

Executive summary

In this fifth Principles for Responsible Management Education (PRME) Sharing Information on Progress report, we have taken a novel approach to reporting our activities in order to demonstrate our efforts and contributions towards the achievement of the 17 Sustainable Development Goals (SDG) across our three campuses, namely the UK, China and Malaysia. The development of the report has provided an invaluable opportunity to take stock of our achievements globally, but also to look ahead as we continue to develop our approach to embedding PRME and the SDGs in all we do.

While we make several contributions to the SDG agenda, the report especially highlights Nottingham University Business School's notable strength in fostering and nurturing local and global partnerships (SDG 17). By collaborating across our three campuses and working with public, private and third-sector stakeholders, we are not only able to maximise the impact of our activities, but we are also able to develop the capabilities of our students to become responsible leaders.



Messages from the deans

As deans of the three campuses of **Nottingham University Business School** (NUBS), we are very happy to confirm that the School's commitment to the implementation of PRME Principles remains as strong as ever. We were fortunate enough to be reappointed as PRME Champions for the 2018/2019 champions cycle. We will continue to contribute in any way that we can to initiatives both globally and locally. We welcome the opportunity to continue our involvement alongside a global network of Champion Schools, especially as the focus is now placed on embedding and addressing the UN Sustainable Development Goals in all we do. The vision of the school is to shape the future of responsible business and management in an increasingly interconnected world. In our aim to realise our vision, we benefit greatly from our involvement in PRME as we move forward to take transformative action on integrating the SDGs in three key areas: curriculum, research, and partnerships.



Professor Jim Devlin, Dean, Nottingham University Business School UK

NUBS UK

Our report aims to showcase the activities that have been developing and the great achievements of NUBS UK in these three areas. The report showcases several initiatives across our three campuses of which we are particularly proud. In the UK, we report a number of developments around SDG 8 (Decent Work and Economic Growth), SDG 12 (Responsible Production and Consumption) and SDG 1 (No Poverty). With reference to SDG 8, the School is leading the agenda on eliminating modern slavery in supply chains through involvement in the Rights Lab. We are also embedding this agenda in our teaching and learning activities, for example turning a large cohort of about 300 undergraduates into activists for two years in a row through collaboration with Wikirate and the Walk Free Foundation.

In terms of SDG 12 and SDG 1, through the school's N/Lab, we have several projects aimed at mapping people in food poverty and working closely with partners such as Olio to tackle the problem of food distribution. Researchers in the School are connected to a number of local and national partners including Super Kitchen, Eden Project to fight food insecurity, isolation and food waste in order to champion social eating (communal spaces for families to get decent freshly cooked meals together for moderate prices). Two of the school's undergraduate students received the Vice-Chancellor's medal for their social enterprise initiatives: People of the Streets CIC (POTS), and Stories of the Streets (SOTS).





Dr Mohan V. Avvari, Dean, Nottingham University Business School, Malaysia

NUBS Malaysia

In Malaysia we have been fortunate to have a group of colleagues with interests in teaching and research in the area of Sustainability and CSR, who work under the banner of the Sustainability in Business Research Group. There is strong student engagement through Enactus and through projects that have inter-school linkages and engagement with external organisations. We are particularly active in the areas under SDG 4 (Education), SDG 5 (Gender Equality), SDG 17 (Partnerships) and SDG 1 (Poverty Alleviation). We also have some efforts in SDG 9 (Industry and Innovation) through research projects concerning business adopting sustainability strategies. With SDG 15 (Life on land), we have a NUBS faculty member who is a co-investigator in the Management and Ecology of Malaysian Elephants project - an Interdisciplinary research on Elephant Conservation in Peninsular Malaysia. Efforts by a NUBs colleague in developing activities related to gender equality and related aspects have led to her receiving the Vice-Chancellor award. The mentoring of our students has led to a number of awards in contests and competitions organised by business organisations. Colleagues with industry and industry associations not only build awareness of responsible business issues within the industry but also involve students in these activities to develop their understanding of the issues. Through teaching, research and engagement of students in industry activities, we are active in promoting responsible business values among students and industry.



Professor Martin Lockett, Dean, Nottingham University Business School, China

NUBS China

We are pleased to report on our continuing progress towards achieving the goals of the United Nations' Principles for Responsible Management Education at Nottingham University Business School China over the last two years since our previous SIP report was released.

Here are highlighted a few of our achievements and activities.

Our students, both individually and as members of our numerous student organisations, are engaged in multiple initiatives promoting the broad agenda of United Nations' Sustainable Development Goals. SDGs 6 and 14, concerning water resources, are of upmost importance to the Ningbo community, where our campus is located. Ningbo is world famous for its seafood, and the quality of water is essential to its aquatic cultures and sea fisheries. Students from the NottinGreen Association organised events imaginatively named Plastic Aquarium. This educated the local community about the impact of plastic on water pollution and was followed by another event aimed at minimising the use of plastic on our campus.

Our faculty has been very successful in research on business ethics and sustainability. Our colleagues conducted research on various aspects of corporate social responsibility, consumer ethics and sustainability in supply chains. These studies were supported by our Business School, as well as national and international grants, and were published in highly ranked international journals. Hence our research is addressing important problems of the local community including consumer behaviour in the relatively developed coastal cities of China as well as the sustainability of supply chains passing through Ningbo, the world's largest cargo port with an annual throughput of over a billion tons.

In our teaching, we significantly increased the number of courses where students learn about sustainability, social responsibility and ethics. Our colleagues published a textbook and case studies, as well as developing other educational materials on sustainability, ethics and the social responsibility of business. We also promote the SDG agenda through our outreach activities such as an international workshop on green supply chains, reports on inclusive finance with local and national policy impact, and a public lecture on sustainable consumption and waste. Another highlight was a visit to the United Nations in New York by a group of executive education students that explicitly covered the SDGs.

We continue to actively participate in the 'Champions Group' of the United Nations' Principles for Responsible Management Education, and we trust that activities of our institution, both as a global leader in higher education, and an important contributor to the education community in China, can serve as an inspiration for other schools of business around the world.



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Introduction A map of Sustainable Development Goals in this report

This report has been written in order to evidence the work around the SDGs taking place across Nottingham University Business School's (NUBS) three campuses. We have structured the report around the six PRME principles and highlighted contributions to specific SDGs under each of these.

The evidence comprised in this report takes multiple forms, including data on our curricula and stories around teaching, research and partnerships. There are a number of features in the report, which are longer stories spanning several principles and showcasing exemplary work around the SDGs.

Given that this is the first time that we have formally reported against the SDGs, finding a format that does justice to what we do has been central to our efforts. The map below has been developed as a way to summarise NUBS' PRME efforts from an SDG standpoint. Overall, the map shows that NUBS is engaged in a wide range of activities, which enable addressing many of the SDGs.

Contribution to Sustainable Development Goals

	Principle 1	Principle 2	Principle 3	Principle 4	Principle 5	Principle 6
SDG1	✓		✓	✓	✓	
SDG2	✓			✓	✓	✓
SDG3	✓		✓			
SDG4	✓	✓	✓	✓		
SDG5		✓	✓	✓		
SDG6	✓					
SDG7	✓			✓		✓
SDG8	✓		✓	✓		
SDG9					✓	✓
SDG10	✓	✓		✓		✓
SDG11						
SDG12	✓		✓			✓
SDG13				✓		
SDG14						
SDG15			✓		✓	
SDG16				✓		
SDG17	✓	✓	✓	✓	✓	✓

Principle 1 | Purpose



NUBS mission and vision

Our vision

Nottingham University Business School's vision is to shape the future of responsible business and management in an increasingly inter-connected world.

Our mission

Our mission is to utilise our unique global footprint to enable our faculty, partners and students to shape the future of business and management.

This mission is realised through co-producing ground-breaking and impactful research that informs innovative and responsible business and management, and through educating leaders, managers and citizens from across the world so they can realise their contribution to business, economy and society.

Our distinct contribution is made possible through our unique international 'tri-campus' footprint that enables us to understand challenges that are both locally distinct and globally shared. We are attentive to our partners' and students' particular economic, cultural and political environments, and the inter-connected world of contemporary business.

Our distinct contributions to the future of business and management are realised through our recognised areas of research and teaching excellence in ethical and responsible business, innovation and entrepreneurship, banking and risk, public and healthcare leadership, and international business.

NUBS in numbers

The table shows students numbers over the last three academic years throughout our programmes across our three campuses.

Total enrolled student numbers	2017/18	2016/17	2015/16
NUBS UK			
Undergraduate	1699	1552	1428
Masters	962	504	400
MBA	70	77	105
PhD	58	68	77
NUBS China			
Undergraduate	2425	2155	1505
Masters	248	166	264
PhD	47	30	10
NUBS Malaysia			
Undergraduate	594	535	611
Masters	55	30	20
MBA	42	86	170
PhD		17	16

Experiences of sustainability education in the Nottingham University Business School curriculum

Dr Michelle Stirk and Dr Anne Touboulic have initiated a longitudinal research project, which assesses how sustainability perspectives and awareness of business school students change over the course of their studies. It examines how the curriculum that is taught promotes and supports sustainable development and sustainable lifestyles. Potentially, it will also highlight areas that could be augmented to deliver better sustainability education and assist in cultivating businesses and business leaders that are sustainability aware. This is a key area for research and education as students of the Business School will become key players in the business world both nationally and internationally.



International teaching resource

The first official textbook of the PRME initiative *Principles of Responsible Management: Global Sustainability, Responsibility, and Ethics* (Cengage) has made a global impact in teaching, also through its Chinese, Indian, Portuguese, and Spanish language editions. The author, Dr Oliver Laasch from the Ningbo campus, is finalising the book's second edition, which is scheduled for publication in Autumn 2019.

Dr Judy Muthuri, Professor Kenneth Amaeshi and Sir Chris Ogbechie have co-edited a book titled *Incorporating Sustainability in Management Education* that addresses the pressing need for business schools to incorporate sustainability thinking into business and executive education. The book, which adopts a global and multidisciplinary perspective, offers fresh thinking on how to achieve sustainability in practical terms across different subject areas such as accounting, business economics, entrepreneurship, international business, marketing strategy, supply chain management and general management education. It is set to be released in January 2019 by Palgrave Macmillan Publishers.

1.3. SDG 8: Career support for students

In contributing to the school's vision of shaping "the future of responsible business and management", our careers and professional development staff support 'decent work and economic growth' and 'gender equality' through our careers and professional development programmes and activities within the School. First year undergraduates through to postgraduate students are supported to develop skills that will enable them to contribute to local economies and communities and to help them navigate an everchanging global labour market.

For example, through our MBA Career Development Programme, the MSc Accelerated Career Leaders Programme and the undergraduate Professional and Academic Development Support module, students are provided with a framework to develop career research skills. These skills enable them to evaluate career options and potential employers in relation to their core values, interests, skills and career aspirations. Students have access to events within the Business School and the University that allow them to network with organisation representatives, giving them a platform to evaluate future work options and understand how those organisations are addressing equality, diversity and inclusion.

Our careers team subscribe to, and promote, good practice in recruitment processes. For example, challenging organisations that wish to approach our students with any unpaid work opportunities and those that do not meet employment law regulations in relation to gender, race, religion, sexual orientation and other protected characteristics. Students are also encouraged to be mindful of such approaches.



