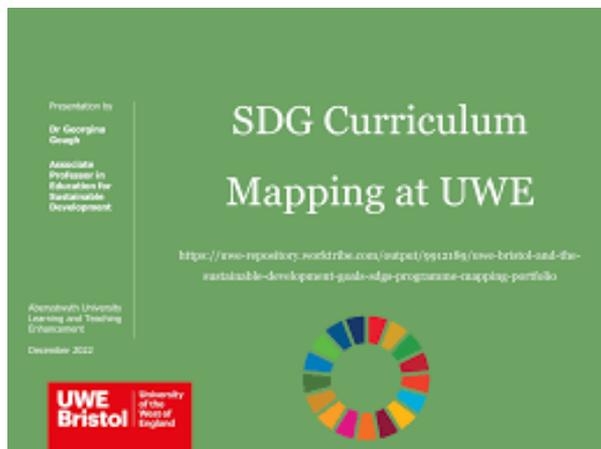
# Key issues – the SAPs project



# **2; SAPs project – module mapping findings**

# SAPs project methodology

Curriculum mapping methods – use of key words to manually search module content (based on practice developed at other universities).



# SAPs project methodology

Mapping was completed across two courses for the SDGs & Graduate Attributes.

- Forensic and Applied Biology
  - Psychology

All three years were covered, using the short module descriptors. Most of the modules were used although in some cases they were not used due to limited information.

# SDG's : Forensic and Applied Biology

- Quality education, decent work and economic growth and life on the land were the key SDGs identified.
- Year three modules were found to have some strong links.

 <p>Quality Education</p>	BIOL1001 BIOL1003 BIOL2001 BIOL2002 BIOL2003 BIOL2009 BIOL2004 BIOL2014 BIOL2012 BIOS3003 BIOS3400
 <p>Decent work and economic growth</p>	BIOL1001 BIOL1002 BIOL1004 BIOL1006 BIOL1007 BIOL1008 BIOL1010 BIOL2001 BIOL2003 BIOL2005 BIOL2007 BIOL2014 BIOS3002 BIOS3041 BIOS3050 BIOS3052 BIOS3111 BIOS3112 BIOS3116 BIOS3117 BIOS3302 BIOS3400 BIOS3401 BIOS3404
 <p>Life on the Land</p>	BIOS3010 BIOS3012 BIOS3041
 <p>Peace justice and strong institutions</p>	BIOS3050 BIOS3025

# SDG's Psychology

- This showed links to other SDGs covering areas such as gender equality and good health and wellbeing.
- This reflects the impact of the differing courses and how stated module content reflects SDG themes.

 <p>Quality Education</p>	<p>PSYC1450 PSYC1452, PSYC1453, PSYC1454, PSYC2541, PSYC2544, PSYC2543, PSYC2542 PSYC2546, PSYC365 PSYC3661, PSYC3657 PSYC3667, PSYC3668</p>
 <p>Decent work and economic growth</p>	<p>PSYC1450, PSYC1451, PSYC1452, PSYC1454, PSYC2546, PSYC2544, PSYC3652, PSYC3666, PSYC3663, PSYC3656, PSYC3654</p>
 <p>Peace justice and strong institutions.</p>	<p>PSYC1453, PSYC1452 PSYC 1454 PSYC3664, PSYC3668</p>
 <p>Gender equality</p>	<p>PSYC1450, PSYC1453, PSYC2542, PSYC2545, PSYC3652, PSYC3666</p>
 <p>Partnership for goals</p>	<p>PSYC1452, PSYC2545, PSYC2543, PSYC2544, PSYC2546, PSYC3655, PSYC3661</p>
 <p>Sustainable cities and communities</p>	<p>PSYC1453 PSYC3663</p>
<p>Good health and well being</p> 	<p>PSYC1452, PSYC1453, PSYC2546, PSYC3652,</p>

# Forensic and Applied Biology

## Graduate Attributes

Blue – Social Responsibility  
 Green – Problem solving  
 Red - Digital Citizenship  
 Brown – Reflective and resilient lifelong learning  
 Yellow – Teamwork and effective communication

