

# Nottingham Trent University Sustainability Professional Award Dr Petra Molthan-Hill

# About the project

#### Summary

Petra has been leading the Green Academy at Nottingham Trent University (NTU) since 2013, developing innovative curricular and extra-curricular projects in Education for Sustainable Development. In the last year the focus has been on integrating the United Nations' Sustainable Development Goals (SDGs) into the core curriculum for all 640 courses at NTU. Staff development workshops and a wealth of supporting learning resources for staff and students have been designed, ranging from Astrophysics to Medieval History to Social Science. More specifically, detailed seminar suggestions, workshops and bigger projects on how to integrate the SDGs into Marketing, Accounting, Innovation etc. were collected and are presented in the second edition of 'The Business Student's Guide to Sustainable Management' (edited by Petra, forthcoming in January 2017). Since 2010 Petra has led the Greenhouse Gas Management Project at NTU, which won the Guardian University Award for 2015 in Business Partnership together with NetPositive Ltd. Petra is also the Co-Chair of the PRME Working Group on Climate Change and Environment with the aim to share innovative curricular and extra-curricular teaching material worldwide.

#### **Project partners**

The Green Academy team works with a variety of different departments across the institution such as the Environment Team and Nottingham Trent Students' Union (NTSU) and with strong support from the Sustainable Action Forum (SAF), where Petra is Deputy Chair. SAF promotes the engagement and use of internal resources and knowledge to facilitate enhancement of curriculum, research and campus with regards to sustainability. The Senior Pro Vice-Chancellor chairs this forum or her designate; and membership includes academics from each school (including research communities), the Environment Manager, two delegates

## NOTTINGHAM<sup>®</sup> TRENT UNIVERSITY

#### Profile

- Higher Education
- 27,000 students (includes full and part time students)
- Urban/Rural







from the NTSU and key representatives from professional services. In addition Petra chairs the TILT Education for Sustainable Futures group that is part of the Trent Institute of Learning and Teaching (TILT) initiative at NTU. The group offers academics a platform for exchanging experiences and knowledge, as well as an opportunity to give support to colleagues across all disciplines. As mentioned above, with regards to the Greenhouse Gas Management Project, Petra has formed multiple external partnerships. Last but not least Petra works closely with other researchers in NTU's Responsible and Sustainable Business Lab.





# The results

#### The problem

In 2013, Petra welcomed the opportunity to apply and take part in the Higher Education Academy (HEA) Green Academy Institutional Change programme 2013/2014. NTU had already been very successful in 'greening' its operations, but the integration of these topics into the curriculum was rather patchy, with some academic schools, such as Nottingham Business School, being more proactive in offering, for example, the Greenhouse Gas Management Project. Previous transdisciplinary work undertaken by Petra often faced internal barriers or academic problems such as how to define sustainability across all disciplines.

## The approach

In our NTU Green Academy we decided to focus on sustainability challenges instead of sustainability as a concept, more specifically on food as a unifying theme. The 'Food for Thought' project had two strands to it, an extracurricular strand, including a 'Superkitchen', 'Vegetable Varsity', 'Foodshare Allotment' and Let's get cooking' and a curricular strand labelled 'Appetite for change'. In order to reach all 28,000 students simultaneously we designed an online course, the 'Sustainability in Practice Certificate', which students could get in addition to the degree. The later was shortlisted for the Green Gown Awards in 2014. Due to its success, NTU's Green Academy became a permanent project in 2014, making NTU one of the few universities in the UK to have a dedicated team delivering on ESD initiatives. Initially consisting of just Petra and two other colleagues, with some hours allocated each for their involvement in Green Academy work, a part-time Administrator, and 4 interns on temporary contracts, the Green Academy now has 5 permanent members of staff making it a unique resource allowing for observable results in the field of sustainability learning. Food is still an important topic, but the Sustainability in Practice (SiP) Certificate is now offered for three subthemes: Energy, Clothing and Food. The SiP is also integrated into some core curricula with tailored versions e.g. for Sustainable Tourism and Chemistry.

#### Our goals

The Green Academy is committed to sending students out into the world as global citizens, building on the links between sustainability literacy and employability and striving to support the incorporation of Future Thinking in all NTU courses. The aim is to foster students' abilities to understand and contribute in meaningful ways towards current and future challenges in the area of sustainable development.