At NUBS, students have access to a wide range of opportunities to fulfil their potential, particularly in becoming creators of sustainable value. We are very proud of our collaborations with external organisations and stakeholders as they enable students to work on real world issues and deliver impact. Through these activities, students are able to address multiple facets of the SDG challenges, which are intrinsically interlinked.



Enactus Nottingham is a student-led organisation that exists within the University of Nottingham, which continues to do fantastic work around sustainable development. Enactus Nottingham is member of Enactus, a not-for-profit global network unified by one vision – to create a better, more sustainable world. Enactus works to transform the lives of people in need through the power of business by setting up social enterprises that provide employment and their byproduct does both social and environmental good. The network consists of 72,000 students in 36 countries working on over 4,000 projects. Using volunteering, it supports students to use entrepreneurship to address the UN sustainable development goals.

Enactus Nottingham's achievements over the last couple of years have been excellent. In 2018, our social enterprises won a variety of awards:

- the Wilko Social Entrepreneurship award for our social supermarket, Foodprint.
- support from the Ford Motor Company fund for our neuro-diverse coding programme, CodeX.
- semi-finalists in the Enactus National Expo 2018. In 2016, Enactus Nottingham were crowned the Enactus UK Champions after competing with 52 other teams across the UK. In September 2016, the team had the opportunity to represent Enactus UK at the Enactus World Cup in Toronto, competing against 35 other international teams.



The various projects developed through Enactus include

Foodprint

(SDG 1, SDG 2 and SDG 12)

Foodprint is a social enterprise that opened in 2017, tackling food waste and food poverty by being an intermediary between supermarkets, wholesalers, farmers and the people of Nottingham. Foodprint sell surplus food from partners at a reduced price, which they are unable to sell themselves due to restrictions, yet is still perfectly fit for consumption. This is done through their low cost social supermarket store located in Sneinton, a suburb of Nottingham.

CodeX

(SDG 10)

CodeX is a student-run social enterprise aiming to improve the employability of young people with autism by teaching them to code. They deliver a specialised coding education to neuro-diverse young people through a variety of programmes. They hope to inspire their students to help meet the demand for a more diverse workforce in both the technology sector and the wider working world.

3 GOOD HEALTH AND WELL-BEING PROGRAMME! HAND WASHING SCHEME! LOCALLY MADE FERTILISERS! 5 GENDER FOUNDLITY 6 CLEAN WATER AND SANITATION 10 REDUCED INEQUALITIES

SANkofa SANitation

(SDGs 1, 3, 45, 6 and 10)

SANkofa aims to improve hygiene and living standards across impoverished communities in Ghana. One in five Ghanaians have no access to a toilet and, with open defecation rates over 70% in Northern Ghana alone, significant national inequalities exist. In addition to this, the burning of harmful fuels contributes to risks imposed on the health of locals as it is estimated that women spend between three and seven hours per day near the stove cooking with fuels such as wood and plastic.

Worryingly, with 96.6% of the district's working population involved in the agriculture industry, the average daily income of a farmer in the region is equivalent to only £4.00. This means that farmers are unable to afford the high prices of nutrients such as fertiliser.

SANkofa was set up to combat these issues through the following main policies:

- improving the livelihoods of farmers by providing cheap sources of fertiliser which contain suitable nutrients for healthy crops.
- reducing the impact of health hazards by teaching locals to construct briquettes containing coconut and rice, presenting a safer method of cooking fuel.
- educating and engaging with local communities surrounding the importance of water, hygiene and sanitation practices by implementing an interactive WASH programme.

These policies empower farmers, women, and children, whilst presenting an entrepreneurial opportunity for locals.

Stiima

(SDG 1 and SDG 7)

Stiima aims to tackle the lack of reliable electricity in rural Kenya by producing affordable batteries that can be charged from the heat created during cooking. In Kenya, mobile banking is the most popular form of banking. However, an unreliable electrical connection means that people have very limited access to this. The batteries produced by Stiima hope to tackle this problem by making a reliable source of electricity that is compatible with the most popular mobile devices.

Bottle by Bottle

(SDG 1)

Bottle by Bottle is a not-for-profit social enterprise that aims to provide safe and affordable housing to disadvantaged communities. Using a unique technique in which the bottles are filled with sand, tied together with string and then secured with mortar and wire, Bottle by Bottle have successfully built all the components necessary for a safe and impressive plastic bottle home.

It was founded to empower individuals, create business and make sustainable change possible.

This is done in three stages:

- 1 bottle filling. By employing members of the local community to fill plastic bottles with soil, sand and other plastic waste we are improving livelihoods as well boosting the local micro-economy benefiting the entire community.
- 2 building houses. We work together with local construction companies to implement our sustainable building product the bottle at a cost significantly less than conventional building methods.
- **3 education.** Our project is born from unsustainable plastic waste management, we invest our profits back into communities to ensure multi-level, continued environmental benefits.



Re-covered

(SDG 1 and SDG 12)

The idea is simple: Re-covered sells donated furniture at low prices to keep it out of landfill and to provide employment. Currently there are three full time members of staff at Re-covered, with the management, marketing and finance being undertaken by 15 student volunteers from the University of Nottingham.

The idea grew from the discovery that new social housing tenants often arrived to empty homes due to poor health and safety regulations. The University supported Re-covered in a number of different ways. Start-up funding came via the alumni fund, with the money being spent on an employee, van hire to collect the furniture, web development and marketing. At that time the University also had some warehouse space it intended to demolish. This was hired to the project at a peppercorn rent. It also ramped up publicity for the project by applying to and winning the GreenGown awards, which recognise sustainability projects by HEIs. Enactus recruit students with quick announcements at the beginning of lectures. This was how Lucy Bushby, became involved. Lucy was originally team leader of the project and then became Managing Director when the social enterprise became operational. Asked how she feels about establishing a successful social enterprise in Nottingham she said: "It's probably the proudest I have been about anything I have ever done in my life. The whole experience was so valuable and to do that at university was very special. It's probably also the most stressful thing I have ever done! It ignited my passion for social enterprise and I'm hoping to continue that further into my career."



Highlights

Students awarded Vice-Chancellor's medal in 2018 for their work on homelessness

(SDG 1)

Alex Greenhalgh and Oliver Bream McIntosh won the University's most prestigious award for their social enterprise People of the Streets.

"People of the Streets CIC (POTS) is a registered social enterprise and was founded in 2017. We empower people experiencing homelessness to tell their stories, and then we do all sorts of things to make the rest of the world listen. In the last decade, the number of people sleeping on the streets in the UK has grown rapidly and there is greater demand than ever on the organisations and resources available to help meet their needs. But the causes of this increase are deep-rooted and complicated, and it's clear that it will not be 'solved' by more beds and hot meals alone. We all have needs more complex than food and shelter - like the need to be listened to, accepted and understood. We create pop-up exhibitions, conversation events, social media content and printed anthologies that harness the power of self-expression and dialogue to tackle stereotypes, invisibility and alienation. Headed up by Managing Director Alex Greenhalgh and Social Director Oliver Bream McIntosh, the POTS team includes four parttime staff and maintains collaborative relationships with dozens of charities and companies around the UK. We have bases in Manchester and London."

Student testimony: Jacob Choy, NUBS UK, year 3

"Furthering my studies in the UK has been a great experience and joining Enactus has only enhanced my time here. Not only did it show me the social and environmental sides to business, I experienced the power of using entrepreneurial action to sustainably transform lives. Thanks to the variety of roles I have held in Enactus, I gained invaluable experience in leadership, crosscultural awareness, and management.

Through Enactus, I realised my greatest passion is people. Whether it be working with, leading, inspiring or being inspired by them, collaborating with unique individuals from a plethora of cultures has been a great joy. As team leader, leading a team of six to provide clean sources of energy to rural communities in India taught me to foster an environment where members could freely voice opinions and feedback. In my current role as international director, I manage the international portfolio comprising three social enterprises and 15 members. In this position, I learnt the value of making people feel worthy, and to not let my leadership position exert influence on my members' reasoning. In addition to innovating start-up social enterprises, responsibility included oversight over 100 members, as well as aiding their personal and professional development."





Social projects in Malaysia

(SDG 1, 4 and 17)

In Malaysia, Pek Chuen Khee (Assistant Professor) worked with Enactus NUBS Malaysia as the faculty advisor. Social projects such as Mushroom Republic and Project Renascimento were supported by the Cascade Grant. Cascade allows students to apply for a grant to deliver projects that develop their skills whilst benefiting local and international communities. The Mushroom Republic project empowers an orphanage to use mushroom farming as an income stream while providing entrepreneurial education for the orphans. Project Renascimento empowers the Portuguese at the settlement in Malacca to revitalise their food culture and make their traditional pickles preparation into an income stream.

Pek has also developed students' skills in coaching through the Business Case Learning Foundation Programme in NUBS Malaysia. Coaching students improves their student employability through quality education on sustainability.

Students have taken part in various sustainability-related business cases, competitions and contests organised by the corporate sectors. Competitions and contests won by NUBS Malaysia students are:

2018

- HSBC Malaysia Business Case Competition champion
- Procter and Gamble CEO Challenge champion
- Sustainable Innovative Young Entrepreneurship Challenge, United Nations Office for South-South Cooperation Youth Dialogue Hong Kong - champion
- Institute of Chartered Accountants in England and Wales (ICAEW) Malaysia Heat Business Case Challenge, Southern Region - champion
- KPMG International Business Competition -1st runner-up
- L'Oréal Brandstorm 1st runner-up

2017

- L'Oréal Brandstorm Tech Challenge champion
- Provost Business Case Challenge champion,
 2nd Runner-Up
- UNMC Global Business Services Challenge champion
- ICAEW Malaysia Business Challenge league winner
- Chartered Financial Analyst (CFA) Institute Research Challenge Malaysia
 - 2nd runner-up
- Alliance Bank Eco-Business Innovation Challenge
 3rd runner-up
- CIMB Talent Trail 4th runner-up

Principle 2 | Values

We will incorporate into our academic activities, curricula, and organizational practices the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.



Feature

SDG 10 and 5: Promoting equality

NUBS UK

Over the last year, NUBS UK has worked to submit its application for an Athena SWAN Bronze Award.

The Athena SWAN charter is based on ten key principles relating to gender equality. By being part of Athena SWAN, institutions are committing to a progressive charter, adopting these principles within their policies, practices, action plans and culture.

As part of our Athena SWAN assessment, we have created an action plan which we believe will result in meaningful and embedded change within the processes and culture of the School. We are striving to have student gender balance, enable more diverse career trajectories of equal value, improve the gender balance in the staff recruitment process and ensure greater fairness and transparency in the allocation of academic administrative roles amongst other interventions.

We also promote equality by providing professional development opportunities for all our staff. In line with the University's Global Strategy 2020, the area of Professional Practice is aligned with the vision to develop skilled, reflective global citizens and leaders. In putting students at the heart of all we do, and in striving for sustained excellence in teaching and research, the University of Nottingham recognises a need to invest in its people. This takes many forms, the majority of which are situated within the recruitment and HR function. Yet, the role of Professional Development is important to the achievement of the GS2020. For example, the University has set a strategy to. For example, the University has set a strategy to support teachers to reach their full potential through ongoing professional development and invest in leadership development programmes for emerging and senior educational leaders.

The core values that drive the University's commitment to professional development are:

- Value all staff and support them to excel.
- Focus on quality and excellence.
- Value diversity and promote equality.

