

eSTeEM Projects List - in progress

No.	Project call	Call date	Ref	Project Leader(s)	Project Title	Theme(s)	Keywords	Module(s) involved	School(s)/ Unit(s)	Other staff involved	Other eSTeEM projects as PL	Start date	Estimated end date
1	15	Jul-19	19J-AA-CC-01	Adeola Adeliyi	<a href="#">Pair Programming as a tool to enhance teaching and learning of programming at a distance.</a>	Technologies for STEM learning	Pair Programming, remote pair programming, extreme programming, teaching programming at a distance	TM112, TM129, M250, M269	C&C	Michel Wermelinger (C&C), Jon Rosewell (C&C) and Karen Kear (C&C)		Oct-19	Mar-22
2	18	Jan-21	21J-FACH-EEES-02	Fiona Aiken and Chris Hutton	<a href="#">Evaluation and improvement of print packs use for Environmental Science students</a>	Equality, diversity and inclusion - APP	Print pack, disability, SISE, reasonable adjustment, accessibility	S112, SXF206, S397, SDT306	EEES		<p><i>Student development and perceptions of employability skills in stage 1 science</i></p> <p><i>Aiken joint PL - Typical Support Seeking Behaviour of STEM Students, their Outcomes and Successes</i></p> <p><i>Hutton joint PL - Online peer mentoring at scale: Benefits and impacts from a student buddy perspective</i></p>	Oct-21	Oct-23
3	18	Jan-21	21F-MA-CC-01	Mustafa Ali	<a href="#">Decolonising Computing: A Resource for Educators</a>	Equality, diversity and inclusion - APP	Decolonisation, decolonial computing, history of computing, computing pedagogy, inclusive curriculum	TM353, TM359	C&C	Magnus Ramage, Ray Corrigan, Clem Herman and Steve Walker (C&C)		Jun-21	Nov-22
4	2 AL	Mar-20	20G-CB-MS-01	Col Blundell	<a href="#">Investigation into running course specific, taster tutorials within prisons for non-OJ students</a>	Equality, diversity and inclusion	Offender learner, prison, vulnerable students, new students, SISE, recruitment, widening participation in STEM, EDI, gender		M&S	Katie Chicot and Andrew Potter (M&S)	<i>Joint lead - Blended tutorials in Mathematics: simultaneous F2F and online learning events</i>	Jul-20	Dec-22
5	13	Jul-18	18K-DB-CC-01	David Bowers	<a href="#">Evaluation of service management simulation activities</a>	Employability	Gamification, simulations, communication skills, service management, team working	TM254	C&C	Matthew Nelson (C&C)		Nov-18	Dec-21
6	3 AL	Mar-21	21H-MB-EI-01	Martin Braun	<a href="#">Investigating how to enhance the idea generation process by students for their T452 project</a>	Supporting students	Topic selection, final year project, capstone project, student experience, project and professional skills	T452, T460, T802 and T847	E&I			Aug-21	Jul-22
7	18	Jan-21	21D-CCCMCCPRW-MSCC-01	Carol Calvert, Clare Morris, Colette Christensen and Pat Ryser-Welch	<a href="#">Developing student use of feedback on their marked TMAs</a>	Supporting students	Student views, using TMA feedback, correspondence tuition, improving student understanding, growing confidence		M&S & C&C	Charly Lowndes, Tricia Terndrup, Jo Smedley and Jason Verrall (ALS)	<p><i>Calvert - Implementation of lessons learnt from students who succeed "despite the odds"</i></p> <p><i>Calvert - Early start M140</i></p> <p><i>Calvert joint PL - MU123 &amp; M140 Early start: 18J</i></p> <p><i>Calvert - Usage of Early Alerts Indicators on two level 1 modules</i></p> <p><i>Calvert joint PL - How one module can serve multiple qualifications through tailored implementation of presentation</i></p>	Apr-21	Sep-22
8	12	Jan-18	18E-ACMIJAMG-ASSPSEI-01	Anne Campbell, Mark Jones and Anne-Marie Gallen	<a href="#">Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders (part II: the student perspective)</a>	Supporting students	Tuition, group tuition, tuition policy, GTP, teaching model, student attitudes, student perceptions,	S111, T192, T193, SM123	Academic Services, SPS and E&I		<p><i>Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders</i></p> <p><i>Campbell joint PL - Accessibility and inclusion in tuition (AccIT)</i></p> <p><i>Jones - Developing practice in online synchronous tuition by peer observation, feedback and reflection</i></p> <p><i>Jones - Online Team Investigations in Science (OTIS)</i></p> <p><i>Joint PL - Evaluation of Assessment and Tuition Changes for S284 Astronomy</i></p> <p><i>Gallen joint PL - Evaluating the level 1 engineering tutors resource</i></p> <p><i>Gallen joint PL - Factors influencing female participation in Physical Science Postgraduate Research Programmes</i></p>	May-18	Jan-22

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9	17	Jul-20	20K-AC-SPS-01	Alan Cayless	<a href="#">Using Learning Logs in SXPS288 – Effectiveness in helping students to reach Learning Outcomes, to enhance and document their employability skills, and raise awareness of opportunities in the space sector</a>	Employability	Employability, Learning log, Learning outcomes, Skill development, Self awareness and achievement	SXPS288	SPS	Arabella Nock (AS)		Nov-20	Feb-22
10	18	Jan-21	21D-PCFA-STEMDEEES-01	Paul Collier and Fiona Aiken	<a href="#">Typical Support Seeking Behaviour of STEM Students, their Outcomes and Successes</a>	Equality, diversity and inclusion - APP	Student Success, Support Models, APS Characteristics		STEM Deanery and EEES		<i>Aiken joint PL - Student development and perceptions of employability skills in stage 1 science</i> <i>Aiken joint PL - Online peer mentoring at scale: Benefits and impacts from a student buddy perspective</i>	Apr-21	Mar-22
11	15	Jul-19	20A-TCSD-KMIEEES-01	Trevor Collins and Sarah Davies	<a href="#">Disseminating inclusive field teaching – sharing resources and practices across disciplines and institutions</a>	Equality, diversity and inclusion	Inclusive teaching and learning; fieldwork education; scholarship translation; scholarship impact	S206, S209	KMI & EEES	Tom Argles (EEES)	<i>Collins joint PL - Assessing The 'Open Field Lab': Evaluating Interactive Fieldcasts for Enhancing Access to Fieldwork</i> <i>Davies joint PL - Geospatial technologies in distance learning and teaching in Science</i> <i>Davies joint PL - Hybrid/Digital Networked Learning scruffy mongrel or sleek new breed? Practices and implications of blending physical and digital resources for learning in HE</i> <i>Davies - Place-making and student identity in fieldwork learning</i> <i>Davies - Embedding research into teaching: practices, motivations and impacts</i> <i>Davies - Investigating Barriers and Inclusive Messaging around Fieldwork Learning in the Earth, Environmental and Ecological Sciences</i>	Jan-20	Jun-22
12	17	Jul-20	20L-CC-EI-01	Chris Corcoran	<a href="#">Barriers and enablers to higher education: the experiences of disabled students from minority cultural backgrounds</a>	Equality, diversity and inclusion - APP	BAME, disability, inclusion, widening participation, values	U116	E&I			Dec-20	Dec-21
13	12	Jan-18	18F-ECNCKB-LHCSSD-01	Eleanor Crabb, Nick Chatterton and Kate Bradshaw	<a href="#">Developing responsive approaches to enhance personalized learning in selected LHCS modules</a>	Technologies for STEM learning	Personalised learning, teaching assets, media, video, Camtasia, screencasts, Adobe Connect, online best practice guide,		LHCS and STEM Deanery	Karen New (LHCS), Ray Jones and Peter Cains (ALs)	<i>Crabb - Online remote experiments in chemistry- analysis of delivery, assessment, tracking and student perception</i> <i>Crabb joint PL - Improving success and satisfaction of credit transfer students entering L3 modules in Science</i> <i>Crabb joint PL - Online Summer Schools</i> <i>Crabb joint PL - Understanding how our assessment contributes to retention and awarding gaps for black students on LHCS modules</i> <i>Chatterton joint PL - Online Chemistry Support Clinics</i>	Jun-18	Dec-21