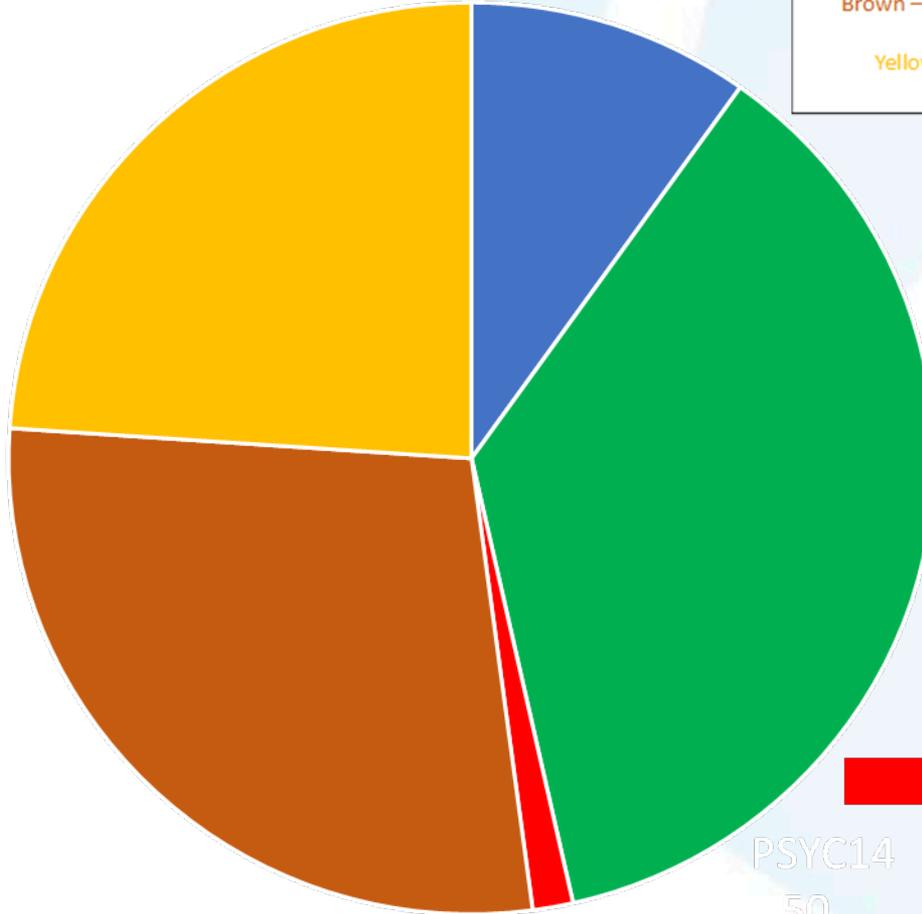
BIOL1001, BIOL1003, BIOL1004, BIOL1006, BIOL1010, BIOL2001, BIOL2003, BIOL2006, BIOL2010, BIOL2014, BIOS3052, BIOS3106, BIOS3111, BIOS3112, BIOS3302, BIOS3403, BIOS3404

BIOL1002, BIOL1003, BIOL1006, BIOL1008, BIOL1010, BIOL2001, BIOL2003, BIOL2007, BIOL2008, BIOL2010, BIOL2014, BIOS3109, BIOS3111, BIOS3112, BIOS3116, BIOS3117, BIOS3302, BIOS3400, BIOS3401, BIOS3403,

BIOL1001, BIOL1002, BIOL2001, BIOL2003, BIOS3002, BIOS3003, BIOS3111,

BIOL1001, BIOL1003, BIOL1005, BIOL1006, BIOL1007, BIOL1008, BIOL1010, BIOL2001M, BIOL2002, BIOL2003, BIOL2007, BIOL2008, BIOL2010, BIOL2014, BIOS3002, BIOS3003, BIOS3109, BIOS3111, BIOS3112, BIOS3116, BIOS3117, BIOS3302, BIOS3400, BIOS3401, BIOS3403, BIOS3404