## Obstacles and solutions

| Engaging more students | <ul> <li>By embedding the teaching content of the Sustainability in Practice<br/>Certificate within both Masters and Undergraduate modules at NBS as a<br/>compulsory element since 2014, each year approximately 250 and 900<br/>students respectively were encouraged to explore the meanings of<br/>sustainability and food.</li> </ul>  |
|------------------------|---|
| Lack of staff resource | <ul> <li>In order to deliver the Sustainability in Practice Certificate with only a<br/>small team of staff Petra recruited 2 academics from each academic<br/>school within the institution to act as 'advisors' for the module in its<br/>development stage, ensuring that it met the needs of students from each<br/>school. Under her encouragement, the advisors and their colleagues, 46</li> </ul> |





|                    | Academics in total, contributed over 55 sets of subject-specific resources to complement the more generic certificate content; resources which can be re-used in teaching outside the certificate.   |
|--------------------|--|
| Widening the reach | <ul> <li>The Green Academy has taken an institution wide approach to ESD by<br/>having a proactive role in positively impacting a 'Curriculum Refresh'<br/>programme at NTU, ensuring that course leaders integrate aspects of<br/>ESD in the courses as a whole for 2016/17 onwards.</li> </ul> |

#### Performance and results

**The Sustainability in Practice (SiP) Certificate** : This innovative online certificate launched in 2013 and delivered through the Nottingham Online Workspace (NOW), aims to foster personal, disciplinary and interdisciplinary understandings of sustainability using food as a key theme. To date, the Certificate is in its 4th year running, with 4917 participants & 320 completions. The Certificate has gone from strength to strength, with 2 new themes for 2016/17 in addition to Food: Energy & Clothing, due to numerous examples of positive feedback from students and colleagues.

**'Future Thinking':** Taking inspiration from the QAA Guidance, Petra co-created NTU's 'Future Thinking Framework', which has since become embedded as an element of the 'Curriculum Refresh' process: a project that will assess all of the 640 courses (both undergraduate and taught postgraduate), over a period of 3 years commencing in spring 2016. All courses will need to demonstrate how they align with elements of NTU's strategic plan, of which sustainability is a key component and will need to address at least one of the United Nations Sustainable Development Goals.

**'The Future Thinking Learning Room'**: created to support members of staff with the sustainability section of Curriculum Refresh. The learning room, which is an innovative online resource library created and designed by the NTU Green Academy, means that ESD no longer needs to be an afterthought when it comes to curriculum content and instead allows it to be an easily achievable priority for course leaders across all academic departments. The Green Academy also runs staff development workshops for course leaders and other members of staff.

**The Greenhouse Gas Management Project:** How can universities help businesses to combat climate change? In a unique partnership Nottingham Business School has teamed up with NetPositive Ltd to do exactly this: As part of their core curriculum students act as consultants to businesses helping them to reduce Greenhouse Gas Emissions and achieve Investor in the Environment (iiE) Accreditation. Over 400 business students, 95 businesses/organizations including 4 NHS Clinical Commissioning Groups have so far taken part. *Quote from participant: "It was a really enjoyable experience and has inspired me to investigate jobs in the energy/sustainability sector as a future career path…."* 

Petra has been involved in many more projects for example working with multiple agents and colleagues at NBS to become Partner in ABIS (The Academy of Business in Society). She is the sole editor for the textbook 'The Business Student's Guide to Sustainable Management', published by Greenleaf in 2014, with a second edition to be released shortly, which will be endorsed by PRME and will offer teaching material in relation to the Sustainable Development Goals. Petra is also collaborating with the National Union of Students (NUS) in order to work towards NTU gaining the 'Responsible Futures' accreditation.



Finalist's case study



We would like to share our ideas with other colleagues; a starting point could be through the different book chapters and articles where we have written about our projects, please see below, but we also welcome colleagues to visit us at NTU or to take part in conferences and workshops, please see contact details below.

I am also interested in showcasing YOUR ideas in the PRME working group on climate change and environment, please contact <u>petra.molthan-hill@ntu.ac.uk</u> to share your ideas or/and to become a member in the PRME working group.