The school is committed to achieving the highest possible standards of quality and excellence in teaching, research and administration. Professional practice is an essential part of this and is regarded as an important sphere of activity for all staff in our day-to-day work and career development. We will strive to ensure that Professional Development is available to all staff and to support them to excel regardless of role, level, gender, ability, ethnicity or background. Our approach to professional

development is driven by a desire to promote equality of opportunity and where diversity is valued.

Our work is supported by dedicated resources, including an academic lead, Head of Professional Practice, the School Operations Manager (lead for administrative development) and an administrator.

NUBS' professional practice portfolio seeks to coordinate and integrate individual and collective aspirations. Key objectives are:

- to support the professional and personal development of all NUBS staff, on a day-to-day basis and with regard to career advancement;
- to align individual aspirations with the School and University's strategic goals;
- to enable all staff to respond effectively to the changing demands of teaching, research and administration within the School;
- to facilitate and monitor the induction and integration of new members of staff;
- to maintain communications with the University Professional Development team so that the views and needs of the School can be met through University policy and programmes and complemented by bespoke activities appropriate to staff in the School;
- to disseminate information about professional practice opportunities;
- to encourage and fund annual social events to enable the integration of staff across all functions of the School.

Furthermore, we are committed to equality of opportunity for all members of staff. One of our key goals is:

"To ensure that appropriately tailored professional development activities are available to all staff, regardless of level, role, position, ethnicity, gender, disability, age, and sexual orientation, commensurate with our goals for diversity, inclusivity, wellbeing and positive engagement."

NUBS Malaysia

Since 2016, University of Nottingham Malaysia has been a participating institution in the Gender Equality Initiative (GEI), a university-level inter-institution student engagement initiative involving Malaysian higher education institutions. The GEI is coordinated by the Bar Council Malaysia and the Association of Women Lawyers Malaysia. Ms Chan Wen Li of NUBS Malaysia is the founding advisor of GEI's UNMC Chapter. This chapter has 5 advisors and 10 resource persons from across several Faculties and is a collaboration with the UNMC Feminist Society. The aim of the GEI is to create an educational platform for university students to understand the issues and complexities of gender and sexuality.

Activities in 2017:

- Participation by two UNMC undergraduates who had papers accepted for presentation at a GEI-organised Undergraduate Conference titled 'Genderworks: Dialogue and Action Across Our Differences' at Monash University Malaysia.
- Chan Wen Li moderated a session entitled 'Gender, Equality and Justice: History and Institutions'.

Chan Wen Li received the Vice-Chancellor's Medal in 2017 for outstanding contributions in advancing equality and diversity for her work with the UNMC GEI Chapter. In particular, she fostered staff and student commitment in a way that enhanced the reputation of the University in the higher education community and Malaysian civil society. The UNMC GEI's work has also enabled the University to build connections with Malaysian non-governmental organisations involved in women's rights and gender equality, including the Women's Aid Organisation, All Women's Action Society, Sisters In Islam and the Association of Women Lawyers.

The Faculty of Arts and Social Sciences Equality and Diversity Committee was set up in 2017, Chan Wen Li was appointed by the Faculty Dean to Chair this committee.

In 2017-18, Wen Li spearheaded a book project in collaboration with the Women's Aid Organisation (WAO) in Malaysia, and its printing was sponsored by the University. The book, titled *Tina's Journey – A Collection of Words and Poetry by Survivors of Domestic Violence* is a compilation of writings of the residents of WAO's crisis shelters via creative writing workshops. The compilation was co-curated by WAO, a colleague in the School of English. Wen Li also illustrated for the book. The book was launched at the George Town Literary Festival 2017 in Penang, and in Kuala Lumpur in 2018.

During the University of Nottingham Malaysia's International Women's Day (IWD) 2018 celebrations, Wen LI moderated a forum on the IWD theme of 'Push for Progress' for which panel members were the Chair of the Kuala Lumpur Bar Committee, Community Engagement Officer of the Women's Aid Organisation, Founder of the Malaysia Women Marathon, President of the Asia Women Circle @ Lean In Malaysia, and a Senior University Teaching Fellow in Entrepreneurial Management with NUBS Malaysia. The forum discussed current issues such as the need for a Malaysian Gender Equality Act, the effects of campaigns such as #MeToo and the need for a Sexual Harassment Act in Malaysia, encouraging women back into the workplace, insights on why sexist remarks and jokes should be called out, and observations from research and practice on gender stereotyping in entrepreneurial businesses.

NUBS Malaysia organised the Nottingham Provost Business Challenge Trophy sponsored by Ken-Rich Chemical Sdn Bhd in November 2017. This was coordinated by Dilip Mutum (Associate Professor NUBS Malaysia). Teams from across all the Faculties and Schools were invited to participate in a business idea generation for Ken Rich involving sustainability aspects (from the use of 'green' materials to developing new products that are ecologically safe for the market). Five teams were shortlisted for the finals and the winning team is sponsored by Ken Rich for a trip to the University of Nottingham's Ningbo campus.



NUBS Malaysia

NUBS has developed and launched a module titled Introduction to Securities and Investment under the Nottingham Advantage Award to the whole university. This is a Chartered Institute for Securities & Investment (CISI) module. CISI is the leading professional body for securities, investment, wealth and financial planning professionals. NUBS Malaysia is now in partnership with CISI as a CISI Accredited Training Provider that will provide our students the opportunity to enrol on this module. In addition to employability developments, this module aims to raise the awareness of financial literacy among young people in Malaysia. Assistant Professor Tang Kin Boon and Shaista Arshad are involved in teaching this module.



NUBS China

NUBS China is taking a lead to develop a new, global Masters programme in Management. Designed by the Business School, the new programme introduces sustainability and corporate responsibility into every module and links the learning outcomes to SDGs. In addition, NUBS China is introducing the module Critical Marketing in the MSc Marketing which is largely a PRME view on marketing.



SDG Action Week: leading SDGs commitment with #ResponsibleNUBS action campaign

In September 2018, NUBS started a call to UN Sustainable Development Goals (SDGs) Action Campaign dubbed #ResponsibleNUBS. The campaign, which runs during the 2018/2019 academic year aims at improving the awareness and action about the SDGs around the school. A variety of initiatives have been undertaken to engage, inspire and support both students and staff to make a difference in whatever they do to promote the SDGs agenda on and off campus.

Conscious that not all students joining the Business School are aware of the SDGs, and in the spirit of "leaving no one behind", all NUBS students were informed about the campaign during their Induction Week. They were introduced to the SDGs Campus page on Moodle, an online learning platform developed to provide an avenue for students and staff to independently learn about the SDGs. The SDGs Campus page on Moodle is a repository of various resources on sustainability action useful for teaching and learning on ethics, social responsibility and sustainability issues relevant to business and management. These resources range from videos, podcasts, self-help guides, and documentaries, to exclusive access to the UN-accredited sustainability knowledge test 'Sulitest'.

We also organised an 'Action for SDGs' week in October 2018 with students encouraged to take some concrete action by identifying a sustainability/SDGs issue and act on it individually or in teams. A SDGs Symposium was held in November 2018 to celebrate NUBS' commitment to the SDGs and to mainstream the SDGs within teaching and students' learning experiences. The students had the opportunity to exhibit their SDGs action challenges and showcase how they are engaging with the SDGs through the formal and informal curriculum.

We continue to inspire our staff and students to play an active role in the society by taking concrete SDGs action throughout the academic year that the #ResponsibleNUBS campaign will run. We are undertaking monthly challenges targeting an SDG issue as part of the continuous action and behaviour change agenda. For example, the September challenge was on SDG12 and calls to reduce plastic waste on campus as part of the #WasteNotts campaign. The October challenge focused on SDG3 healthy well-being, and similar SDGs-focused challenges are set for the remaining academic year. The challenges are shared via various communication medium and the SDGs Campus Moodle page.



2.2 SDG 17: Working in Partnership to address SDG challenges



Anti-plastic movement on Ningbo Campus

In the spring of 2018, a newly-established association of students NottinGreen, joined by staff members, conducted a series of events promoting sustainability in the operations of the Ningbo campus. Two particular campaigns against the use of plastic attracted wide attention. In the first one, conducted in April 2018 under a motto 'Plastic-free day', students spread a huge piece of white cloth in the middle of the campus, at a crossroads where students normally pass on their way to class, and near to the campus coffee shop. Student volunteers at the stand asked all people passing by to sign their environmental commitments on that cloth. Each participant was offered a non-plastic reusable bag with the logo of the organisation and a motto of the anti-plastic day.

Only two weeks later, the association followed this up with an exhibition titled The Plastic Aquarium. In the windows of the campus High Street stores, compositions of marine animals made from plastic were displayed for three days. The purpose was to raise awareness of the damage caused by plastics (including micro-plastics) to the marine environment, which is essential to the economy of the city of Ningbo, and deeply rooted in the history of this city where the China campus of the University of Nottingham is located. The campaign also helped the University raise awareness of the importance of the SDG 14, which explicitly refers to the marine ecosystems.

Principle 3 | Method

We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.



Feature

SDG 4: Ingenuity: educating responsible entrepreneurs

The Ingenuity Process

The University of Nottingham has been a pioneer of entrepreneurship education since first introducing dedicated modules in the area in the early 1990s. A key feature of the approach has been to focus on experiential learning by immersing the students in the entrepreneurial process rather than just describing entrepreneurship as practiced by someone else. This is achieved by engaging the students in a rigorous application of creative problem solving to encourage radical rather than incremental innovation thinking. Students learn how to identify the root causes of the issue that they are considering before generating large numbers of non-obvious ideas and potential remedies and then using these to produce the optimal realistic solution given any prevailing constraints in terms of, for example, technology or budget. Experience suggests that the students engage more productively and enthusiastically with this focus upon live entrepreneurial creativity than they do with approaches that place more emphasis upon historical practice. The secret to engagement is to harness students' understandable desire to change the world by issuing them with real life social entrepreneurship challenges. Luckily there is no shortage of these.

At University of Nottingham, creative problem-solving (CPS) techniques have been used to guide the students through modules from the very start. An initiative in 2008 resulted in the development of a bespoke CPS approach - the Ingenuity Process - which has been used ever since. The underlying principle is that original responses are to be found in volume. The creative-problem-solving platform ingenuityonline (IOL) allows remote working and collaboration and has been undergoing beta-testing since 2015. It is now incorporated in various modules at NUBS. The first stage of IOL is a discussion thread, which is intended to result in a refined problem being posed. The second is the production of a large volume of virtual post-its, from which are constructed a much smaller number of potentially viable concepts for consideration in the third phase. A key element of IOL is the presentation of the 'collective intelligence' of collaborators from which can be drawn original and appropriate solutions to the problem posed by the first stage. It is unusually democratic in this regard - quieter voices are heard; once a particular 'flight of ideas' has run its course, other paths have been recorded and remain to be followed.

Whilst there already exist many idea management platforms, we believe ingenuityonline's central function of idea generation is ground-breaking and results in a far greater number of ideas than the paper-based version. For example, in 2017, a global competition resulted in over 2000 ideas being generated by 15 student teams. The nature of the technology means that every one of these can be traced to the exact minute that an individual team member posted it. As can every engagement with the discussion threads at the start and finish of the process. The data available is probably the most comprehensive that has yet become available for study.