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14	14	Jan-19	19E-ECIL-LHCS-01	Eleanor Crabb and Jane Loughlin	<a href="#">Improving success and satisfaction of credit transfer students entering L3 modules in Science</a>	Supporting students	Credit transfer, level 3, student support, distance learning, transition		LHCS	Catherine Halliwell (AL), Tanya Noon (AS), Clare Dunn (AS) and Elaine Walker (AS)	<p><i>Crabb joint PL - Developing responsive approaches to enhance personalized learning in selected LHCS modules</i></p> <p><i>Crabb joint PL - Online remote experiments in chemistry - analysis of delivery, assessment, tracking and student perception</i></p> <p><i>Crabb joint PL - Online Summer Schools</i></p> <p><i>Loughlin joint PL - Early Start S294: evaluation</i></p> <p><i>Loughlin joint PL - Understanding awarding gaps for disabled and black LHCS students at Level 1</i></p>	May-19	Dec-21
15	16	Jan-20	20E-SDLW-LHCS-01	Sarah Daniell and Lorraine Waters	<a href="#">Evaluation of D-flag students' accessibility to and use of online tutorials and forums in L2 modules</a>	Equality, diversity and inclusion	Online tutorials, forums, participation, disability, accessibility	SK299, S294	LHCS	Kate Fox (AL)		May-20	Apr-23
16	19	Jul-21	21K-SD-EEES-02	Sarah Davies	<a href="#">Embedding research into teaching: practices, motivations and impacts</a>	Supporting students	Research-teaching nexus; student engagement; environmental science	U116, S112, S/XF206, S397, SDT306, SXE390	EEES	Phil Holden and Kadmiel Maseyk	<p><i>Joint PL - Geospatial technologies in distance learning and teaching in Science</i></p> <p><i>Hybrid/Digital Networked Learning scruffy mongrel or sleek new breed? Practices and implications of blending physical and digital resources for learning in HE</i></p> <p><i>Joint PL - Disseminating inclusive field teaching – sharing resources and practices across disciplines and institutions</i></p> <p><i>Place-making and student identity in fieldwork learning</i></p> <p><i>Investigating Barriers and Inclusive Messaging around Fieldwork Learning in the Earth, Environmental and Ecological Sciences</i></p>	Nov-21	Apr-23
17	19	Jul-21	21K-DKSKM-CC-01	Dhouha Kbaier and Soraya Kouadri Mostefaoui	<a href="#">Analysis of COVID-19's impact on BAME students' attainment (A case study of Level 1 C&amp;C Open University modules)</a>	Equality, diversity and inclusion - APP	BAME students, COVID-19, students' attainment, students' experience, enhancing tuition experience	TM111, TM112	C&C		<p><i>Kouadri Mostefaoui - Assessing 'alternative media' elements: is there a generic model?</i></p> <p><i>Kouadri Mostefaoui joint PL - Visualising the code: are students engaging with programming at level 1?</i></p> <p><i>Kouadri Mostefaoui joint PL - Supporting Degree Apprenticeship students: Tutors' and Students' perspectives</i></p> <p><i>Kouadri Mostefaoui joint PL - Using Bitesize Videos to Enhance Students' Experiences in a Level 2 Programming Module</i></p> <p><i>Kouadri Mostefaoui joint PL - Are You Ready for Your Studies - Are we Assessing Students Readiness? An evaluation of the usefulness of the Level 2 ARFY quizzes</i></p> <p><i>Kouadri joint PL - Modern Container-based Learning Interface and Delivery Infrastructure (MCLIDI)</i></p>	Nov-21	Apr-23
18	3 AL	Mar-21	21H-JDHK-EEES-01	Jenny Duckworth and Harriet Kopinska	<a href="#">Challenges of assessment for a level 3 interdisciplinary module: an AL and student perspective</a>	Innovative assessment	Assessment, learning outcomes, marking grids, tutor feedback, interdisciplinary	SDT306	EEES	Jennie Bellamy and Yoseph Araya (EEES)	<p><i>Duckworth joint PL - Can an asynchronous student conference in Open Studio develop students' critical evaluation skills?</i></p>	Aug-21	Dec-22
19	17	Jul-20	20K-FE-MS-01	Fadlalla Elfadaly	<a href="#">Using knowledge from Associate Lecturers in a Bayesian model to predict the probability of students' results</a>	Supporting students	Associate Lecturers, expertise, Predictive probabilities of success, Student feedback, Student satisfaction and retention	M140, M249, M347	M&S	Carol Calvert and Rachel Hilliam (M&S)		Nov-20	Dec-22

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20	17	Jul-20	20K-MFMHTF-KMI-01	Miriam Fernandez, Martin Hlosta and Tracie Farrell	<a href="#">Understanding the BAME attainment gap at the OU by means of quantitative and qualitative data analytics</a>	Equality, diversity and inclusion - APP	BAME attainment gap, learning analytics, pattern divergences, focus groups, qualitative understanding of root causes		KMI	Vaclav Bayer Venetia Brown	<i>Hlosta - Disproved predictions of at-risk students: Some students fail despite doing well, others succeed despite predicted as at-risk</i>	Nov-20	Feb-22
21	19	Jul-21	21J-CG-CC-02	Christine Gardner	<a href="#">Early Start for TM470 project students</a>	Supporting students	Retention, progression, early support, tutor support	TM470	C&C	Michael Bowkis and Alexis Lansbury (C&C)	<i>Analytics for tracking student engagement</i>  <i>Joint PL - Are virtual insight visits an effective way of engaging learners and supporting student retention in distance learning environments?</i>	Oct-21	Apr-23
22	18	Jan-21	21D-HGJRJGJW-LHCSEES-01	Hannah Gauci, Julie Robson, Jon Golding and Janette Wallace	<a href="#">Impact of introducing new practical and dataset project options to the science undergraduate capstone project module (S390)</a>	Equality, diversity and inclusion - APP	Practical project work, secondary data handling, accessibility, independent learning, undergraduate capstone science project.	S390, SXL390, SXE390	LHCS & EEES	Miranda Dyson (EEES), Vicky Taylor (LHCS), Clare Lawson (EEES), Vikki Hayley-Mirnar (LHCS) and Lorraine Waters (LHCS)	<i>Gauci joint PL - Assessing the effectiveness of the induction process for novice Associate Lecturers in the School of Life Health and Chemical Sciences in preparing them for the Associate Lecturer role</i>  <i>Gauci joint PL - Evaluating a new STEM AL induction programme</i>  <i>Gauci joint PL - Summer Series of Journal Clubs: an opportunity to develop employability skills and a sense of community amongst students in secure environments</i>  <i>Robson joint PL - Online peer mentoring at scale: Benefits and impacts from a student buddy perspective</i>  <i>Wallace joint PL - Assessing the effectiveness of the induction process for novice Associate Lecturers in the School of Life Health and Chemical Sciences in preparing them for the Associate Lecturer role</i>  <i>Wallace - Evaluating student perspectives of different types of learning events provided on SDK228, a level 2 LHCS module</i>	Apr-21	Jun-23
23	15	Jul-19	19J-NG-CC-01	Nigel Gibson	<a href="#">Do they know what they are doing? A review of IT use by prison-based students</a>	Equality, diversity and inclusion	Study skills, offender learning, students in prison, supporting students, onscreen practice		C&C		<i>Joint PL - Pair marking: Working together to improve our teaching</i>	Oct-19	Dec-22
24	19	Jul-21	21K-NGKS-CC-01	Nigel Gibson and Kate Sim	<a href="#">Pair marking: Working together to improve our teaching</a>	Innovative assessment	Marking efficiency, correspondence tuition, development, mentoring, induction	TM111	C&C		<i>Gibson - Do they know what they are doing? A review of IT use by prison-based students</i>	Nov-21	Oct-22
25	15	Jul-19	19J-DG-CC-01	Daniel Gooch	<a href="#">Teaching distributed computing using Raspberry Pi clusters at a distance</a>	Technologies for STEM learning	Raspberry Pi cluster, distance learning, distributed architectures, parallel, CS education	TM111, TM112, TM129, M269	C&C	Mike Richards (C&C) and Jon Rosewell (C&C)		Oct-19	Jan-23
26	12	Jan-18	18E-AC-EI-01	Alec Goodyear	<a href="#">Evaluating the impact of a qualification based approach to student engagement and success in engineering study</a>	Supporting students	Student success, engagement, progression, teaching quality assessments, TEF, assessment and tuition groups, personal development planning, professional skills, peer interactions		E&I	Carol Morris (E&I), Sally Organ (E&I), Zahra Golrokhi (E&I) and Maria Kantirou (CIO Portfolio)	<i>Joint PL - Engineering residential school or home experiments? A comparison from the perspective of both the student and the tutor</i>	May-18	May-22
27	18	Jan-21	21D-AGIJKMDS-EI-01	Alec Goodyear, Jestyn Iowers, Jan Kowal, Carol Morris and David Sharp	<a href="#">Engineering residential school or home experiments? A comparison from the perspective of both the student and the tutor</a>	Supporting students	Engineering, residential schools, home experiment kits, practical skills, team-working	T176, T276	E&I		<i>Goodyear - Evaluating the impact of a qualification based approach to student engagement and success in engineering study</i>  <i>Morris joint PL - Understanding factors influencing BAME students' achievements within Engineering and Innovation</i>	Apr-21	Dec-21
28	3 AL	Mar-21	21J-MGVC-LHCS-01	Melanie Gregg and Vivien Cleary	<a href="#">Cultivating student led tutorials in STEM</a>	Supporting students	Student centred learning, equal opportunities, maximising student potential, improving tutorial attendance, inverted classroom	SDK100	LHCS			Oct-21	Dec-22

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29	17	Jul-20	21A-MHSM-CC-01	Mark Hall and Soraya Kouadri Mostéfaoui	<a href="#">Modern Container-based Learning Interface and Delivery Infrastructure (MCLIDI)</a>	Technologies for STEM learning	Container-based delivery, Cloud technologies, Accessibility, Integrated Learning Interface	TT284, TM351	C&C		<p><i>Kouadri Mostéfaoui joint PL - Using Bitesize Videos to Enhance Students' Experiences in a Level 2 Programming Module</i></p> <p><i>Kouadri Mostéfaoui - Assessing 'alternative media' elements: is there a generic model?</i></p> <p><i>Kouadri Mostéfaoui joint PL - Visualising the code: are students engaging with programming at level 1?</i></p> <p><i>Kouadri Mostéfaoui joint PL - Supporting Degree Apprenticeship students: Tutors' and Students' perspectives</i></p> <p><i>Kouadri Mostéfaoui joint PL - Using Bitesize Videos to Enhance Students' Experiences in a Level 2 Programming Module</i></p> <p><i>Kouadri Mostéfaoui joint PL - Are You Ready for Your Studies - Are we Assessing Students Readiness? An evaluation of the usefulness of the Level 2 ARFY quizzes</i></p> <p><i>Analysis of COVID-19's impact on BAME students' attainment (A case study of Level 1 C&amp;C Open University modules)</i></p>	Jan-21	Oct-22
30	13	Jul-18	18K-CH-CC-04	Clem Herman	<a href="#">Developing a strategy for an LGBT+ inclusive STEM Faculty</a>	Equality, diversity and inclusion	LGBTQ+, equality, diversity, inclusion, Athena SWAN, learning environment, study goals, workplace cultures, confidence, career progression		C&C	Nacho Romero (STEM Deanery)	<p><i>Evaluation of a community partnership approach using open educational resources: Equate Scotland and the Returning to STEM BOC</i></p> <p><i>Gendered Choices - Motivation and degree choices of Computing and IT students: a gendered analysis</i></p> <p><i>Career Development for STEM professionals</i></p>	Nov-18	Jul-22
31	19	Jul-21	21J-MHCH-LHCS-01	Mark Hirst and Christopher Heath	<a href="#">Student progression through linked interactive screen experiments: building confidence and competence</a>	Technologies for STEM learning	ISE, confidence, scientific enquiry and skills, scientific thinking, ease-of-use/gamification	S290	LHCS	Hilary MacQueen (LHCS)		Oct-21	Oct-22
32	18	Jan-21	21E-FHAMGHLRH-EILDS-01	Foroogh Hosseinzadeh, Anne-Marie Gallen, Helen Lockett and Rafael Hidalgo	<a href="#">Investigating students perception of some of the key learning activities in T272</a>	Supporting students	STEM, engineering, OpenEngineering Laboratory, Mathematics, Software skills, Real time student feedback	T272	E&i and LDS		<p><i>Gallen joint PL - Factors influencing female participation in Physical Science Postgraduate Research Programmes</i></p> <p><i>Gallen joint PL - Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders (part II: the student perspective)</i></p> <p><i>Gallen joint PL - Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders</i></p> <p><i>Gallen joint PL - Evaluating the level 1 engineering tutors resource</i></p> <p><i>Lockett - An investigation into the breadth of learning outcomes and skills developed in OpenSTEM Labs experiments</i></p> <p><i>Hidalgo joint PL - Improving student engagement during online-only courses through the use of interactive question-embedded videos</i></p>	May-21	May-23
33	17	Jul-20	20L-EHTPLB-EI-01	Flouise Huxor, Theo Philcox and Lisa Bowers	<a href="#">Associate Lecturer Disability Champion scheme at the Open University (E&amp;i-STEM)</a>	Equality, diversity and inclusion - APP	Accessible, Associate Lecturer, Disability, Mental Health, Mentor, Peer-peer	U101	E&i	Nicole Lotz, Georgina Holden and Derek Jones (E&i)	<p><i>Bowers - Haptic thinking; identifying haptic tooling interventions for an online design course</i></p>	Dec-20	Dec-21