#### Lessons learned

- 1) Work in partnerships, internally within the university but also externally
- 2) Encourage ideas, no matter how un-conventional
- 3) Adapt a 'we will find a way to do it' approach

#### Sharing your project

We have written the following books, book chapters and articles about our projects:

#### About developing the online course and other teaching material:

MOLTHAN-HILL, P., DHARMASASMITA, A. and WINFIELD, F. 2015 Academic Freedom, Bureaucracy and Procedures: The Challenge of Curriculum Development for Sustainability. In: W. LEAL FILHO and J. P. DAVIM, eds., Challenges in Higher Education for Sustainability. Cham, Switzerland: Springer, pp. 199-215. ISBN 978-3-319-23705-3

MOLTHAN-HILL, P. (Ed) 2014. *The business student's guide to sustainable management: principles and practice*, Sheffield: Greenleaf (second edition in January 2017)

MOLTHAN-HILL, P., WINFIELD, F., BADDLEY, J. and HILL, S. 2016 "Work based learning: Students solving sustainability challenges through strategic business partnerships" for the PRME book titled 'Redefining Success: Integrating the UN Global Compact into Management Education', Sheffield: Greenleaf (Upcoming)

DHARMASASMITA, A., PUNTHA, H. and MOLTHAN-HILL, P. 2016 'Feeding' the world - generating sustainability solutions through a combination of digital learning and volunteering challenges' in Speight, Sarah (Ed) On the Horizon: '

Learning for sustainability in the digital world: assessing the opportunities and challenges in higher, adult and vocational education' (Upcoming)

#### About extracurricular activities:

MOLTHAN-HILL, P., PUNTHA, H., DHARMASASMITA, A., HUNTER, K. and LAWE, B. 2016. Addressing food waste: collaborative student and community projects. In W. LEAL FILHO, L. BRANDLI, J. NEWMAN, P. CASTRO, eds., Handbook of Theory and Practice of Sustainable Development in Higher Education (Volume 1), Cham, Switzerland: Springer (Upcoming)

#### About the original 'Food For Thought' Project:

PUNTHA, H., MOLTHAN-HILL, P., DHARMASASMITA, A. and SIMMONS, E., 2015. Food for thought: a university-wide approach to stimulate curricular and extra-curricular ESD activity. In: W. LEAL FILHO, U.M.

www.greengownawards.org.uk



Dissemination supported by:

HIGHER EDUCATION



AZEITEIRO, S. CAEIRO and F. ALVES, eds., Integrating sustainability thinking in science and engineering curricula. Cham, Switzerland: Springer, pp. 31-48. ISBN 9783319094748

#### More specifically for business/management studies and business schools:

MOLTHAN-HILL, P., 2014. <u>A new framework for embedding sustainability into the business school curriculum.</u> In: P. MOLTHAN-HILL, (Ed), *The business student's guide to sustainable management: principles and practice.* Sheffield: Greenleaf, pp. 7-25.

PAINTER-MORLAND, M., SABET, E., MOLTHAN-HILL, P., GOWOREK, H. and DE LEEUW, S., 2015. <u>Beyond</u> the curriculum: integrating sustainability into business schools, *Journal of Business Ethics*. ISSN 1573-0697

We have showcased our projects at external events including four international conferences and twelve national events/conferences and (co-) organised three internal events (HEA seminar 'Food4Thought: A whole university approach to embedding ESD', SRHE event 'The digital university and its contributions to a sustainable future', PRME regional chapter UK and Ireland: Workshops including the Learning room and GHG project). Additionally, we run newsletters for students, tweet and contribute to various (social) media streams at NTU.The GHG project has been included in the report 'Climate Change Action for Sustainable Development' 2015 by United Nations Department of Economic and Social Affairs (UNDESA).

#### What has it meant to your institution to be a Green Gown Award finalist?

**Professor Eunice Simmons, Senior Pro Vice-Chancellor, Nottingham Trent University** We continually strive to increase the reach and significance of our work at NTU to create a truly sustainable university and Petra being shortlisted for the Green Gown Award is a prestigious recognition of our leadership in this regard.

Further information Email: <u>GreenAcademy@ntu.ac.uk</u>

Website: https://www4.ntu.ac.uk/sustainability/sustainable-learning/

Twitter: @NTUGreenAcademy