We use this process in several forms from paper to online and to various audiences from schools (through Widening Participation) up to Executive Education. Over the last year or so we have concentrated on giving participants social entrepreneurship challenges. We have gone about this in several ways, for example:

- 1. Undergraduates Entrepreneurship and Business module our flagship module delivered to 642 participants last year. Students were directed to UN SDGs, UoN Beacons of Excellence and a specific challenge on homelessness issued through engagement with Nottingham City Council (NCC). NCC representatives supplied briefing materials and attended a showcase of students' finished projects some 10% took on this challenge. We also trialled an involvement with Experian.
- 2. Postgraduates MSc, MBA and Executive MBA. Building on our contacts with NCC, representatives of the Council and partners presented a brief to our students and returned to sit on assessment panels. The first was around homelessness, followed by another on financial vulnerability. NCC have told us how impressed they have been by our students' ideas and engagement and it is expected that we will develop this relationship further.
- 3. Student entrepreneurs As part of the Ingenuity 18 Ideas Summit, 300 participants were given CPS exercises responding to challenges from the British Geological Survey as well as Beacons presented by University of Nottingham colleagues on sustainability (plastic waste) and modern slavery.
- 4. International students In collaboration with Universitas 21, we have run an online CPS competition for the last four years involving hundreds of students from around the world (over four years approximately 70 teams from twenty institutions). The challenges for the last two years have been specifically SDGs. Whilst Universitas 21 is the sponsor, University of Nottingham is the facilitator using unique software developed for the Haydn Green Institute for Innovation and Entrepreneurship that sits within the Business School.

Highlight

It's not all pina coladas!

by Shaq Gibson, Witty Scholar

A summer break in Jamaica may strike one as more of a vacation than a career-building experience. The non-stop beach weather won't do much to change that impression and, to be fair, there was a lot to enjoy during my internship! However, I also ensured this was never at the expense of career development and learning.

My internship was undertaken with the Planning Institute of Jamaica, a government-funded research and planning agency who are engaged with contributing to national economic, demographic and social policy. During the summer, they hire a small platoon of interns to help keep their files in good order. This is necessary because the Institute creates a huge amount of paperwork, and I quickly came to realise, it was actually paperwork in the traditional sense.

Going paperless clearly means less paper, less demand for paper-making wood and less deforestation. Also, a paperless system provides a convenient means of record management bypassing the human effort needed and effectively eliminating human mistakes. There are savings from paper and labour hours, leading to a more cost-effective system. An environmentally clean, convenient and cost-effective advancement.

This is something which the developed west has taken in its stride in the last couple of decades, and the speed of technological development probably makes this basic advancement seem like ancient history. But for many developing countries, the basics are not in place yet. There seems to be a market for companies that can reduce costs (economic and environmental) to organisations in countries where technological diffusion occurs at a slower rate.

"Without perspective, the pace of innovation can sometimes be taken for granted. This internship was a month-long exercise in perspective. I can say with no inhibitions that my perspective has been thoroughly revisited and updated."

Shaq Gibson is one of our first Witty Scholars.

The Witty Scholarship is open to promising undergraduate student entrepreneurs from lower-income backgrounds for up to three years of study. For more information, visit our Witty Scholar page at https://tinyurl.com/y8s6fm57

Shaq attended the Go For The Goals Roadshow, launching the UN Sustainable Development Goals and Vision 2030 at Morant Bay, Jamaica



We have developed specific modules that go across all of our programmes, enhancing our students' competence in responsible management. Below is a list of our programmes and the modules against each of these that relate to responsible management that we run in the UK. Similar modules and structures of programmes are also run in China and Malaysia.

Undergraduate programmes

BSc Accountancy

	Qualifying year	Part one	Part two
Core	Assurance	Financial Accounting and Reporting 1 and 2	Business Ethics
	Organisational Behaviour	Tax Compliance	Business Planning: Taxation
	Business Finance		
Options		Law and Economics	
		Exploring Perspectives in Entrepreneurship	

BSc Finance, Accounting and Management

	Qualifying year	Part one	Part two
Core	Entrepreneurship and Business		Business Ethics
	Organisational Behaviour		
	Business Finance		
Options		Managing and Marketing Tourism	Law and Economics
		Economics of Innovation	International Finance
		Tourism futures: the challenge of sustainability	Public Services Management
		Corporate Entrepreneurship and Innovation Management	Purchasing Strategies and Techniques
		Marketing Management	Understanding and Managing Organisational Crises
		Human Resource Management	Public Choice and Economic Policy-Making
		Risk Management Decisions	Risk Management Processes
		Technology and Organization	Behavioural Economics and Finance
		Managing Tourism and the Environment: Conflict or Consensus?	Technology Entrepreneurship in Practice
		Topics in Labour and Personnel Economics	

BSc Industrial Economics and Industrial Economics with Insurance

	Qualifying year	Part one	Part two
Core	Entrepreneurship and Business	Economics of Innovation	Public Choice and Economic Policy-Making
	Organisational Behaviour	Risk Management Decisions*	Risk Management Processes*
	Insurance in a Risky World*		
Options	Work and Society	Managing and Marketing Tourism	Law and Economics
	New Venture Creation	Tourism futures: the challenge of sustainability	International Finance
	Business Finance	Corporate Entrepreneurship and Innovation Management	Logistics and Supply Chain Management
		Marketing Management	Marketing and Society
		Branding and Advertising	Public Services Management
		Technology and Organization	Exploring Perspectives in Entrepreneurship
		Managing Tourism and the Environment: Conflict or Consensus?	Consumer Behaviour
		Topics in Labour and Personnel Economics	Behavioural Economics and Finance
			Technology Entrepreneurship in Practice
* Option for Industria	I Economics		

Management, International Management, Management with French, Spanish or Chinese Studies

	Qualifying year	Part one	Part two
Core	Entrepreneurship and Business	Marketing Management	Strategic Management: Process and Practice
	Work and Society	Human Resource Management	Contemporary Developments in HRM and Organisations
	Managing Operations in the Digital Enterprise	Technology and Organisation	Sustainable Business Challenge
	New Venture Creation**		Business Ethics
	Organisational Behaviour		International Business
	Consumers and Markets		
Options (not all available on all programmes)	Business Finance	Managing Tourism and the Environment: Conflict or Consensus?	Law and Economics
	Insurance in a Risky World	International Human Resource Management	Logistics and Supply Chain Management
	Managing and Marketing Tourism		Marketing and Society
	Economics of Innovation		Public Services Management
	Tourism futures: the challenge of sustainability		Purchasing Strategies and Techniques
	Corporate Entrepreneurship and Innovation Management		Exploring Perspectives in Entrepreneurship
	Managing the Responsible Business		Understanding and Managing Organisational Crises
	Branding and Advertising		Risk Management Processes
	Risk Management Decisions		Consumer Behaviour
			Behavioural Economics and Finance
			Technology Entrepreneurship in Practice
			New Product/Service Development Management
			Organisational Theory and Practice
**Option for Management with Chinese Studies			

Masters programmes

	Core	Options
Accounting and Finance	Corporate Financial Strategy	International Finance
	Current Issues in Accounting	
Banking and Finance	Corporate Financial Strategy	Financial Reporting
		International Finance
		Behavioural Economics and Decision Making
		Islamic Banking, Finance and Accounting
Business Analytics	Foundational Business Analytics	Consumer Behaviour and Consumption
	Analytics Specializations and Applications	
	Leading Big Data Business Projects	
	Machine Learning and Predictive Analytics	
Business and Management		Corporate Financial Strategy
		Managing People and Organisations
		Financial Reporting
		International Finance
		Corporate Strategy
		New Product/Service Development and Management
		Behavioural Economics and Decision Making
		Contemporary developments in HRM/OB
		Market Relationships: A Strategic Approach
Entrepreneurship, Innovation	Entrepreneurial Finance and Accounting	Managing for Sustainability
and Management		Technology Entrepreneurship
		Evaluating Sustainability
		Globalization, Business and Development
Finance and Investment	Capital Market Analysis	Financial Reporting
	Corporate Finance	International Finance
		Monetary and Financial Economics
		Behavioural Economics and Decision Making
Human Resource	Strategic Human Resource Management	
Management and Organisation	Managing Organisations	
	Employment Relations	
	International Human Resource Management	
	Research Methods	
	Contemporary Developments in HRM/OB	
	Leadership and Management Development	
Industrial Engineering and Operations Management	Design of Operations Facilities and Systems	
Information Systems and		Design of Operations Facilities and Systems
Operation Management		Procurement and Purchasing

Masters programmes

	Core	Options
International Business	International Accounting	Managing Organisations
	International Business Environment	Creative Problem Solving
	Research Methods	Strategies for Responsible Business
	International Business Strategy	Business Ethics
		Tourism and Sustainability
		Managing for Sustainability
		Technology Entrepreneurship
		Globalization, Business and Development
		Contemporary developments in HRM/OB
		Risk and Society
Logistics and Supply Chain Management	Design of Operations Facilities and Systems	Procurement and Purchasing
Management	Managing Organisations	Creative Problem Solving
	International Accounting	Strategic Marketing in the Digital Economy
	Research Methods	New Product/Service Development and Management
	Strategy and Leadership	Tourism and Sustainability
		Managing for Sustainability
		Contemporary Developments in HRM/OB
		Risk and Society
Marketing	Consumer Behaviour and Consumption	New Product/Service Development and Management
	Strategic Marketing in the Digital Economy	Branding and Marketing Communications
	Research Methods	Critical Marketing, Ethics and Sustainability
		Tourism and Sustainability
		Technology Entrepreneurship
		Contemporary developments in HRM/OB
		Market Relationships: A Strategic Approach
Risk Management	Risk Analysis	Managing People and Organisations
	Corporate Risk	Corporate Strategy
	Risk and Society	Behavioural Economics and Decision Making
Supply Chain and Operations		Design of Operations Facilities and Systems
Management		Procurement and Purchasing
Sustainable Business	Foundations of Sustainability	Managing Organisations
	Research Methods for Sustainability	Creative Problem Solving
	Managing for Sustainability	Strategies for Responsible Business
	Evaluating Sustainability	Business Ethics
		Tourism and Sustainability
		Technology Entrepreneurship
		Procurement and Purchasing
		Globalization, Business and Development
		Contemporary Developments in HRM/OB

MBA programme

	Core	Options
MBA	Marketing	Business Ethics
	Operations Management	Innovation Management
	Entrepreneurship and Creativity	Leadership and Change Management
	Sustainable Decisions and Organisations	International Study Tour
		Strategic Market Relations: Building, Managing, and Leveraging Market Relationships
		Leadership for Corporate Responsibility and Sustainability
Executive MBA and Executive MBA (Healthcare)	Marketing	Leadership for Corporate Responsibility and Sustainability
	Operations Management	Business Ethics
	Entrepreneurship and Creativity	Innovation Management
	Ethics, Governance and Risk^	Leadership and Change Management
		International Study Tour
		Strategic Market Relations: Building, Managing, and Leveraging Market Relationships
^Option for Executive MBA		

As shown in the previous section, our students are widely exposed to sustainability, ethics and responsibility through the curriculum. In terms of module development, convenors across the three campuses collaborate to embed the SDGs across their modules. In practice, this translates into different approaches to teaching and learning as illustrated in the testimonies from two module convenors below.