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34	16	Jan-20	20F-MJHF-SPS-01	Mark Jones and Helen Fraser	<a href="#">Evaluation of Assessment and Tuition Changes for S284 Astronomy</a>	Supporting students	Assessment, Tuition, Student-support, Online-learning, AL-experience	S284	SPS	Olivia Rowland and Rafa Hildago (LDS)	<p><i>Jones - Developing practice in online synchronous tuition by peer observation, feedback and reflection</i></p> <p><i>Jones - Online Team Investigations in Science (OTIS)</i></p> <p><i>Jones joint PI - Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders</i></p> <p><i>Joint joint PL - Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders (part II: the student perspective)</i></p>	Jun-20	Dec-21
35	14	Jan-19	19H-SS-SPS-02	Sally Jordan	<a href="#">Concept inventories in physics: from development to impact</a>	Equality, diversity and inclusion	Concept inventory, free-text response, automated marking, learning gain	SM123, S112, S217	SPS	Holly Hedgeland (University of Cambridge)	<i>Thresholded assessment: Does it work?</i>	Aug-19	Jul-22
36	2 AL	Mar-20	20H-AK-MS-01	Abi Kirk	<a href="#">Learning lessons from Mathematics Individual Support Sessions in order to promote verbal communication by students in group online tutorials</a>	Supporting students	Online group tutorials, interaction, verbal communication, individual support sessions	M337	M&S			Aug-21	Feb-22
37	15	Jul-19	19K-SKMOH-CC-01	Soraya Kouadri Mostéfaoui and Oli Howson	<a href="#">Are You Ready for Your Studies - Are we Assessing Students Readiness? An evaluation of the usefulness of the Level 2 ARFY quizzes</a>	Supporting students	Retention and progression, students satisfaction, gender bias, pre-requisite	M250, TT284, M269	C&C		<p><i>Kouadri Mostéfaoui - Assessing 'alternative media' elements: is there a generic model?</i></p> <p><i>Kouadri Mostéfaoui joint PL - Visualising the code: are students engaging with programming at level 1?</i></p> <p><i>Kouadri Mostéfaoui joint PL - Supporting Degree Apprenticeship students: Tutors' and Students' perspectives</i></p> <p><i>Kouadri Mostéfaoui joint PL - Using Bitesize Videos to Enhance Students' Experiences in a Level 2 Programming Module</i></p> <p><i>Kouadri Mostéfaoui joint PL - Modern Container-based Learning Interface and Delivery Infrastructure (MCLIDI)</i></p> <p><i>Kouadri Mostéfaoui joint PL - Analysis of COVID-19's impact on BAME students' attainment (A case study of Level 1 C&amp;C Open University modules)</i></p>	Nov-19	May-22

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38	16	Jan-20	20D-SKMMC-CC-01	Soraya Kouadri Mostéfaoui, Marina Carter and Mark Hall	<a href="#">Using Bitesize Videos to Enhance Students' Experiences in a Level 2 Programming Module</a>	Supporting students	Programming, visual programming, video tutorial, student engagement, retention.	TT284	C&C		<p><i>Kouadri Mostéfaoui - Assessing 'alternative media' elements: is there a generic model?</i></p> <p><i>Kouadri Mostéfaoui joint PL - Visualising the code: are students engaging with programming at level 1?</i></p> <p><i>Kouadri Mostéfaoui joint PL - Supporting Degree Apprenticeship students:</i></p> <p><i>Kouadri Mostéfaoui joint PL - Are You Ready for Your Studies - Are we Assessing Students Readiness? An evaluation of the usefulness of the Level 2 ARFY quizzes</i></p> <p><i>Kouadri Mostéfaoui and Mark Hall joint PLs - Modern Container-based Learning Interface and Delivery Infrastructure (MCLDI)</i></p> <p><i>Kouadri Mostéfaoui joint PL - Analysis of COVID-19's impact on BAME students' attainment (A case study of Level 1 C&amp;C Open University modules)</i></p> <p><i>Carter joint PL - Workday day-time tutorials for apprentices – what is the best practice in Computing?</i></p>	Apr-20	Dec-21
39	18	Jan-21	21D-ALSD-CC-01	Alexis Lansbury and Sharon Dawes	<a href="#">Accessibility of Jupyter Notebooks on M269</a>	Equality, diversity and inclusion - APP	Jupyter notebooks, accessibility, usability, iPython	M269	C&C		<p><i>Lansbury joint PL - An investigation into how STEM students use learning resources in different formats, and how this use develops over time</i></p> <p><i>Lansbury joint PL - Degree-Apprenticeships: Embedding learning in the practice-tutor, apprentice, employer tripartite</i></p> <p><i>Dawes joint PL - An investigation into the way Jupyter Notebooks enhance learning and teaching on TM351</i></p>	Apr-21	Sep-22
40	16	Jan-20	20E-ALCTAH-CC-01	Alexis Lansbury, Chris Thomson and Andy Hollyhead	<a href="#">Degree-Apprenticeships: Embedding learning in the practice-tutor, apprentice, employer tripartite</a>	Employability	Apprenticeships; practice-tutors; quality assurance and enhancement; evaluation		C&C		<p><i>Lansbury joint PL - An investigation into how STEM students use learning resources in different formats, and how this use develops over time</i></p> <p><i>Lansbury joint PL - Accessibility of Jupyter Notebooks on M269</i></p> <p><i>Thomson joint PL - An investigation into the way Jupyter Notebooks enhance learning and teaching on TM351</i></p> <p><i>Thomson - Workday day-time tutorials for apprentices – what is the best practice in Computing?</i></p>	May-20	May-22
41	16	Jan-20	20F-HL-EI-01	Helen Lockett	<a href="#">An investigation into the breadth of learning outcomes and skills developed in OpenSTEM Labs experiments</a>	Technologies for STEM learning	Remote laboratories, online laboratories, OpenSTEM Labs, learning outcomes, practical work		E&I	James Smith and Kevin Gowans (STEM Deanery)	<i>Joint PL - Investigating students perception of some of the key learning activities in T272</i>	Jun-20	Sep-22
42	17	Jul-20	20K-AL-SPS-01	Annika Lohstroh	<a href="#">Investigating the impact of ethnicity on student experience in stage 1 and 2 Physical Sciences (PS)-oriented modules</a>	Equality, diversity and inclusion - APP	Ethnicity, Physical Sciences, Student Experience, Retention, Student Success	SM123, S217	SPS	Laura Alexander (SPS)		Nov-20	Apr-22

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43	13	Jul-18	18K-JLKRDB-LHCS-01	Jane Loughlin, Katja Rietdorf and Diane Butler	<a href="#">Early Start S294: evaluation</a>	Supporting students	Bridging interventions, module start, retention, forum support, tutorials	S294, SDK100, S112, SK299	LHCS		<p><i>Butler joint PL - Investigating factors which affect active student participation during tutorials in online rooms</i></p> <p><i>Butler joint PL - Monitoring student behaviour on a level 1 Science module using a multidisciplinary team approach</i></p> <p><i>Loughlin joint PL - Improving success and satisfaction of credit transfer students entering L3 modules in Science</i></p> <p><i>Loughlin joint PL - Understanding how our assessment contributes to retention and awarding gaps for black students on LHCS modules</i></p> <p><i>Rietdorf and Loughlin - Assessing the impact of skills development through formative assessment on student retention and success in S294</i></p>	Nov-18	Aug-22
44	18	Jan-21	21D-JLDBEC-LHCS-01	Jane Loughlin, Duncan Banks and Eleanor Crabb	<a href="#">Understanding how our assessment contributes to retention and awarding gaps for black students on LHCS modules</a>	Equality, diversity and inclusion - APP	Awarding gap, retention gap, assessment strategy, assessment design	S111, S112	LHCS	Sarah Daniell, Lorraine Waters, Karen New and Nicola McIntyre (LHCS)	<p><i>Loughlin joint PL - Early Start S294: evaluation</i></p> <p><i>Crabb and Loughlin - Improving success and satisfaction of credit transfer students entering L3 modules in Science</i></p> <p><i>Rietdorf and Loughlin - Assessing the impact of skills development through formative assessment on student retention and success in S294</i></p> <p><i>Loughlin joint PL - Understanding awarding gaps for disabled and black LHCS students at Level 1</i></p> <p><i>Crabb joint PL - Online remote experiments in chemistry- analysis of delivery, assessment, tracking and student perception</i></p> <p><i>Crabb joint PL - Improving success and satisfaction of credit transfer students entering L3 modules in Science</i></p> <p><i>Crabb joint PL - Online Summer Schools</i></p> <p><i>Crabb joint PL - Developing responsive approaches to enhance personalized learning in selected LHCS modules</i></p>	Apr-21	Dec-22
45	17	Jul-20	20K-NLMS-EI-01	Nicole Lotz and Muriel Sippel	<a href="#">Understanding the mental health attainment gap in Design modules</a>	Equality, diversity and inclusion - APP	Mental Health, Design, E&I, Study Experience	U101, T217, T317	E&I	Lisa Bowers (E&I)	<p><i>Lotz - Are we making progress? Progression through learners' interaction in OpenStudio across a qualification</i></p> <p><i>Lotz - Developing a sense of community through cross-level engagement between staff and students in creative industries subjects</i></p>	Nov-20	Dec-21
46	17	Jul-20	20K-LMJB-LHCSEES-01	Louise MacBrayne and Jennie Bellamy	<a href="#">Black student experience and outcomes on S112: improving a level 1 STEM module</a>	Equality, diversity and inclusion - APP	Attainment gap, BAME, BME, exam, online tuition	S112	LHCS & EEES	Elaine McPherson (EEES)		Nov-20	Jun-22
47	14	Jan-19	19D-CM-SPS-01	Calum McCormick	<a href="#">Implementing quantum mechanics visualisation tools in a distance learning context</a>	Technologies for STEM learning	QuVis, Quantum mechanics visualisation	SM358	SPS	Silvia Bergamini (SPS) and Jimena Gorfinkiel (SPS)		Apr-19	Feb-22
48	16	Jan-20	20F-EM-EEES-01	Elaine McPherson	<a href="#">Investigating the motivations of female students choosing an open versus named qualification</a>	Equality, diversity and inclusion	Gender, qualification, women, STEM, motivation, aspiration, engineering	Y033	EEES	Anne-Marie Gallen (E&I) Anactoria Clarke (WELS) and Mary Keys (E&I)	<p><i>Joint PL - Proactive support for students to make the transition from print material to online study</i></p> <p><i>Joint PL - Engaging students as experts in the trial and evaluation of Disability Language Guidance</i></p> <p><i>McPherson joint PL - Accessibility and inclusion in tuition (AccIT)</i></p>	Jun-20	Jun-22