BIOS2001



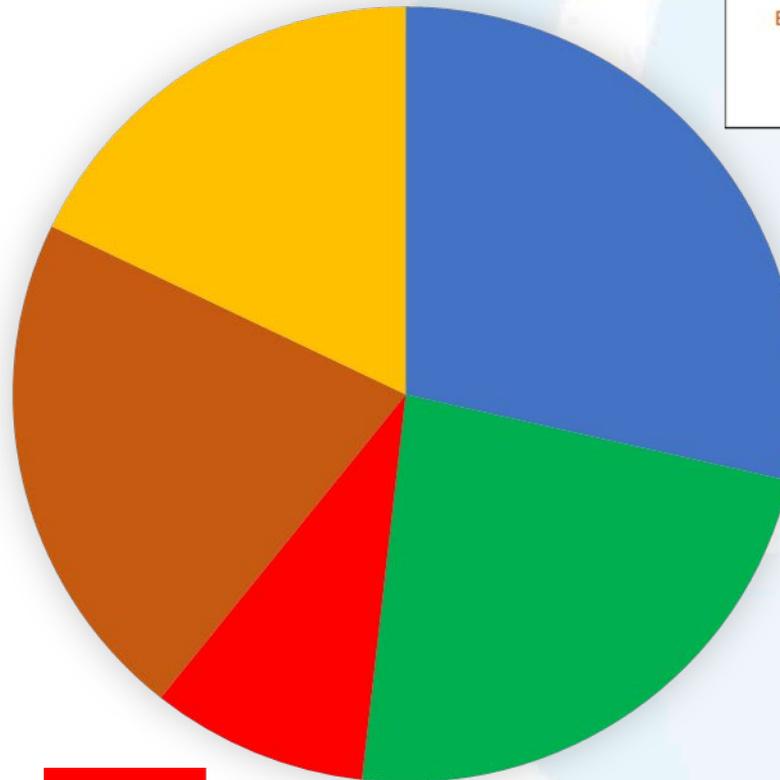
PSYC14  
50...

# Psychology

## Graduate Attributes

PSYC1453 PSYC2541  
PSYC2544 PSYC2546  
PSYC3652 PSYC3655  
PSYC3661 PSYC3663  
PSYC3664 PSYC3665

PSYC1450 PSYC1452  
PSYC1453 PSYC1454  
PSYC2543 PSYC2544  
PSYC2545 PSYC2546  
PSYC3656 PSYC3661  
PSYC3662 PSYC3666



Blue – Social Responsibility  
Green – Problem solving  
Red - Digital Citizenship  
Brown – Reflective and resilient lifelong learning  
Yellow – Teamwork and effective communication

PSYC1450 PSYC1452  
PSYC1454 PSYC2541  
PSYC2542 PSYC2543  
PSYC2544 PSYC2546  
PSYC3652 PSYC3653  
PSYC3654 PSYC3656  
PSYC3657 PSYC3660  
PSYC3667 PSYC3668

PSYC1450 PSYC1451  
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PSYC3661

PSYC1451  
PSYC2541  
PSYC2543  
PSYC3661  
PSYC3666

# **3; SAPs project – interview findings**

# SAPs project methodology – interviews

## Interviews

- Course leaders and students were contacted through email.
- An interview was conducted with a course leader, prompt questions were used as proposed through ethical approval.
- The interview was recorded and saved via one drive.
- Interview lasted approximately twenty minutes

# Excerpts from the interview

Q) Does the module cover the SDG's

....I'm unsure if any or all of them are, this is something that we have been made aware of it but we haven't been given a list of all 17 and sat down as a team....I was interested from the perspective how if any we are incorporating, which obviously needs to change....

Q) How are the graduate attributes incorporated into the course?

..... the graduate attributes are simpler as we are thinking each time the course is put through a review, we are more geared to thinking okay once this person graduates what skills ability knowledge can they get from a module.

# 4; Conclusions and future directions

# Conclusions

- Reflections on understanding the SDGs (development of knowledge), use of key words, knowledge of the course;
  - Some of the key words used, when looking at the SDG's, e.g. SDG 4: Quality education – expand on knowledge, career, develop key skills
  - SDG 8 Decent work and economic growth – contributes to society, clinical practice
  - Throughout the mapping, I found that understanding the course made a difference when mapping and may have influenced the results. As proposed in the future directions course leaders/students would have a greater understanding of the course, as although some of the module descriptors did not explicitly state they covered an area relating to an SDG or Graduate Attribute, from my own knowledge I realised they did cover this. Although if I felt this I did not in put this into the mapping as it was not explicitly stated.

# Conclusions

- The research found that whilst the SDGs are being promoted at the university there needs to be a clearer system in place for course leaders to ensure they can cover them, when reviewing courses at the end of a year.
- Graduate attributes were seen to be easier to incorporate within courses, however by developing a system can include both the SDGs and the GAs would be beneficial to both course leaders and students. This would lead to a clear understanding of how they can be beneficial to students in their future careers and to develop them for course leaders throughout their courses.

# Future directions

1. SDG Teach in – disseminate practice and set up an ESD 'Community of Practice'.
2. Documentation – review current practice in courses (handbooks and approval/review documentation).
3. Develop guidance for AQU, course teams, students on mapping (for inclusion in student course handbooks).
4. Undertake further curriculum mapping across the university.
5. Work with course reps to gain more input from students.
6. Consider how impact can be measured.

# Thank you for listening, any questions?

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