Dr Jillian Rickly

"I teach on a number of modules that focus on sustainability challenges and relate directly to the SDG agenda. I convene an undergraduate module, Tourism Futures: the Challenge of Sustainability that covers the 17 SDGs, from inequities of tourism development to its environmental impacts, as well justice and community wellbeing in the face of tourism. Further, at the postgraduate level I deliver several lectures for the Tourism and Sustainability module that tackles all the SDGs with greater attention to both theoretical approaches and practical applications. Throughout this postgraduate module, for example, we delve into the rise of Antarctic tourism with attention to its regulatory bodies and those that monitor environmental change in the region, while in other lectures we examine the disparities between indigenous stakeholders and tourism development in parts of the US. We also take students on a field trip to a sustainable wetland that has revived the economy of area of Norfolk, but also strengthened the ecosystem while providing breeding grounds for migratory birds."

Dr Anne Touboulic

"I convene and teach two introductory Operations Management modules at undergraduate level through which the students are introduced to the concept of sustainable development in an embedded fashion. For example, one of the modules includes an exercise to do at home where the students have to reflect on a Global Compact ethical dilemma scenario and choose between four different response options. This enables surfacing the tensions inherent to sustainability decision-making but also their ability to reason and consider their own values. The assessment of the other module completely revolves around key sustainability issues as identified by the students, whereby they have to critically analyse the extent to operational practices in organisations have to be re-imagined in light of these issues. When selecting the issue they want to investigate, the students are given full freedom, however they are also encouraged to refer to frameworks such as the SDGs."



Principle 4 | Method

We will engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.

Feature

SDG 8: Tackling modern slavery in supply chains

The Unchained Supply:

Eradication of modern slavery from supply chains by 2030

Dr Alexander Trautims, NUBS UK, is leading the Unchained Supply project, which is part of the Rights Lab, a University of Nottingham Beacon of Excellence. Within NUBS, the project involves research on:

- risk perceptions (Dr Jamie Wardman and Dr Selim Cakir)
- conceptual gaps between supply chain practitioners, academics and NGOs (Dr Alex Trautrims, Dr Jamie Wardman, Professor Stefan Gold (visiting scholar)
- identification of modern slavery in hand car washes (Dr Thomas Chesney and Dr Alex Trautrims)
- the role of public procurement on modern slavery in adult social care (Dr Caroline Emberson and Dr Alex Trautrims)
- the use of cross-sector initiatives and consortia (Dr Anne Touboulic and Dr Alex Trautrims)
- investigations of managerial narratives on modern slavery (Dr Rob Caruana)
- the use of geospatial patterns to identify modern slavery amongst street artists (Dr Rob Pasley, Dr Thomas Chesney and Dr Alex Trautrims) and
- the effectiveness of cross-judicial anti-slavery legislation in global supply chains (Dr Caroline Emberson and Dr Alex Trautrims).

The work is firmly embedded in an impact agenda and we are working very closely with key stakeholders, such as the Gangmasters and Labour Abuse Authority (GLAA), East Midlands Police Academic Collaboration, the Independent Anti-Slavery Commissioner, the Walkfree Foundation, the ThomsonReuters Foundation and the UN University Centre for Policy Research. We frequently contribute to Baroness Young's legislative initiative on strengthening the Modern Slavery Act and to various Commons Select Committees.

Research project highlight:

The identification of modern slavery in hand car washes

To investigate modern slavery in hand car washes Dr Thomas Chesney, Dr Alex Trautrims and Professor Stefan Gold conducted research on using shadow accounting to identify whether a hand car wash could possibly generate sufficient cash to be a legitimate business. This work was picked up by the then Chief Executive of the GLAA, Paul Broadbent, who referred to it as "groundbreaking and precisely what we would look to use to assist us." The work has since evolved into a continued mutual research relationship and exchange on hand car washes with the GLAA and has also resulted in Dr Trautrims' membership of the GLAA's construction industry roundtable. In continuation of the hand car wash research, Dr Chesney and Dr Trautrims are collaborating with the Clewer initiative (run by the Church of England) to analyse the data that the initiative's car wash app is producing. The hand car wash work is currently also producing a policy-focussed report with the Independent Anti-Slavery Commissioner's Office. This work is the focus of Dr Akilah Jardine who has also given written and verbal evidence on modern slavery in hand car washes to the Commons **Environmental Select Committee.**

Curriculum and teaching activities highlights

Content on modern slavery was first introduced on the final year undergraduate procurement specialisation module and the procurement specialisation on the Masters programme, which are both taught by Dr Alex Trautrims and Revd Dr Robin McKenzie and includes lectures and in-class exercises on the topic.

In 2017, modern slavery was also introduced to the first year core module Managing Operations which is taught by Dr Anne Touboulic and Dr Alex Trautrims. On this module students become anti-slavery activists by contributing the Wikirate project, which is supported by WalkFree, the world's largest business-facing anti-slavery NGO. Students are asked to evaluate corporate Modern Slavery statements based on the content that they are learning on the module. They also peer-review evaluations that other students produce to encourage critical thinking in corporate reporting.

For the academic year 2018/19, every student at the University has been given a book on modern slavery during welcome week. This is accompanied by reading groups across campus and followed through by events with stakeholders such as Baroness Young of Hornsey and the Director of Sourcing of fashion retailer ASOS. In addition, Dr Anne Touboulic will be hosting the 2020 European Operations Management Association's Sustainability Forum at the University of Nottingham with a dedicated PhD workshop on modern slavery.



Feature

SDG 15 - Life on land



Dr Vanitha Ponnusamy (NUBS Malaysia) is engaged in cross-disciplinary work with a biologist from the School of Environmental and Geographical Sciences on elephant conservation. The research project is called Management and Ecology of Malaysian Elephants.

Dr Ponnusamy is involved in the perception studies of human elephant conflict (HEC) and mitigation. After the study, she will be involved in the communication and education of public awareness for elephant conservation. She has been giving talks to schools and to the public on the importance of elephants and the need to conserve them. In collaboration with the Department of Wildlife and National Parks, she has also been part of the team that is implementing a community awareness programme on managing HEC and the need for the conservation of elephants, reaching out to the rural community and schools that are in the hotspot area for HEC. The next phase will be looking at a three year plan on community engagement for HEC mitigation.



Here, we offer a range of case studies showing how we have established partnerships in order to address complex challenges.

Case 1

N/Lab: machine learning for road condition analysis part 1: partnerships

Across the world, delivering effective transport infrastructure is key to any nation's economic growth. It is necessary to underpin vital services, to transport goods, to enable mobility among a country's population and to assist in reducing inequalities across a country. Such issues are particularly prescient to those economies categorised as in need of development aid by the OECD. The OECD's list shows a number of countries from East Africa, a region which is at present facing almost unparalleled mass urbanisation where good roads are becoming increasingly important.

Many of the cities in countries such as Kenya, Uganda and Tanzania are growing at more than 10% every year. Rural dwellers are flooding into urban areas, in search of better prospects and a better life. This isn't always what awaits them, and the cities they reach often cannot cope with such a huge influx of citizens, and the unmitigated pressure to public infrastructure that is applied.

Road capacities are being stretched to their limits. For example, in settlements such as Dar es Salaam, Tanzania (which was projected to have 10 million inhabitants by 2030 by the World Bank, yet currently looking set to beat that prediction with ease), informal settlements now make up the majority of the city. As such, roads are not established or planned - they simply emerge. In tandem, better connections to rural areas become increasingly important, lest remaining rural communities become even more isolated.



Examples of the different road conditions from the Zanzibar Region.

Despite the fundamental importance of having a good road infrastructure, conditions in countries such as Tanzania are often far from optimal both in rural and urban contexts. Countries are not only battling from a relatively low-quality starting point in terms of road quality (especially on low-volume roads) but are also facing difficult environmental conditions. In Tanzania, floods and heavy bouts of seasonal tropical rainfall are common, continually degrading whatever infrastructure already exists.

Deep learning to monitor road infrastructure

For the growing economic health of a region such as Tanzania, monitoring road conditions has become a key issue. And it is a big job. To survey a whole nation, or even just its key road links, is a serious logistical challenge—never mind extending that work to more isolated rural areas. Surveying requires not only significant human resource but skilled application of relatively expensive technologies. Thousands of hours are necessary to slowly traverse tens of thousands of kilometres of roads.

However, a potential solution is in sight: advances in Artificial Intelligence are promising the possibility of automating road condition analysis via 'deep learning'. As part of Frontier Technology Livestreaming Programme, a proof of concept study is now underway in Zanzibar to investigate whether this promise can become a reality.

Z-ROADS, as the project is called internally, is developing a pilot system through collaboration between the Department for International Development (DfID) and consultants based at the University of Nottingham. We are investigating the application of state-of-the-art machine learning techniques to automatically classify road conditions from high resolution drone imagery. Our first step is stakeholder discovery: to build partnerships and to ensure that this technology can scale.

4.1 SDG 17: Establishing partnerships to address complex research challenges

Building partnerships

Projects of this kind, which seek to help accelerate development, must by their very nature be joint affairs. Success can only come from shared ownership of the project and through the formation of real partnerships: collaborations between developers, researchers and the domain experts. In the case of Z-ROADS, Sprint 1 has seen partnerships rapidly established, thanks to fantastic engagement by Zanzibar's Department of Roads (DoR) and Zanzibar Road Fund Board (ZFRB).



Dr Mark Iliffe (standing) and Dr Bertrand Perrat (left) presenting the project to the Zanzibar Road Fund Board

For Z-ROADS, two initial meetings with DoR were followed by a successful project inception workshop attended by the project team, as well as representatives from the Zanzibar Road Fund Board, DROMAS (a District Road Management System used within Tanzania) and the Dar es Salaam Institute of Technology. This, combined with presentations to the Tanzania Road Fund Board, have established some great engagement, and has seen the rapid approval for the project's data collection and quality control protocols by ZFRB.

Through these partnerships, the project was rapidly able to establish a final extent for its survey regime (see the figure below for a graphical illustration of planned road coverage, ready to be circumnavigated in sensor laden vehicles). This is essential for obtaining the 'ground truths'—real world road condition scores that we can label roads with, and with which we can use to train and test our Artificial Intelligence models. It was agreed that the project would attempt to cover the whole of the DoR road inventory to obtain a full set of scores for our test region of Zanzibar (around 700km of unique roadways, including both paved and unpaved roads).



The survey's extent covered all the roadways under the domain of Zanzibar's Department of Roads.

Local knowledge is invaluable

It is all too easy for projects, especially those established and funded in western arenas, to swing in with a we know best attitude combined with a bucket full of technological solutions. We have learnt (sometimes the hard way) that on development projects it is people on the ground who know the most about their own contexts and the idiosyncrasies a project will face given the geographies in which it is situated. Partners are not there just to give credence and support to the work, but to help guide the plan. In this case, we learnt that while machine learning is a fine thing, it is nought in the face of the elements.

The advice of our local partners was "survey now and survey quick". The rainy season in Tanzania is a serious affair—torrential rain deluges the region and regularly can continue unabated for a week. Every year this brings with it natural floods, which wreak havoc on roadways in particular. In urban areas, which often provide insufficient drainage due to inadequate urban planning, these floods become man-made disasters. Surveying in such conditions is simply not possible.

In light of this, the program was accelerated with surveying being rapidly brought forward in order for it to be completed by December 2017. This was achieved thanks to the flexibility of Frontier Technology Livestreaming's program setup and through the collaboration of DfID and DoR with the project team. Due to the partnerships formed, it was possible to bring the required equipment and skills together and the team were able to begin the surveying process before conditions became unfavourable. In a DoR vehicle, fitted with both sensors and team members, data collection began in earnest, achieving excellent results within two weeks.