eSTeEM Projects List - in progress

49	18	Jan-21	21D-CMIL-LHCS-01	Carol Midgley and Jane Loughlin	<a href="#">Understanding awarding gaps for disabled and black LHCS students at Level 1</a>	Equality, diversity and inclusion - APP	Awarding gap, retention gap	SDK100, S111, S112	LHCS	Claire Rostron, Louise MacBrayne, Fiona Moorman and Vikki Haley-Mirnar (LHCS)	<p><i>Midgley joint PL - SDK100 – what aspects of this online only module are the students engaging with?</i></p> <p><i>Loughlin joint PL - Early Start S294: evaluation</i></p> <p><i>Loughlin joint PL - Improving success and satisfaction of credit transfer students entering L3 modules in Science</i></p> <p><i>Loughlin joint PL - Assessing the impact of skills development through formative assessment on student retention and success in S294</i></p> <p><i>Loughlin joint PL - Understanding how our assessment contributes to retention and awarding gaps for black students on LHCS modules</i></p>	Apr-21	Jul-22
50	15	Jul-19	20D-AMHJ-EI-01	Alice Moncaster and Hedieh Jazaeri	<a href="#">Improving and evaluating inclusivity in group project work for distance-learning engineering students</a>	Equality, diversity and inclusion	Inclusivity, group work, project-based learning, engineering education	T176, T276, T229	E&I	Fiona Gleed and Silvia Varagnolo (E&I)		Nov-21	Mar-23
51	14	Jan-19	19E-FMKN-LHCS-02	Fiona Moorman and Karen New	<a href="#">STEM ISSS - where are we now? Evaluating awareness, usage and effectiveness of individual student support sessions</a>	Supporting students	Individual student support session, effective, supportive		LHCS	Deborah Peat (AS), Roberta Nathan (AS), Catherine Coldbeck (AS) and Maria Kantirou (CIO Portfolio)	<p><i>Online journal clubs in distance higher education: an opportunity to develop skills and community?</i></p> <p><i>New - Use of augmented reality in a second level human biology module: benefits and challenges</i></p> <p><i>Summer Series of Journal Clubs: an opportunity to develop employability skills and a sense of community amongst students in secure environments</i></p>	May-19	Mar-22
52	17	Jul-21	21A-CMRS-EI-01	Carol Morris and Rachel Slater	<a href="#">Understanding factors influencing BAME students' achievements within Engineering and Innovation</a>	Equality, diversity and inclusion - APP	BAME, attainment, intersectionality, recruitment, engagement	T192, U101, U116	E&I	Esther Sample (E&I)	<p><i>Morris joint PL - Engineering qualifications at the OU – what motivates women to study?</i></p> <p><i>Morris joint PI - Engineering residential school or home experiments? A comparison from the perspective of both the student and the tutor</i></p> <p><i>Slater joint PL - Accessibility and inclusion in tuition (AccIT)</i></p>	Oct-21	Dec-22
53	18	Jan-21	21F-KNFM-LHCS-01	Karen New and Fiona Moorman	<a href="#">An evaluation of use and impact of zero grades in assessment: are we being consistent, fair, and transparent?</a>	Equality, diversity and inclusion - APP	Zero grade, academic conduct, L marker, outcomes, consistency	SDK100, S111, S112, SDK228, S294	LHCS	Ellen Heeley and Dan Johnson (LHCS)	<p><i>Online journal clubs in distance higher education: an opportunity to develop skills and community?</i></p> <p><i>Summer Series of Journal Clubs: an opportunity to develop employability skills and a sense of community amongst students in secure environments</i></p> <p><i>STEM ISSS - where are we now? Evaluating awareness, usage and effectiveness of individual student support sessions</i></p> <p><i>New - Use of augmented reality in a second level human biology module: benefits and challenges</i></p>	Jun-21	Dec-22
54	17	Jul-20	20K-KNEC-LHCS-01	Kate Nixon and Eleanor Crabb	<a href="#">Online Summer Schools</a>	Online/onscreen STEM practice	On-line experiments, research skills, develop a community, summer engagement		LHCS	Rob Janes, Daniel Johnson and Mike Batham (LHCS)	<p><i>Crabb joint PL - Developing responsive approaches to enhance personalized learning in selected LHCS modules</i></p> <p><i>Crabb - Online remote experiments in chemistry- analysis of delivery, assessment, tracking and student perception</i></p> <p><i>Crabb - Improving success and satisfaction of credit transfer students entering L3 modules in Science</i></p> <p><i>Understanding how our assessment contributes to retention and awarding gaps for black students on LHCS modules</i></p>	Nov-20	Mar-22

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55	15	Jul-19	19J-TO-STEMD-01	Tom Olney	<a href="#">Measuring the Impact of Learning Design and Course Creation (LDCC) Workshops</a>	Academic professional development	Learning Design, Course Creation, Professional Development, Impact, Belarus, China, International Engagement, Pedagogy Research.		STEM Deanery	Duncan Banks (LHCS), Bart Rienties (IET) and Daphne Chang (E&I) (Mark Edean was part of team but retired in Oct 2020)	Joint PL - Piloting OU Analyse and the Student Probabilities Model on 12 STEM Modules  Evaluating the Impact of Implementing Learning Design Approaches in STEM over 4 Years	Oct-19	Mar-22
56	18	Jan-21	21D-TO-STEMD-02	Tom Olney	<a href="#">Evaluating the Impact of Implementing Learning Design Approaches in STEM over 4 Years</a>	Learning design	Learning design, OULDI, quality, process, governance		STEM Deanery	Carlton Wood, Anne Higson and Alison Edwards (STEM Deanery)	Joint PL - Piloting OU Analyse and the Student Probabilities Model on 12 STEM Modules  Measuring the Impact of Learning Design and Course Creation (LDCC) Workshops	Apr-21	Feb-22
57	17	Jul-20	20K-SP-MS-01	Sue Pawley	<a href="#">Exploring the extent of maths anxiety within the STEM Faculty at The Open University</a>	Equality, diversity and inclusion - APP	Maths Anxiety, Mental Health, Supporting Students, Maths teaching	MU123, MST124, T192, TM111, U101, U116, S111, SDK100	M&S	Sally Organ (E&I) and John Morgan (AL)	Joint PL - Supporting MST224 students with bridging material during their transition from level one mathematics	Nov-20	Dec-22
58	19	Jul-21	21J-SPCB-MS-01	Sue Pawley and Cath Brown	<a href="#">Creating a community of support through social activities</a>	Supporting students	Student support; Student community; Retention; Resilience	MST124	M&S		Pawley joint PL - Supporting MST224 students with bridging material during their transition from level one mathematics  Pawley - Exploring the extent of maths anxiety within the STEM Faculty at The Open University  Brown joint PL -	Oct-21	Sep-23
59	17	Jul-20	20K-APDTC-MS-01	Andrew Potter, Delyth Tomos and Chris Hughes	<a href="#">Welsh-medium tuition in Level 1 Mathematics</a>	Supporting students	Wales, Welsh-medium tuition, apprehension in learning mathematics, student experience, minority languages	MU123	M&S	Chris Hughes (M&S), Ann Williams (AL) and Ceinwen Gwilym (WELS)	Potter joint PL - Developing students and tutors perceptions of good mathematical communication on level one service mathematics module MU123: an investigation  Potter joint PL - Associate Lecturer Reflections on Student Perceptions of Usefulness of Level 1 Service Mathematics  Potter joint PL - Blended tutorials in Mathematics: simultaneous F2F and online learning events  Hughes - Hughes - Evaluating the accessibility of an alternative format of module materials in Maths & Stats  Hughes joint PL - Usage of Early Alerts Indicators on two level 1 modules  Hughes joint PL - Supporting MST224 students with bridging material during their transition from level one mathematics  Hughes joint PL - Sonification partial pilot on M140  Hughes joint PL - Sonification of depictions of numerical data	Nov-20	Dec-22
60	16	Jan-20	20F-SP-EI-01	Sotiria Psoma	<a href="#">Comparative study of distance teaching of Electronics using simulation software versus OpenEngineering Laboratory</a>	Technologies for STEM learning	Distance teaching practical laboratory, real-time remote-control electronic laboratory, simulation in education, distance teaching undergraduate student, learning tools in electronic engineering education	T212, T312	E&I			Jun-20	Mar-22
61	14	Jan-19	19C-CRMBAMG-EILIV-01	Clare Reger, Mark Bowden and Anne Marie Gallen	<a href="#">Factors influencing female participation in Physical Science Postgraduate Research Programmes</a>	Equality, diversity and inclusion	Female postgraduates; fusion; nuclear; under-representation; postdoctoral; progression; recruitment; physical science; physics; engineering		E&I and Uni of Liverpool		Reger and Gallen - Evaluating the level 1 engineering tutors resource  Gallen joint PL - Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders (part II: the student perspective)  Gallen joint PL - Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders	May-19	Dec-21