Case 2

International Centre for Corporate Social Responsibility innovative research into investors' role in advancing sustainable development.

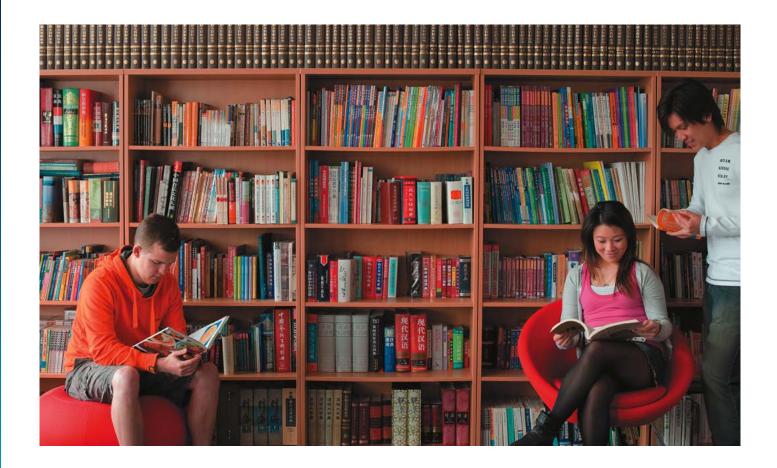
The private sector has a fundamental role to play in the achievement of the sustainable development goals. Chief among the sector is the financial sector which sits at the top of the economic supply chain and has tremendous leverage to advance more sustainable and responsible conduct by their clients and investee companies.

One of the main ways institutional investors can encourage (more positive) corporate environmental, social and governance (ESG) behaviour and performance, is through engagement – or direct dialogue – with their investee companies on ESG issues that are most material to them. In doing so, issues such as, for example, climate change hazards associated with the utilities and extractive industries, human rights and forced labour in the apparel and food and beverage sectors, or gender equality in board composition and pay across all sectors, can be prioritised for corporate action, while at the same time reducing investor exposure to the (financial) risks associated with these ESG issues.

In recognition of this, in 2016, the Principles for Responsible Investment – comprised of over 1,800 international institutional investor signatories working on responsible investment - commissioned academic research to investigate how ESG engagement influences corporate sustainability performance and creates value for investors and companies alike. The research team selected to conduct this project was led by Professor Jean-Pascal Gond, Cass Business School, London, in association with NUBS UK International Centre for Corporate Social Responsibility Assistant Professor, Dr Niamh O'Sullivan, and Dr Rieneke Slager, University of Groningen (former NUBS academic).

The first stage of this project involved conducting, analysing and compiling 100 interviews from research projects with key investor and company stakeholders globally. The subsequent production of a report revealed that ESG engagement creates a range of value beyond financial value alone (i.e. communicative, learning, political) and offered unique insights into how this could be improved for both investors and companies going forward. The report was launched in May 2018, in Cass Business School, London, to a captive audience of over 100 investors, consultants, academics and broader stakeholders.





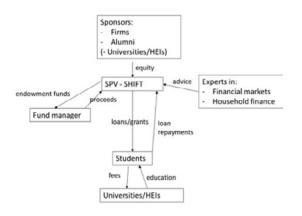
Case 3

SHIFT strengthen HE through innovative financial tools - Erasmus+ project led by Professor Enrico Onali (NUBS UK)

SHIFT is a project aiming to introduce a sustainable funding model for students in higher education (HE), to improve financial inclusion of HE students in the EU, while increasing the efficiency of public spending in HE. The project is being implemented by a transnational consortium of 8 partners from 4 countries (United Kingdom, Belgium, Italy and Poland).

SHIFT will develop and validate an innovative funding model for both HE students who receive grants/loans and HE Institutions that manage public resources. The model will also involve academics and experts in household finance and financial markets to improve students' financial literacy and ensure that the management of the fund is consistent with the objectives of the model.

Because of the involvement of private actors and a financial instrument that will generate financial resources for the provision of soft loans and grants to students, the model will increase the amount and quality of funding opportunities for HE students. Therefore, SHIFT will improve participation in HE as well as the quality of the student experience in HE, which is often impaired by worries about student debt.



SHIFT expected results are:

- innovative financial model: The partners will develop and validate the model and will outline the structure of the financial instrument and the governance mechanism
- implementation package: The consortium will produce an implementation package detailing the technical, operational and administrative aspects of how to implement the SHIFT model and formalise the involvement of public and private participants.

4.1 SDG 17: Establishing partnerships to address complex research challenges

Case 4

The Nottingham FinTech Research Network, which is funded by the ESRC IAAB Business Boost Fund, was launched in November 2018. The network is led by Professor Meryem Duygun, Aviva Chair in Risk and Insurance, NUBS UK. It brings together a multidisciplinary group of academics, policymakers, regulatory bodies and industry players with an interest in technology for the delivery and use of financial services. The UoN President and Vice-Chancellor, Professor Shearer West, delivered the opening remarks officially launching this prominent network which will provide a forum in which key industrial strategy challenges will be addressed, specifically in relation to artificial intelligence and data.

Case 5

Dr Vengadeshvaran Sarma (Assistant Professor of Economics) is collaborating with a Sri Lankan research firm in an ongoing project to understand the nexus between poverty, inequality and education in Sri Lanka. In particular, they are focusing on access to education, quality of service delivery and inclusiveness of the country's education policies. This involved collecting field data from three of the poorest districts in Sri Lanka to understand the bi-directional effect between poverty and education.



Case 6

Dr Avvari V Mohan (Associate Professor of Strategic Management) worked with academics from Ritsumeikan Asia Pacific University (APU), Japan, in a project titled Corporate Shared Value (CSV) in Asia – a Dialogue and Suggestion for Future Research (June-August 2017).

The project was supported by Ritsumeikan APU and involved investigating the understanding and adoption of a CSV approach to responsible business strategies through a multi-stakeholder field study in Japan, South Korea and India. In addition to the report, the following publication is under review: Rebecca Chunghee Kim, Akira Saito and Avvari V Mohan, Creating Shared Value: Interpretation and Integration in Asia, and Implications for Strategy Research and Practice.

Case 7

Dr Lau Chee Kwong's (Associate Professor of Accounting) undertook a Research Project on Economic Benefits to firms that embarked Business Sustainability Initiatives (BSI). In 2010, Bursa Malaysia (the Malaysian Stock Exchange) introduced an initiative of business sustainability for its public listed companies (PLCs) and a number of benefits were listed to encourage the voluntary adoption of this initiative. This study examines the economic benefits achieved by sample Malaysia firms which embarked on different levels of BSIs. The significant associations between the BSI level and its economic benefits reflect the decision usefulness of sustainability reporting and disclosures. The findings provide useful support for Bursa Malaysia, as well as for other stock exchanges around the world - especially those in developing countries - in nurturing BSI as a core element in the strategic management of PLCs and making sustainability reporting mandatory among them.

Case 8

By examining accessibility, Dr Jillian Rickly's latest research is particularly focussed on SDG 10 – reduced inequalities. This research is undertaken in partnership with Guide Dogs for the Blind Association and Assistance Dogs UK to investigate one of the least catered for segments of the accessible tourism market. Those who require an assistance dog to support their mobility or a medical/psychological condition often find a serious shortfall in services needed for their assistance dogs. As such, the research will help better understand the ways dependency on an assistance impacts travel behaviour and tourism decision-making, as well as how this relationship has resulted in distinct tourism experiences.

4.2 Research outputs and achievements

Selected funding and awards

Title	from	to	researchers
An international comparison of national-level occupational health provisions: a systematic review	June 2018	September 2018	Jain, Aditya
De-implementation in health and care services: what works, for whom, why, and in which contexts? A realist synthesis	October 2017	March 2019	Waring, Justin
Exploring the human dimension of sustainable supply chains	May 2018	December 2018	Touboulic, Anne
Governing AI safety in healthcare: towards an integrated framework for regulation, investigation and learning	November 2018	April 2020	Waring, Justin
Healthcare leadership with political astuteness, a study of embedded models of knowledge co-production in the NHS	December 2017	August 2020	Waring, Justin Bishop, Simon
Healthcare safety investigation board	April 2018	March 2020	Waring, Justin
Human experiences of transitioning to sustainable agricultural practices	April 2018	March 2019	Touboulic, Anne
Information leakage: organizational ethics, information security and sharing in the UK and Malaysia	September 2017	September 2019	Tan, Kim
Modern slavery – everyone's business?	October 2018	January 2019	Emberson, Caroline
Reduction of modern slavery risk in Nottinghamshire County Council's direct payment adult social care supply chains	September 2018	December 2018	Emberson, Caroline
Rural innovation and sustainable development in China	January 2019	July 2019	Wu, Bin
Copenhagen business school's governing responsible business research fellowship	2018	2019	Laasch, Oliver
National science foundation of China grant (399,800 RMB) on microplastic impact on water catchments	January 2019	December 2020	Seufert, Jürgen and team

4.2 Research outputs and achievements

Selected publications

Anthony Paulraj, is a new chair professor at NUBS Ningbo campus who develops a substantial research agenda related to sustainability and CSR in supply chains. Two papers have already been published.

Dr Oliver Laasch from the Ningbo campus published nine books within the period 2017-2018 as founding editor of the United Nations PRME book collection and serves as a co-editor of the Greenleaf PRME book collection.

Dr Oliver Laasch and Dr Dirk Moosmayer edited the special issue 'Responsible management learning: Change and innovation for sustainability, responsibility, ethics', for the *Journal of Business Ethics*, 2018-2019.

Dr Oliver Laasch, Dr Dirk Moosmayer and Dr Frithjof Arp published 'Responsible practices in the wild: An actor-network perspective on mobile apps in learning as translation(s)' in the *Journal of Business Ethics*, an innovative pedagogy for learning responsible practices.

Professor Peter Hofman's paper on the impact of political environment in the home market / host country on social responsibility of firms is highly cited and downloaded.

Dr Frithjof Arp further developed a project on microfinance and poverty alleviation and an illustrative recent publication is listed below.

Professor Tim Gocher is NUBS Malaysia's Hon Professor of Sustainable Business. He is the Founder and CEO of Dolma Impact Fund - the first international Private Equity fund for Nepal.

Arp, F., Ardisa, A., and Ardisa, A. (2017). Microfinance for poverty alleviation: Do transnational initiatives overlook fundamental questions of competition and intermediation? *Transnational Corporations*, 24(3), 103–117, United Nations Conference on Trade and Development, UNCTAD/DIAE/IA/2017D4A8, ISSN 1014-9562; ISBN 978-92-1-112919-9

Brindley, P., Goulding, J. and Wilson M.L. (2017). Generating Vague Neighbourhoods through Data Mining of Passive Web Data. *International Journal of Geographical Information Science*, 32(3), 498-523.

Clarke, J.M. and Waring, J. (2018). The Transformative Role of Interaction Rituals within Therapeutic Communities. *Sociology of Health and Illness*, forthcoming 2018.

Clarke, J., Waring, J., and Timmons, S. (2018). The Challenge of Inclusive Coproduction: the importance of situated rituals and emotional inclusivity in the coproduction of health research projects. *Social Policy and Administration: an international journal of policy and research*, forthcoming 2018.

Crompton, A., Waring, J., O'Conor, R. and Roe, B. (2018). Are We All On the Same Page? A Qualitative Study of the Facilitation Challenges Associated with the Implementation of Deliberative Priority-Setting. *Public Management Review*, forthcoming 2018.

Font, X., and McCabe, S. (2017). Sustainability and marketing in tourism: its contexts, paradoxes, approaches, challenges and potential. *Journal of Sustainable Tourism*, 25(7), 869-883.

Foucart, R. and Garsous, G. (2018). Climate change mitigation with technology spillovers. *Environmental and Resource Economics*, 71(2), 507-527.

Frecknall-Hughes, J. (2017). Ethical issues in the use of tax intermediaries. In *The Routledge Companion to Tax Avoidance Research* (404-416). Routledge.

Gartshore, E., Waring, J. and Timmons, S. (2018). Patient safety culture in care homes for older people: a scoping review. *BMC Health Services Research*, forthcoming 2018.

4.2 Research outputs and achievements

Selected publications

Gold, S., Muthuri, J.N. and Reiner, G. (2018). Collective action for tackling "wicked" social problems: A system dynamics model for corporate community involvement. *Journal of Cleaner Production*, 179, 662-673.

Gocher, T. (2017). Can investing in frontier markets tackle corruption? *London Business School Review*, 31 Oct 2017.

Hofman, P. S., Moon, J., and Wu, B. (2017). Corporate social responsibility under authoritarian capitalism: Dynamics and prospects of state-led and society-driven CSR. *Business & Society*, 56(5), 651-671.

Jain, A., Leka, S. and Zwetsloot, G.I. (2018). Managing Health, Safety and Well-Being: Ethics, Responsibility and Sustainability. Springer.

McCarthy, L. and Muthuri, J.N. (2018). Engaging Fringe Stakeholders in Business and Society Research: Applying Visual Participatory Research Methods. *Business and Society*, 57(1), 131-173.

McCarthy, L., Touboulic, A. and Matthews, L. (2018). Voiceless but empowered farmers in corporate supply chains: Contradictory imagery and instrumental approach to empowerment. *Organization*, 2018.

Painter, M., Hibbert, S. and Cooper, T, (2018). The development of responsible & sustainable business practice: Value, mind sets, business-models - editors' introduction. *Journal of Business Ethics*, forthcoming 2018.

Paulraj, A. and Blome, C. (2017). Plurality in environmental supply chain mechanisms: Differential effects on triple bottom line outcomes. *International Journal of Operations and Production Management*, 37(8), 1010-1030.

Paulraj, A., Chen, I.J., and Blome, C. (2017). Motives and performance outcomes of sustainable supply chain management: A corporate social responsibility perspective. *Journal of Business Ethics*, 145(2), 239-258.

Rickly, J. and Vidon, E. (2017). Contesting authentic practice and ethical authority in adventure tourism. *Journal of Sustainable Tourism*, 25(10), 1418-1433.

Slager, R., Pouryousefi, S., Moon, J. and Schoolman, E.D. (2018). Sustainability Centres and Fit: How Centres Work to Integrate Sustainability Within Business Schools. *Journal of Business Ethics*, 1-17.

Spence, L., Jedrzej, G.F., Muthuri, J.N. and Navare, J. (Eds) (2018). Research handbook on small business social responsibility: global perspectives. Edward & Edgar Publishing Limited, United Kingdom.

Touboulic, A., Matthews, L. and Marques, L. (2018). On the road to carbon reduction in a food supply network: A complex adaptive systems perspective. Supply Chain Management: *An International Journal*, 23(4), 313-335.

Wang, Y., Touboulic, A. and O'Neil, M. (2018). An exploration of solutions for improving access to affordable fresh food with disadvantaged Welsh communities. *European Journal of Operational Research*, 268(3), 1021-1039.

Whelan, G. and Muthuri, J.N. (2017). Chinese State-Owned Enterprises and Human Rights: The Importance of Intra-Organizational Pressures. *Business and Society*, 56 (5), 738-781.



Feature

SDGs 9, 15 and 17: Social innovation for sustainable agriculture and rural development in the developing world



An international consortium was initiated in Summer 2018 to promote research, knowledge exchange and student training in the area of social innovation for sustainable agriculture and rural development in the developing world. Hosted in the Haydn Green Institute for Innovation and Entrepreneurship in NUBS UK, a collaboration is under development with the following partners:

- Crop For the Future (agricultural diversity, Malaysia),
- Pune International Centre (social innovation and young entrepreneurship, India),
- University of Dhaka (micronarrative methodology, Bangladesh),
- Federal University of Rio de Janeiro (local productive and innovation system, Brazil),
- Tianjin University of Finance and Economics (grassroots innovation and entrepreneurship education, China),
- Centre for Regional Agricultural & Rural Development (land transfer and rural revitalisation, China),
- Beijing University of Technology (migration and housing, China).

In addition to mutual visits and information exchange, joint funding applications and/or joint publications are common elements with each partner. Depending upon the development of this consortium, a joint student training programme for research or entrepreneurship will be discussed individually or collectively.

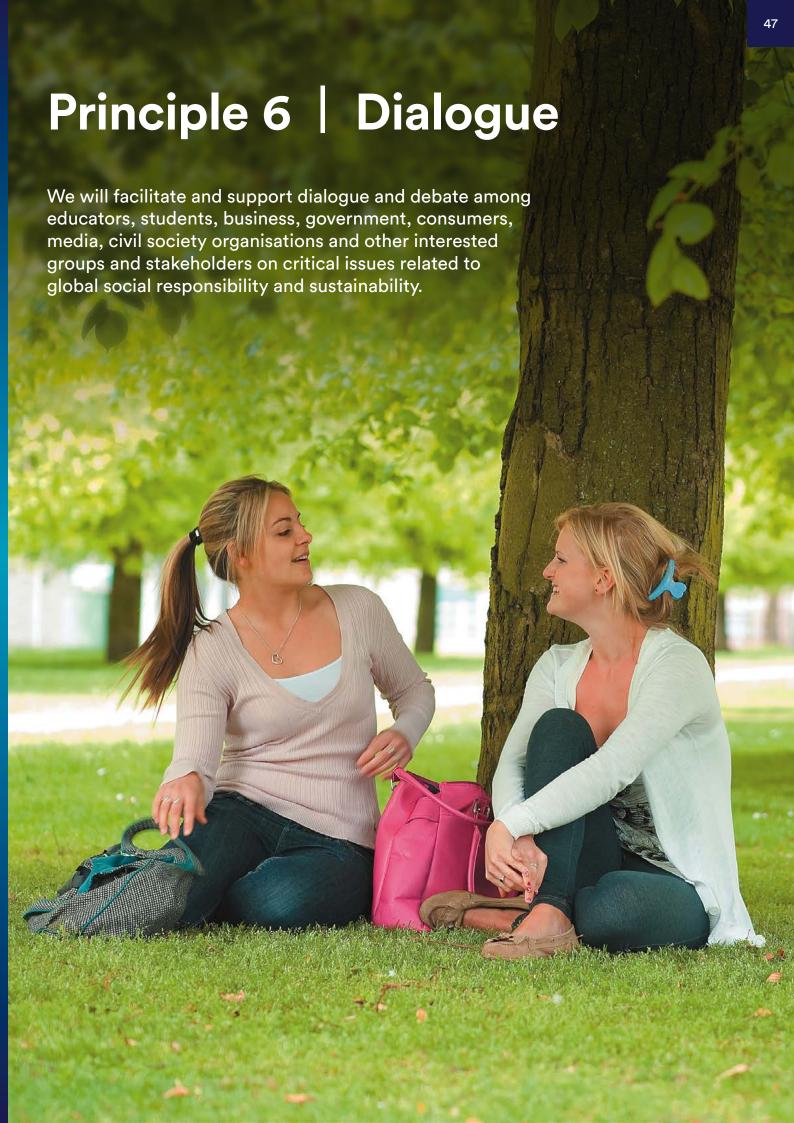
NUBS Malaysia

Dr Lau Chee Kwong (Associate Professor of Accounting) worked with the Malaysia Institute of Accountants in developing a training programme as follows:

- All Public Listed Companies (PLCs) listed on Bursa Malaysia (Stock Exchange of Malaysia) are to include a sustainability report in their annual reports, for the reporting period ending 31 December 2017, while those with market capitalisation over RM2 billion with period ending 31 December 2016. For the reporting requirement, Bursa had issued a sustainability reporting guide and tool kit, which serve as a best practice when PLCs prepare for the sustainability statement and its detailed disclosures.
- In line with this reporting requirement, Dr Lau developed a tailor made one-day course to train and assist the PLCs in preparing sustainable reporting as per the Bursa's requirement. The public course has been offered via the Malaysia Institute of Accountants since 2016

NUBS China

In October 2018, researchers from the Ningbo campus invited an expert on global responsible leadership from WU Vienna, Austria, Dr Christof Miska, to China. Together they visited companies in the Zhejiang province to meet business leaders who demonstrated particular dedication to sustainability and socially-responsible leadership. They now develop joint-research projects and plan practitioner-oriented publications based on the data collected in Ningbo.





One of the primary ways that NUBS promotes dialogues is through the organisation of, and participation at, local and international events.

Addressing food poverty and food hunger in Nottinghamshire

In May 2018, the Social and Environmental Responsibility Group hosted the Social Eating Spaces and Big Lunch organisers meet-up event led by the Eden Project Communities. This brought together different stakeholders and partners across Nottingham to share best practice, learning and skills for people involved with existing social eating spaces. The event, held at the Jubilee Campus, was in support of Nottingham's ambition as the first social eating city in the United Kingdom that brings together communities using food as a tool to stamp out isolation and create better, connected communities.

Prospects and constraints on firm investment, financing and innovation in changing global environment

Dr Arijit Mukherjee and Professor Sanjay Banerji, organised a NUBS-University of Calcutta workshop in October 2017. It was a great success with good attendance and interesting papers and discussions covering topics, such as financial inclusion, innovation, and dual sourcing.

Two professors from the University of Calcutta (Professor Sugata Sen Roy and Professor Bhaswati Ganguli) presented in the workshop. We also had presentations by colleagues from NUBS and our School of Economics. The workshop created the opportunity for improving the research link between NUBS and the University of Calcutta, and the links among colleagues in the University of Nottingham.

Engaging to solve the grand challenge of sustainability: Interdisciplinary workshop on participatory and engaged research

The workshop was organised by Dr Anne Touboulic (NUBS UK), Dr Lucy McCarthy and Dr Carsten Reuter and took place in Nottingham in February 2018. It gathered over 30 participants from all over the UK and Europe.

The workshop was organised around the following core question: How can research in the field of corporate sustainability become more forward-looking and future-shaping?

This event focused on exploring how participatory and engaged research constitute powerful approaches in tackling key challenges posed by sustainability in practice. Sustainability is arguably the wicked problem of this century and there is a clear mandate for considering how change can be driven at individual and collective levels.

The central role of management scholarship in transitioning towards sustainability and addressing societal grand challenges is largely recognised. Several scholars have called for action in the field but have acknowledged that this entails the difficult task of fundamentally questioning the assumptions upon which much of our research is based. Progress will be achieved through asking different questions and adopting less mainstream methodologies.

Calls for methodological diversity in management are not new and it has even been claimed that a lack of creative approaches will lead us to fail to uncover the mysteries from which new knowledge can emerge. The nature of sustainability requires research to drive change. Other fields where issues of societal change are fundamental, such as development studies and medical research, have strong traditions of engagement and participation. However, there is a notable absence of management research that specifically contributes to enhancing managers' ability to make decisions to progress towards true sustainability and to engaging relevant stakeholders in the process. We seek to develop an interdisciplinary conversation in order to foster mutual learning.