eSTeEM Projects List - in progress

62	18	Jan-21	211-KRIL-LHCS-01	Katja Rietdorf and Jane Loughlin	<a href="#">Assessing the impact of skills development through formative assessment on student retention and success in S294</a>	Equality, diversity and inclusion - APP	Formative assessment, student retention, student success, student performance, student feedback, student engagement	S294	LHCS	Lorraine Waters and Angelika Fischenich (LHCS)	<p><i>Joint PIs - Early Start S294: evaluation</i></p> <p><i>Loughlin joint PL - Improving success and satisfaction of credit transfer students entering L3 modules in Science</i></p> <p><i>Loughlin joint PL - Understanding awarding gaps for disabled and black LHCS students at Level 1</i></p> <p><i>Loughlin joint PL - Understanding how our assessment contributes to retention and awarding gaps for black students on LHCS modules</i></p>	Sep-21	May-22
63	11	Jul-17	17K-LR-EI-02	Linda Robson	<a href="#">Assessment banking – useful break or deferred withdrawal? An investigation of the outcomes and experience for students who have assessment banked</a>	Supporting students	Assessment banking, TMA, retention	U101	E&I	Laura Stafford (AS)	<p><i>A quantitative and qualitative investigation into communications sent to students for selected level 1 MST and science modules</i></p>	Nov-17	Jul-23
64	14	Jan-19	19G-JRCH-EEES-01	Julie Robson and Chris Hutton	<a href="#">Online peer mentoring at scale: Benefits and impacts from a student buddy perspective</a>	Supporting students	Peer mentoring, sustainability, employability skills, student buddies	S112, S(XF)206, S209, S390	EEES		<p><i>Hutton joint PL - Student development and perceptions of employability skills in stage 1 science</i></p> <p><i>Hutton joint PL - Evaluation and improvement of print packs use for Environmental Science students</i></p> <p><i>Robson joint PL - Impact of introducing new practical and dataset project options to the science undergraduate capstone project module (S390)</i></p>	Jul-19	Jul-22
65	14	Jan-19	19E-ER-EEES-03	Emma Rothero	<a href="#">Floodplain Meadows Partnership Ambassadors</a>	STEM engagement	Floodplain meadows, ambassadors		EEES	David Gowing	<p><i>Flight of the Fritillary</i></p> <p><i>Flight of the Fritillary phase 2</i></p>	May-19	Dec-21
66	10	Dec-16	17I-HRTO-MS-01	Hayley Ryder and TC O'Neil	<a href="#">Use of OULive recordings of 'live mathematics' and discussion forums on a level 3 Pure mathematics module in order to enable students to move to a growth mindset in maths and to add a social dimension to learning mathematics.</a>	Supporting students	Growth mindset, maths resilience, drop-out, retention, OU Live, forums, level 3		M&S		<p><i>Ryder - Use of STACK to generate formative assessment for level 3 Pure mathematics</i></p> <p><i>Does the provision of an 'own working space' for tutors enhance the learning experience for students</i></p> <p><i>Evaluating the increase in student wellbeing brought about by informal online sessions and computer generated worked examples on a level 3 pure maths module.</i></p>	Oct-17	Apr-22
67	11	Jul-17	17K-HRTO-MS-02	Hayley Ryder and TC O'Neil	<a href="#">Does the provision of an 'own working space' for tutors enhance the learning experience for students</a>	Technologies for STEM learning	Online tuition, Adobe Connect, tutor room approach, individual rooms, shared rooms	M303	M&S		<p><i>Use of OULive recordings of 'live mathematics' and discussion forums on a level 3 Pure mathematics module in order to enable students to move to a growth mindset in maths and to add a social dimension to learning mathematics</i></p> <p><i>Evaluating the increase in student wellbeing brought about by informal online sessions and computer generated worked examples on a level 3 pure maths module</i></p> <p><i>Ryder - Use of STACK to generate formative assessment for level 3 Pure mathematics</i></p> <p><i>Evaluating the increase in student wellbeing brought about by informal online sessions and computer generated worked examples on a level 3 pure maths module</i></p>	Jan-18	Apr-22

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68	17	Jul-20	20K-HRTO-MS-03	Hayley Ryder and TC O'Neil	<a href="#">Evaluating the increase in student wellbeing brought about by informal online sessions and computer generated worked examples on a level 3 pure maths module</a>	Equality, diversity and inclusion - APP	Wellbeing, mathematical anxiety, cognitive load theory, resilience, worked example effect	M303	M&S		<p><i>Use of OULive recordings of 'live mathematics' and discussion forums on a level 3 Pure mathematics module in order to enable students to move to a growth mindset in maths and to add a social dimension to learning mathematics</i></p> <p><i>Does the provision of an 'own working space' for tutors enhance the learning experience for students</i></p> <p><i>Ryder - Use of STACK to generate formative assessment for level 3 Pure mathematics</i></p>	Nov-20	Oct-22
69	15	Jul-19	20A-RSACEM-EIASEEES-01	Rachel Slater, Anne Campbell and Elaine McPherson	<a href="#">Accessibility and inclusion in tuition (AccIT)</a>	Equality, diversity and inclusion	Accessibility, inclusion, students with disabilities, tutors, distance learning, face-to-face tuition, online tuition		E&I, AS and EEES	Vic Pearson (SPS), Kate Lister (RES), Christine Pearson (E&I), Jo Buxton (WELS), Zoe Clayton (PVC Students) and Carol Howells (FBL)	<p><i>Slater joint PL - Understanding factors influencing BAME students' achievements within Engineering and Innovation</i></p> <p><i>Campbell joint PL -</i></p> <p><i>McPherson joint PL - Proactive support for students to make the transition from print material to online study</i></p> <p><i>McPherson joint PL - Engaging students as experts in the trial and evaluation of Disability Language Guidance</i></p> <p><i>McPherson - Investigating the motivations of female students choosing an open versus named qualification</i></p>	Jan-20	Mar-22
70	16	Jan-20	20D-CTMC-CC-01	Chris Thomson and Marina Carter	<a href="#">Workday day-time tutorials for apprentices – what is the best practice in Computing?</a>	Supporting students	Apprenticeships, tutorials, workday daytime study, weekday tutorials	TMXY130, MXY250, TTXY284	C&C	Emily Wood (AS), Alison Leese (BDU) and Dave McIntyre (AL)	<p><i>Thomson joint PL - An investigation into the way Jupyter Notebooks enhance learning and teaching on TM351</i></p> <p><i>Thomson joint PL - Quality Assurance and Enhancement in Degree Apprenticeships: Developing New Approaches</i></p> <p><i>Carter joint PL - Using Bitesize Videos to Enhance Students' Experiences in a Level 2 Programming Module</i></p>	Apr-20	Feb-22
71	13	Jul-18	18K-CWLC-EEESLHCS-01	Carlton Wood and Lynda Cook	<a href="#">Supporting students in online tuition from Access through the student journey</a>	Online/onscreen STEM practice	Tuition, synchronous, online, student behaviour, learning experience, tutor-student relationship	Y033, SDK100, U116, S111, S112	EEES & LHCS	Anactoria Clarke (WELS)		Nov-18	Mar-22
72	3 AL	Mar-21	21J-AZ-EI-01	Ann Zata	<a href="#">Understanding the challenges faced by BAME students studying T219 Environmental Management 1, to better support and enhance their learning</a>	Equality, diversity and inclusion - APP	BAME, diverse cultural experiences, participation, tutor interactions, academic performance	T219	E&I	Daphne Chang and Kevin Collins (E&I)		Oct-21	Oct-22