This event represented a fundamental step in this direction by bringing together early career academics and PhD students from the field of management and experienced scholars from other disciplines who adopt participatory and engaged research approaches to researching wicked problems.

This event was structured around two distinct days:

Day 1 was specifically for PhD students and early career researchers in management who research the fields of sustainability, CSR and business ethics. The day consisted of interactive masterclasses from speakers from disciplines outside management, a panel of editors' discussion and collective reflections around key questions identified by participants. The event aimed to be a platform for discussing the 'how' of conducting such types of research - details that often remain absent from publications.

Day 2 was focused on advancing sustainability in production and consumption networks. The audience for this day were academics at all stages of their careers who identify with this theme. Day 2 was an agendashaping event and sought to surface the key research questions for the field, particularly around how to move towards meaningful change. This entailed reflecting on what assumptions/theories and research questions we should be asking but also on with whom we should engage.

The workshop was funded by the Society for the Advancement of Management Studies and sponsored by a number of external partners including the *Journal of Supply Chain Management* and the International Purchasing and Supply Research and Education Association.

Sustainability reporting in Asia

In Singapore in October 2018, Dr Avvari V. Mohan moderated a session titled 'Sustainability Reporting is out, Storytelling is in. Is this the way forward?' as part of the annual Asia Sustainability Reporting Summit 2018 - Sustainability Reporting: Beyond Transparency.

In Kuala Lumpar, October 2017, Dr Avvari V. Mohan moderated a High-Level Dialogue Towards Sustainability – Incorporating Ethics and Integrity into the Digital Business. This was part of the Seminar on Business Ethics and Integrity: Key to Sustainability in the Digital Economy, organised by ASEAN CSR and the Federation of Malaysian Manufacturers.

In July 2017, Dr Avvari V. Mohan was invited to present Innovation Systems: Emerging Role of NGOs in South East Asia. This was held at the Centre for Knowledge Culture and Innovations Studies, University of Hyderabad, India.



Promoting democracy and green investment in China

In January 2018, Dr Xiuping Hua, a member of the Ningbo Committee of Chinese People's Political Consultative Conference (CPPCC), Associate Professor in Finance, NUBS China, and Secretary-General of the Centre for Inclusive Finance in Ningbo, attended the 2nd Conference of the 15th Ningbo Committee of CPPCC and also the 3rd Meeting of Ningbo People's Congress. Mr Zheng Shanjie, the Party Secretary of Ningbo Municipal Government, Mr Yang Xubiao, the Chairman of Ningbo Committee of CPPCC and other leaders attended the discussion with the China Democratic League and the China Association for Promoting Democracy and Economic Groups. Members put forward relevant suggestions for the development based on their professional fields. Dr Xiuping Hua, as the third representative of the Economic Group, spoke on the topic of Building the Green Financial System in Ningbo, Conducting Extensive International Cooperation, and gave advice for the development of local economy and financial market. Mr Zheng Shanjie responded to policy proposals of nine CPPCC members.

There is a great potential for energy saving and carbon emission reduction in Ningbo. Ningbo is not only an important energy base, but also a city with great energy consumption. Ningbo's industry and energy structure shows high level of carbon consumption. During the period of the '13th Five-Year Plan', one of the goals is that the energy consumption of GDP in Ningbo needs to achieve 19.5% reduction. However the latest statistics from the Bureau of Statistics show that in 2016, the GDP energy consumption increased by 0.8% compared with 2015, instead of decreasing.

In the first three quarters of 2017, the energy consumption of the GDP only decreased by 0.7%, which is far from the goal of 7.8% reduction in two years. From January to November, energy consumption to added value in above scale industry decreased by 2.9%, and the reduction rate was 0.9 percentage points lower than the provincial average level (3.8%), ranking the last fourth place among all cities in Zhejiang Province.

According to the existing research estimation, the demand for green investment in China is about RMB 4 trillion per year in the next five years, of which the government funds will meet 15% of the green investment demand. China urgently needs to develop green finance through a series of policies, institutional arrangements and related infrastructure construction to introduce social capital into the green industry in the form of loans, private investment, bonds and stocks issuing, insurance and other financial services.

At present, the development of green finance in Ningbo has reached periodical achievements. However, there are still many restrictive factors in the development of the green financial system in Ningbo. Because of the imperfect financing mechanism and imperfect marketisation arrangement, the huge potential of the green financial market in Ningbo is not fully satisfied. For example, green funds, green bonds and carbon finance is not well-developed in Ningbo yet.

Responsible management in China

Dr Oliver Laasch from the Ningbo campus was invited to deliver So: What is responsible management learning and education (RMLE)? This was at the inaugural session of the Academy of Management Education and Development Division's webinar series in 2018 to a global audience of close to 200 participants.

Sustainable consumption and waste

In April 2018 NUBS China organised a public lecture on sustainable consumption and waste. Dr Michal Lemanski's lecture focused on the problem with which many industrialising economies struggle, namely that the economic prosperity comes at a high cost to the natural environment: increasing waste. New technologies for production and distribution of food, and development of new materials create great opportunities and facilitate economic development, yet at the same time create problems with the sustainability of our consumption. We all face these challenges every day, and it becomes a global problem and a challenge to many governments, companies, and individuals. Dr Lemanski discussed what people, companies and governments do, and can do, to tackle current problems of waste and sustainability of consumption.

Greening supply chains

In September 2018, the Researcher Links Workshop on Environmental Technology Innovation for Greening Supply Chains was successfully held in the University of Nottingham Ningbo China. Addressing the theme of greening the global supply chains, the workshop aimed to promote UK-China research collaborations and seek more industry—academy—research opportunities in the future.

During the opening session, Dr Jing Dai, as the Associate Professor in Operations Management, and China Coordinator of this workshop, welcomed researchers and mentors from UK and China and briefly introduced the background of the workshop. The workshop was funded under the joint programme of National Natural Science Foundation of China and the British Council, and is designed to provide opportunities for researchers to interact, learn from each other and exchange research ideas.

Professor Martin Lockett, Dean of Nottingham University Business School China, pointed out that Ningbo is in the pivotal position for global supply chains in many industries and NUBS China is engaged in the development of links with business and government. "In NUBS China, we analyse and promote sustainable development, hence our strong focus on green and smart supply chain management", said Professor Lockett.



6.2 External connections and outreach

Professor Sally Hibbert (NUBS UK) sits on Nottingham City Public Health Physical Activity, Obesity and Diet Strategic Group.

Dr Rob Lambert (NUBS UK) along with Dr Matt Jones (School of Geography), under the auspices of the Life in Changing Environments RPA, organised and hosted the inaugural Nottingham Environment Conference on the Jubilee Campus in June 2018. On day one, this event showcased all the remarkable environmental work being done across the University of Nottingham campuses (domestic and international), across all Schools and Faculties. On day two ('forging new regional networks for nature'), introduced and hosted by Dr Lambert and the Nottinghamshire Wildlife Trust, the University looked outwards and interacted through panel debates with a host of regional and national environmental NGOs, agencies, charities, industry and community groups, politicians, policymakers, campaigners and broadcasters. Contributors included the RSPB, Woodland Trust, Wildlife Trusts, Canal and River Trust, National Union of Students, Buglife, AFON, Environment Agency, Anglian Water, and OPAL. A second Nottingham Environment Conference will be held in June 2019.

Dr Rob Lambert is Vice-President of Nottinghamshire Wildlife Trust, charged with enhancing and building upon a connection between the Trust, the University and the City that goes back 50 years. Our Vice-Chancellor, Professor Shearer West, is also Honorary Vice-President of Nottinghamshire Wildlife Trust. Within this position, Rob has played a key role in Trust activities across the city and county. Dr Lambert (representing the University) and the Trust co-hosted public events as part of the national Being Human Festivals in November 2017 and 2018. In 2017, a family-friendly creative writing session, a nature-writing workshop, and a debate on 'Wild Words' took place. In 2018, a panel debate and audience question time 'Nottingham Nature: back to a future?' were the main events. In January 2018, Rob chaired a public event in The Council House in Nottingham titled 'Nottingham for Nature' with representatives from the University, eNGOs, civic groups, local councils and invited schools.

Dr Rob Lambert is also a regular feature on the Events Stage at the British Birdwatching Fair at Rutland Water (attended by 25,000 people over three days each August). This year he will chair 'The Plastics Debate: can we save our seas and ourselves?' in front of an audience of 800, and in previous years has chaired debates on 'Brexit & the Environment' and 'Should we ban grouse shooting?' In 2018, he will chair the Next Generation Conservation debate at Birdfair 'Should nature work for us?' hosted by AFON, the youth conservation network in the UK, co-founded by Dr Lambert in 2012 and now with over 3,000 members.

Dr Dirk Moosmayer (NUBS China) takes a very active role in the global scholarly community dedicated to sustainability, social responsibility and business ethics. Among others, he is an Associate Editor of the most influential journal in this field: Business Ethics: A European Review, and serves on the Editorial Board of another leading journal publishing on sustainability, ethics and the social responsibility of business: Journal of Business Ethics; Business and Society.

Since 2014, researchers from the Ningbo campus, Dr Dirk Moosmayer and Dr Oliver Laasch have been organising the annual AOM professional development workshop titled *Responsible Management Education in Action*, attracting a large global audience at the Academy of Management meeting every year.

Dr Oliver Laasch has founded and runs the LinkedIn group 'Managing Responsibly' with over 700 responsible management practitioner members, related to the Coursera MOOC initiated by him, which goes by the same name.

Dr Laasch also supports responsible management education faculty development, course design, and delivery on site around the world, including at the Management Centre Innsbruck, University of Tuebingen, HEC Paris (Doha Campus), Fordham University New York, Sheffield Hallam University and the University of St Gallen. In 2019, he will promote responsible management through a faculty and practitioner workshop series across in collaboration with New Delhi's Centre for Responsible Business.

Dr Judy Muthuri sits on the Nottingham Good Food Partnership (NGFP) Steering Group. NGFP is a multistakeholder initiative aimed at promoting social cohesion through food, and creating an economically-vibrant and a sustainable food culture in Nottinghamshire. NGFP provides an experiential learning opportunity to postgraduate students undertaking the *Managing for Sustainability* module.

Looking ahead: our goals for 2019/2020

The process of reporting has itself enabled us to consider what we have already achieved and where we want to go from here. The PRME tri-campus team has agreed on the following three goals as our development plan for the next reporting cycle:

Goal 1

In the next year we are aiming to promote PRME more widely in NUBS and embed PRME principles further through the mission and vision of the School. We will endeavour to enhance the visibility of PRME in all that we do. We will explore avenues to increase the capabilities and resources behind the PRME efforts at a tri-campus level.

Goal 2

In this report, we have tested ways of gathering and reporting evidence of PRME in our teaching and learning activities. We will endeavour to systematise this effort by including modules at all levels, across the three campuses, as well as at postgraduate research level (PhD projects and dissertations). We will aim to capture both quantitative and qualitative evidence to support our reporting efforts.

Goal 3

Following the experience of working together as an international tri-campus team, we are committed to continue to consider the ways in which we can contribute to the SDG agenda across the board. We will specifically encourage our colleagues to share their experiences and experiment with novel approaches to address challenges under the SDGs.



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