eSTeEM Projects List - completed

No.	Project call	Call date	Ref	Project Leader(s)	Project Title	Theme(s)	Keywords	Module(s) involved	School(s)/Unit(s)	Other staff involved	Other eSTeEM projects as PL	Start date	Status	Final report submitted	Key findings/impact
1	13	Jul-18	18K-FACH-EEES-01	Fiona Aiken and Chris Hutton	<a href="#">Student development and perceptions of employability skills in stage 1 science</a>	Employability	Employability, personal development planning (PDP), radar chart, radar diagram, science, skills development	S112	EEES	Isabella Henman, Jane Kendall-Nicholas and Niusa Marigheto (ALS)	<i>Evaluation and improvement of print packs use for Environmental Science students</i>  <i>Aiken joint PL - Typical Support Seeking Behaviour of STEM Students, their Outcomes and Successes</i>  <i>Hutton joint PL - Online peer mentoring at scale: Benefits and impacts from a student buddy perspective</i>	Nov-18	Project completed	Nov-20	Our project has highlighted that students who have studied S112 show some evidence of developing employability skills, however certain LOs (business and customer awareness) and the use of radar diagrams as compulsory to record skills development are not popular. Students also find it difficult to engage with PDP at the start of the module where they lack a benchmark to assess their skills against.  We met with the Module Team in October 2020 to share our findings, and a constructive discussion ensued. The MT were unsure about making radar diagrams optional, but were keen to: 1. Help students establish a realistic benchmark as possible at module start (e.g. promotion of the Are You Ready For S112? quiz). 2. Provide tutor guidance, including materials to promote self-assessment in the introductory tutorial session. 3. Increase tutors' awareness of students' confidence levels in existing skills at module start, and provide guidance to tutors in helping students see the value of PDP / to facilitate authentic engagement.  Our own awareness of PDP design for future modules will probably avoid radar diagrams, or make them available as an optional tool. The S112 MT are considering numerous small changes in PDP on S112 in order to improve student engagement with this. This should enhance students' PDP on the module in future presentations. Furthermore, it is better for PDP to be introduced to students using a consistent method for recording them throughout a qualification e.g through use of the FutureYou tool.
2	1	Feb-11	11D-TASD-EEES-01	Tom Argles & Sarah Davies	<a href="#">Geospatial technologies in distance learning and teaching in Science</a>	Technologies for STEM learning	Geospatial, geology, spatial thinking skills, spatial literacy, threshold concepts, geolocated data, GIS software	S276, S209, S288	EEES		<i>Argles - Evaluation of The OpenScience Lab's 3D Virtual Skiddaw application</i>  <i>Davies joint PL - Geospatial technologies in distance learning and teaching In Science</i>  <i>Davies joint PL - Hybrid/Digital Networked Learning scruffy mongrel or sleek new breed? Practices and implications of blending physical and digital resources for learning in HE</i>  <i>Davies joint PL - Disseminating inclusive field teaching - sharing resources and practices across disciplines and institutions</i>  <i>Davies - Place-making and student identity in fieldwork learning</i>  <i>Davies - Embedding research into teaching: practices, motivations and impacts</i>  <i>Davies - Investigating Barriers and Inclusive Messaging around Fieldwork Learning in the Earth, Environmental and Ecological Sciences</i>	Apr-11	Project completed	Nov-14	Development of a Geology Photo Blog tool based around a Google Maps interface, to enable OU geology students and tutors to share pictures related to their studies and encourage discussion. Tool embedded in S209 Earth science
3	11	Jul-17	17K-LAAL-SPS-01	Laura Alexander and Alexis Lansbury	<a href="#">An investigation into how STEM students use learning resources in different formats, and how this use develops over time</a>	Online/onscreen STEM practice	Digital content, books, learning resources, virtual learning, distance learning	S217, MST224, M250	SPS	Sharon Dawes	<i>Alexander joint PL - SISE only tutor groups and the effect on SISE students and their tutors</i>  <i>Lansbury joint PL - Degree-Apprenticeships: Embedding learning in the practice-tutor, apprentice, employer tripartite</i>  <i>Lansbury joint PL - Accessibility of Jupiter Notebooks on M269</i>	Nov-17	Project completed	Feb-21	In summary, in the STEM faculty, module teams should be aware that students prefer a combination of books and digital resources to entirely digital resources, and this is not age related. Students would like more non-textual (audio-visual) digital resources, and more online quizzes. Qualification leads and module teams should be aware that students meeting an entirely digital module for the first time are likely to have problems adapting their study methods, particularly if this happens after stage-1. In addition, the impact on students from poorer backgrounds of entirely digital modules should be considered, since entirely digital modules seem to require at least two different digital devices for effective study, as well as a good broadband connection and access to a printer.
4	15	Jul-19	19I-LALVN-SPSLHCSEES-01	Laura Alexander, Linda Thomson and Vic Nicholas	<a href="#">SISE only tutor groups and the effect on SISE students and their tutors</a>	Equality, diversity and inclusion	Students in secure environments, SISE, Tutor Allocation, S111, Supporting students, SISE only tutor groups	S111	SPS, LHCS, EEES	Melanie McCabe, Tom Wilks, Lance Dalton, Siobhan McGuigan, Trevor Scott, Jane Kendall-Nicholas (ALS)	<i>Alexander joint PL - An investigation into how STEM students use learning resources in different formats, and how this use develops over time</i>  <i>Thomson joint PL - The impact of live streaming module-wide events in student engagement and motivation</i>  <i>Thomson Joint PL - Online tutorial design: can we do better?</i>  <i>Nicholas - Gathering student perception about online/distance practical science at level 1</i>  <i>Nicholas - Gathering student perception about online/distance practical science at level 2</i>	Oct-19	Project completed	Oct-20	The single thing that the OU could do to improve the SISE experience is to fix and enforce a Final Enrolment Date for SISE students. This would:- • Increase the likelihood that SISE students receive their module materials in good time • allow sensible geographic allocation of SISE students to tutors, making some face to face tuition possible • ensure that in each prison Education Officers only have to deal with one tutor per module, allowing tutors to build up relationships with the EOs and improving communication For high population modules with more than say 10 SISE students, SISE only tutorgroups offer significant advantages as there is a considerable overhead for tutors in navigating module materials, SISE procedures etc. It would also allow the SISE only tutors to work more closely with the relevant module team to improve the resources available over time.
5	1	Feb-11	11D-LB-CC-01	Leonor Barroca	<a href="#">Understanding different perspectives of postgraduate education in the international arena</a>	International curriculum delivery	Postgraduate, international, ICT, computing, Brazil, Portugal, professional development		C&C			Apr-11	Project completed	Jun-12	Ongoing strategic collaboration with Brazilian institutions leading to further publications and study visits
6	14	Jan-19	19F-LBMW-CC-01	Leonor Barroca and Matt Walkley	<a href="#">Understanding the profile of apprentices</a>	Equality, diversity and inclusion	Student profile, apprentices, diversity		C&C		<i>Barroca - Understanding different perspectives of postgraduate education in the international arena</i>	Jul-19	Project completed	Due Feb-22	
7	11	Jul-17	17J-EI-SB-01	Simon Bell	<a href="#">Wisdom from Groups</a>	Supporting students	Group work, graphic, novel, animation, retention, student engagement	T219, T319	E&I	Kevin Collins (E&I) Charles Cutting		Oct-17	Project completed	Mar-19	At the time of writing (March 2019) it is too early to identify any significant findings or measures or impact. The site is just launched, and students are only beginning to engage with it. The comic site has been advertised in online/ live module-wide tutorials for both T219 and T319 cohorts. These broadcasts remain available as podcasts to students on either module.  This project was all about reaching out to students via the means of a story about collaborating in online groups presented in a graphic novel. To achieve maximum outreach the project achieved co-funding by Open Media and Informal Learning (OMIL) and is available along with a variety of supplementary materials in its final form at: <a href="https://www.open.edu/openlearn/science-maths-technology/design-innovation/when-two-worlds-collide-achieving-wisdom-online-groups">https://www.open.edu/openlearn/science-maths-technology/design-innovation/when-two-worlds-collide-achieving-wisdom-online-groups</a>

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8	7	Feb-15	15F-LB-EI-01	Lisa Bowers	<a href="#">Haptic thinking, identifying haptic tooling interventions for an online design course</a>	Technologies for STEM learning	Haptics, accessibility, online, applied design, engineering, touch, future technology, sensory centric tooling		E&I	Nick Braithwaite, Mark Endean, Ryan Hayle		Jun-15	Project completed	Jan-18	<p>Students who were invited to the project had no previous knowledge of haptics, the specific device used, nor the concept of how haptics worked in the virtual realm. Thereby students were introduced to new fields of design interaction and prototype assembly. Many of the students have since followed up their interest in haptics. One specific case of a NS participant (now a PhD student) reading haptics (Air Haptics) and was inspired by the particular process and device and stated he would like to include the shape assembly project as a literature review in the future.</p> <p>The longer term impact revealing the effect on students' retention etc... will be measured after more testing with mobile haptic devices or gesture haptics.</p> <p>The legacy this project has left with academic teaching staff has been interesting. From the three volunteer design ALs selected to work with the BETA version of the shape assembly, all of them have been inspired to read further on haptics in education. They all were interested and stated they were inspired about the OU investing in research for design TEL.</p> <p>Externally this project has led to the project lead adding to an external blog through University Hertfordshire (UJH). It has also been placed in the project leads PhD thesis, as a main trial of haptic testing. Papers have been submitted to external haptic conference.</p>
9	13	Jul-18	18K-LBRI-WELSLHCS-01	Lesley Boyd and Rob Janes	<a href="#">Using technology-enabled learning networks to drive module improvements in STEM</a>	Technologies for STEM learning	Learning networks, collaboration, action research, learning design analytics, Tricky Topics	S215	WELS & LHCS	Tom Olney (STEM Deaney), Christine Leach (AL) Carol Calvert	<p><i>Janes joint PL - Blending labcasts and remote/virtual experimentation: students' perception in practical skill development alternative</i></p> <p><i>Janes joint PL - Utilising the Teaching Tricky Topic process to Identify and Address Student Misunderstandings across Three OU Modules</i></p>	Nov-18	Project completed	Sep-21	<p>As a result, as series of 'signposting' materials were developed by a tutor for five Blocks identified by tutors and students as 'pressure points'. The signposts were promoted to students via Real Time Student Feedback (RTSF) questionnaires in the Study Planner. This communicated to students that the module team were aware of and investigating the workload issue, and provided reassurance to students who may have been falling behind. Thus targeted practical and emotional support was provided to those students requiring it.</p> <p>Signposts have been evaluated very positively by students. Tutors considered the project to be a 'welcome collaborative process' in which key improvements were made, for students, based directly on the project reflection and solutions put forward'. Project data formed a backbone of evidence for the module Mid Life Review, to chart the development road forward for the module. The project thus contributed to the development of the module as a whole. It is envisioned that the lessons and evidence from the project will be integrated into the forthcoming module re-write (beginning 2021-22).</p>
10	10	Dec-16	17E-AB-MS-01	Alison Bromley	<a href="#">Supporting the student's learning journey through the transition of mathematics and statistics from level 2 to level 3</a>	Supporting students	Bridging interventions, transition, level 2, level 3, retention, student journey	MST224	M&S	Gareth Williams, Sue Pawley, Gaynor Arrowsmith (M&S) and Alex Siddons (AS)  Rachel Hilliam joint PL until 31 July 18	Joint PL - M140 B VLE usage	May-17	Project completed	Due Feb-22	
11	15	Jul-19	19I-VB-KMI-01	Venetia Brown	<a href="#">Associate Lecturers' involvement in improved practice in a SXP288 Labcast Delivery</a>	Technologies for STEM learning	Distance learning, synchronous online learning, labcasts, tutor perceptions, sense of community	SXP288	KMI	Alan Cayless (SPS)		Oct-19	Project completed	Dec-21 - with MI for review	
12	6	Jun-14	14L-PB-SPS-01	Pam Budd/Holly Hedgeland	<a href="#">Gender Differences in completion and credit obtained in Level 2 study in Physical Sciences</a>	Equality, diversity and inclusion	Equality, gender differences, physics, level 2	S207, S217, MST121	SPS	Jimena Gorlinkiel, Sally Jordan and Victoria Pearson (SPS) Holly Hedgeland	Hedgeland - Concept inventories in physics: from development to impact	Dec-14	Project completed	Feb-18	<p>This project involved further data analysis in relation to various aspects of the assessment in S207 - both continuous assessment and various exam components. Data from other modules in related areas was also examined. Results suggested that the difference in success between the genders in S207 could be not explained by the assessment strategy or by other factors (e.g. online forum activity, gender of tutor) (Jordan et al, (2015)). Demographic information gave no obvious differences for women and men e.g. age, previous qualifications etc but for Open University student previous study is very varied and individual student information known is very limited. To determine further information in this area some students on the 2016 presentation of S217 were surveyed and a cohort of these students interviewed by phone. These telephone interviews allowed more detailed discussions of students' reasons for studying S217 as well as their preparedness for the module particularly in terms of any previous study of physics and/or mathematics. Common themes were identified and allowed recommendations for additional resources to be made to the module team.</p>
13	12	Jan-18	18F-SB-EI-01	Stephen Burnley	<a href="#">Investigating the challenges faced by postgraduate students in developing countries</a>	International curriculum delivery	Commonwealth Scholarship Commission, postgraduate, developing countries, Environmental Management MSc programme		E&I	Sinead O'Connor and Richard Campen (ALS)		Jun-18	Project completed	Due Feb-22	
14	8	Oct-15	16D-DBLCVHM-LHCS-01	Diane Butler, Lynda Cook and Vikki Haley-Mimir	<a href="#">Investigating factors which affect active student participation during tutorials in online rooms</a>	Supporting students	Online, tutorials, active student participation, student experience	S294, SK277, S295, SXHL288	LHCS	Louise MacBrayne and Catherine Halliwell (ALS)	<p><i>Cook - A quantitative and qualitative investigation into communications sent to students for selected level 1 MST and science modules</i></p> <p><i>Haley-Mimir joint PL - SDK100 - what aspects of this online only module are the students engaging with?</i></p> <p><i>Butler joint PL - Early Start S294: evaluation</i></p> <p><i>Cook and Butler - Monitoring student behaviour on a level 1 Science module using a multidisciplinary team approach</i></p>	Apr-16	Project completed	Sep-18	<p>Our detailed focus on the realities of tutorial provision in this area of our curriculum therefore suggests a modified approach to tutorial provision using a greater variety of approaches/techniques that may better serve the variety of expectations of our students. The design of future module tutorial strategies may encompass the following without the intention that all students will use all types of provision.</p> <ul style="list-style-type: none"> <li>• A greater variety of types of well signposted, small group tutorials, clearly defined in terms of expectations of active student participation, including drop in support, clinic, problem solving, skills focused sessions, assessment focused sessions.</li> <li>• Provision of large scale, high production value (potentially previously recorded) 'lectures' providing the additional 'voice' which explains key module concepts and gives the coverage many students crave.</li> <li>• Provision of genuinely large-scale synchronous events, which add value to the student experience such as live debates or lab casts.</li> <li>• Creative use of forum spaces to provide places for follow up asynchronous or synchronous discussion of online 'lectures' or other synchronous but large scale events.</li> <li>• Complete integration of the tutorial provision within the online module materials - from the module planning stage onwards.</li> <li>• Opportunities for student collaborative tasks which emphasise the importance and value of student to student interaction.</li> <li>• Opportunities for peer to peer 'tutor less' synchronous meetings.</li> </ul>

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15	8	Oct-15	16A-CC-MS-01	Carol Calvert	<a href="#">Implementation of lessons learnt from students who succeed "despite the odds"</a>	Supporting students	Retention, data		M&S	Rachel Hilliam (M&S), Linda Brown and Dave Edwards (ALS), Colin Fulford, Juliet Coleman	<i>A Flexible Start to M140</i> <i>Early start MU123</i> <i>Joint PL - Usage of Early Alerts Indicators on two level 1 modules</i> <i>Joint PL - How one module can serve multiple qualifications through tailored implementation of presentation</i> <i>Joint PL Developing student use of feedback on their marked TMAs</i>	Jan-16	Project completed	Jun-17	The findings from the project have been incorporated into an Induction Programme for a group of students on a Level 1 Mathematics entry module. This Induction Session has also been made available to all the students on the 2017 February start for entry level Mathematics & Statistics modules
16	10	Dec-16	17E-CC-MS-02	Carol Calvert	<a href="#">A Flexible Start to M140</a>	Supporting students	Bridging interventions, module start, retention, tutor support	M140, MST124, MU123, MST125, B124, DB123	M&S	Karen Vines (M&S) Gaynor Arrowsmith, Colin Fulford, Mark Hobbs, Luay Salman, Trinicia Terndrup	<i>Implementation of lessons learnt from students who succeed "despite the odds"</i> <i>Early start MU123</i> <i>Joint PL - Usage of Early Alerts Indicators on two level 1 modules</i> <i>Joint PL - How one module can serve multiple qualifications through tailored implementation of presentation</i> <i>Joint PL - Developing student use of feedback on their marked TMAs</i>	May-17	Project completed	Aug-18	<ol style="list-style-type: none"> <li>The pilot has established that a substantial number of students are keen to take part in an opportunity to start M140 on a more flexible basis prior to the October module start. Students have identified the benefits in terms of reduction in stress, better time management and a better understanding of how study at the OU is organised.</li> <li>Student responses to the questionnaire were clearly showing how much they valued the tutors and the tutorials support ..... and yet uptake of the facility offered by tutors seemed low. This may simply be that it was important for the student to KNOW the tutor was there if needed but that actually the materials were well within the understanding of the majority of the students.</li> <li>Neither students nor tutors feel that there are strong benefits for most students of having the same tutor on the early start programme as they do on the main presentation.</li> <li>Student retention has improved by 2-3 percentage points between registration and module start. Around 30-40 more students passed M140 than we would have expected compared with registration numbers in 2015 and 2016. It is anticipated that student satisfaction will also have improved but it is unlikely that will be identifiable within the annual University student satisfaction survey (SEAM).</li> <li>The cost involved was for 40 DL days and programme manager time to set up web site and Chair/ project lead to develop and administer the programme. In 181 the faculty will fund 20 DL days and the administration of the programme will be simplified to 5 days. This is off set against a potential retention in 181 of at least 30 students. Thus the programme represents a cost effective way of increasing retention.</li> <li>The explanatory factor to be added to the predictive model is not "take part" but more critically being "offered a place and not taking up the place". This is acting as a proxy for lack of engagement at an early stage with study.</li> <li>Additionally</li> <li>Following discussions with AL's, colleagues in assessment, and the Board of studies it was agreed that we would introduce an element of flexible submission and feedback for TMAs. This meant that students could be offered the opportunity to submit the final two TMAs early and hence receive limited feedback before submitting the EMA in March if they wished.</li> <li>A discussion with WELS has taken place re adapting the idea to their context.</li> <li>In the light of current talk about flexibility of starts for students the project has provided some hard evidence of demand, organisational and assessment issues associated with nonstandard starts</li> </ol>
17	13	Jul-18	18K-CCARH-MS-01	Carol Calvert, Alison Bromley and Chris Hughes	<a href="#">Usage of Early Alerts Indicators on two level 1 modules</a>	Supporting students	Bridging interventions, module start, retention, tutor support, at risk students, analytics, VLE	M140	M&S	Clare Morris (AL)	<i>Calvert - Implementation of lessons learnt from students who succeed "despite the odds"</i> <i>Calvert - A Flexible Start to M140</i> <i>Calvert joint PL - Early start MU123</i> <i>Calvert joint PL - How one module can serve multiple qualifications through tailored implementation of presentation</i> <i>Calvert joint PL - Developing student use of feedback on their marked TMAs</i> <i>Bramley joint PL - Supporting the student's learning journey through the transition of mathematics and statistics from level 2 to level 3</i> <i>Hughes joint PL - Welsh-medium tuition in Level 1 Mathematics</i> <i>Hughes - Evaluating the accessibility of an alternative format of module materials in Maths &amp; Stats</i> <i>Hughes joint PL - Supporting MST224 students with bridging material during their transition from level one mathematics</i> <i>Hughes joint PL - Sanification partial pilot on M140</i> <i>Hughes joint PL - Sanification of depictions of numerical data</i>	Nov-18	Project completed	Dec-19	<p>Associate lecturers were asked to consider contacting students on the basis of the Early Alerts Indicators and they reported students were generally very happy to be contacted. Students were also asked for their views and they had few reservations of predictions being generated and used as the basis for their tutor to contact them. The pass rates of the students in tutor groups of the ALS involved in the project showed no consistent differences to the pass rates of those not involved in the project.</p> <p>The impact of this project on student learning and on AL practice cannot be assessed within this project. This project has established a clear message for other ALS- the Early alert indicators are useful but they are a supplement not a replacement to your knowledge. With a secondary more acceptable message that students like you to proactively contact them! The work on simplification should help make the information more acceptable to tutors and the work on quantifying how much accuracy is lost by providing early predictions should help an AL decide how much reliance to place upon it. Using the interim AL report- Annex A- this message has been shared with module teams and Level 1 chairs and influenced the information in use in the October presentation.</p> <p>There is a clear message for students as well. To a new student is simply that being cautious over how much you commit to at first is good and engaging with the VLE as soon as you can is good. And for students who did that last year we have the quantified evidence that those that did so did better in terms of passing their module. To a continuing student the message is similar: engaging with the VLE as soon as you can is good and bear in mind your previous track record because it is likely to be similar unless you change something.</p> <p>In both cases we can measure VLE engagement pre-module start but actually any engagement pre-module start is likely to be positive. For Mathematics and statistics modules, where we are increasingly running early access to materials.</p>
18	16	Jan-20	20C-CCRH-MS-01	Carol Calvert and Rachel Hilliam	<a href="#">How one module can serve multiple qualifications through tailored implementation of presentation</a>	Supporting students	Key routes, conditional qualification study routes, tutor allocation by qualification, tutor group discussions	M248	M&S		<i>Calvert - Implementation of lessons learnt from students who succeed "despite the odds"</i> <i>Calvert - Early start M140</i> <i>Calvert joint PL - MU123 &amp; M140 Early start: 181</i> <i>Calvert joint PL - Usage of Early Alerts Indicators on two level 1 modules</i> <i>Calvert joint PL - Developing student use of feedback on their marked TMAs</i> <i>Hilliam - Enabling Mathematics and Statistics Associate Lecturers to achieve their potential</i> <i>Hilliam - Investigating the careers of Staff Tutors in STEM for Athena SWAN</i> <i>Hilliam - The Mathematics and Statistics Community of Learners</i>	Mar-20	Project completed	Nov-21 - with M1 for review	

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19	13	Jul-18	18F-CCLS-MS-01	Carol Calvert and Luay Saliman	<a href="#">Early start MU123</a>	Supporting students	Bridging interventions, module start, retention, tutor support, at risk students	MU123, M140	M&S		Calvert - Implementation of lessons learnt from students who succeed "despite the odds" Calvert - Early start M140 Calvert joint PL - Usage of Early Alerts Indicators on two level 1 modules Calvert joint PL - How one module can serve multiple qualifications through tailored implementation of presentation	Jul-18	Project completed	May-20	To date there is minimal detectable difference in terms of retention for those who took part in the early start programme. This is in contrast with M140 and suggests that the choice of students offered an early start opportunity is critical.
20	8	Oct-15	16E-DC-EI-01	Daphne Chang	<a href="#">Impact study of the taught MScs in Technology related subjects on students' employability</a>	Employability	Employability, postgraduate, professional development, student perception, technology	T847, T802	E&I	Jo Walshe (AL)		May-16	Project completed	Due Feb-22	
21	8	Oct-15	16A-NCEM-LHCS-01	Nick Chatterton and Elaine Moore	<a href="#">Online Chemistry Support Clinics</a>	Online/onscreen STEM practice	Bridging interventions, drop-in clinics, retention, chemistry, online, Khan Academy, screencasts, Learn Chemistry	S104, S215	LHCS	Louise Macbrayne and Catherine Halliwell (ALs)(Elaine Moore,	Moore - Students' study of online modules Chatterton joint PL - Developing responsive approaches to enhance personalized learning in S315	Jan-16	Project completed	Jan-20	The direct impact of the clinic on S215 16I presentation is difficult to assess. Each presentation has a different cohort of students, some of which may be better or less well engaged with the module materials inherently, so comparisons with previous years can be problematic. Additionally, there were several other retention measures undertaken by S215 module team during 16I, including reductions to course content and the introduction of assessment weeks. Undoubtedly both these measures would have a positive impact on retention - students would be presumably less likely to fall too far behind and thus drop-out. Bearing this in mind, we must be cautious when drawing direct conclusions on the impact of the clinics. Figure 5 shows a comparison of the student retention for the 16I presentation along with similar data for earlier S215 and S205 presentations.  Caveats aside, the 16I presentation of S215 was more successful than other presentations, and this may be in part due to the clinic although direct evidence is elusive. As mentioned earlier, we had plenty of opportunities to disseminate our approach and findings both within STEM and the university more widely. In terms of our projects' impact we could claim that there has been an increase in the number of clinic/bootcamp-type initiatives since 16I! However, we cannot claim to be the sole inspiration for this by any means as there were several other initiatives of similar type being piloted around the same time. Some bridging activities that have started since end of our pilot include:  •S315 "Getting Ready for S315" website and clinic •S294 "Early start", involving some revision type tutorials •Bridging activities in Maths and Stats for students transitioning between levels 2 and 3
22	7	Feb-15	15F-FC-CC-01	Frances Chetwynd	<a href="#">Breaking the coding barrier: transition from Level 1 to Level 2 programming</a>	Supporting students	Bridging interventions, transition, programming, level 1, level 2, retention	TU100, TM129, M250, M269, TT284	C&C	Helen Jefferts and Fiona Aiken (ALs)		Jun-15	Project completed	Jul-18	During the course of the project work the C & C School replaced the subject Stage 1 60 credit module, TU100, with two 30 credit modules, TM111 and TM112. The first of these – TM111 – uses OUBuild for programming which is a version of Scratch and very similar to Sense as used on TU100. The second of these – TM112 – uses Python a text-based programming language frequently used in education. Whilst the programming teaching on TM111 is of a similar level to TU100, and generally the students do very well on this, the programming on TM112 is of a higher level and moves the students from using visual programming to text-based programming. The first two findings of our project strongly support the decisions made by the School in replacing TU100.  The second two findings of this project contribute significant knowledge to the efficacy of running bridging courses for distance learning students. The findings demonstrate that students who are most likely to benefit from attending a bridging course will need to be contacted personally and encouraged to sign up for it and attend.  Overall, the project has demonstrated that OU cohort data, when considering multiple modules across a number of years, is extremely complex. Whilst it is relatively easy to track an individual student, following multiple cohorts of students across several possible pathways and qualifications results in a spider's web of interconnectivity. Given the current work on CSR and a new data strategy for the OU, consideration should be given to providing this type of data in a readily accessible and usable format.
23	11	Jul-17	17K-KC-MS-01	Katie Chicot	<a href="#">Using Student Analytics with tutors to increase retention</a>	Supporting students	Analytics, retention, ALs, support tool, growth mindset, mathematics resilience	MU123	M&S	Gerry Golding (M&S), Sally Crighton (M&S) and Carol Calvert (M&S)		Nov-17	Project completed	Aug-18	This project was included in a cross-Faculty evaluation of module use of analytics (Walker et al, 2018), and as such some qualitative data regarding tutors' views of our project is available. The results of these qualitative and quantitative assessments suggest that there is potential for expanding and rolling out this project across all of our level one Mathematics and Statistics modules.
24	15	Jul-19	19I-SCRMCH-LHCS-01	Simon Collinson, Rachel McMullan and Catherine Halliwell	<a href="#">Can a new OU Study App enhance the learning experience of students on S350, an online only module?</a>	Supporting students	Online, distance learning, innovations, supporting students, flexible study	S350	LHCS	Jenny Duckworth (AL)	Collinson joint PL - Online remote experiments in chemistry - analysis of delivery, assessment, tracking and student perception Halliwell joint PL - How are students using extensions and what is the impact on success? Halliwell joint PL - Can an asynchronous student conference in Open Studio develop students' critical evaluation skills?	Oct-19	Project completed	Apr-21	Our research has shown that students valued the App to enhance their studies of a level 3 science module, using the App in different ways with different intents. For many it was a simpler and quicker means to just check details on assignments or on study calendars and 'stay in touch' with the module, but at least one student used it for significantly longer and for first reading of module content. This aspect of use, particularly for disabled students should be investigated further. Students commented on the 'informality' of its use and this, along with taking part in scholarship led to positive sentiments towards the module, which could be considered as a greater sense of learner ownership (Dommett, E. 2018). This has been a positive impact on the student experience of the module. The students benefitted from taking part as their participation allowed them to reflect and comment on their own time management skills and provided evidence of this for their assignments. As educators this research has impacted on our practice in a number of ways. Firstly, the work was widely disseminated at a number of workshops and presentations at the OU and at external conferences and met with positive feedback. Secondly, the project enabled the two ALs involved to actively engage with the development of new teaching practises at the OU and analyse the associated student behaviour. Thirdly, the project has highlighted unexpected student behaviours that the module team are keen to better understand and engage with. This eSTeEM project was highlighted in the S350 QMIE module review.



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25	15	Jul-19	19L-DCCGH-CC01	David Conway, Chris Gardner and Janet Hughes	<a href="#">Are virtual insight visits an effective way of engaging learners and supporting student retention in distance learning environments?</a>	Supporting students	Widening participation, employability, student support, student satisfaction, virtual field trips, virtual visits, student programme retention	T122, TM111, TM112, TM129, TMY130, TMY125, TX122	Academic Services and C&C		<i>Gardner - Analytics for tracking student engagement</i>  <i>Gardner - Early Start for TM470 project students</i>  <i>Hughes joint PL - Investigating the perceived benefits to computing students of remote pair programming</i>	Dec-19	May-20	Nov-21 with - MI for review	
26	13	Jul-18	18K-LCDB-LHCS01	Lynda Cook and Diane Butler	<a href="#">Monitoring student behaviour on a level 1 Science module using a multidisciplinary team approach</a>	Supporting students	Retention, progression, Level 1, SST, MILLS interventions, student behaviour,	S112, S104	LHCS	Dan Berwick (LHCS) Marcus Badger (LHCS) Anthony Short (SRSC, Manchester) David Appleton (SRSC, Manchester) Oliver Burney	<i>Joint PLs - Investigating factors which affect active student participation during tutorials in online rooms</i>  <i>Butler joint PL - Early Start S294: evaluation</i>  <i>Cook joint PL - Assessing and supporting student experience of synchronous online tuition</i>  <i>Cook joint PL - A quantitative and qualitative investigation into communications sent to students for selected level 1 MST and science modules</i>	Nov-18	Project completed	Due Mar-22	
27	9	May-16	16I-SC-MS-01	Sally Crighton	<a href="#">Leading the way as a hydro nation in Scotland – supporting student transitions within a strategic partnership between Glasgow Clyde College, The Open University in Scotland and Heriot-Watt University</a>	Supporting students	Student transition, student motivation, employer engagement, strategic partnership	MU123, MST124, MST24	M&S	Felicity Bryers, Laura Howe and Andrew Potter (ALs)	<i>Using peer observation within a Mathematics and Statistics community of practice in Scotland</i>  <i>Joint PL - Developing students and tutors perceptions of good mathematical communication on level one service mathematics module MU123: an investigation</i>	Oct-16	Project completed	Oct-19	Our thoughts on setting up the strategic partnership and subsequent exploration into the experience of the first cohort of students was shared within the HE community in Scotland (Crighton & Berndt, 2017a) and the STEM community (Crighton & Berndt, 2017b).
28	10	Dec-16	17E-SC-MS-02	Sally Crighton	<a href="#">Using peer observation within a Mathematics and Statistics community of practice in Scotland</a>	Academic professional development	Peer observation, community of practice, growth mindset, Associate Lecturers, ALs, feedback, peer support, AL practice, reflective practice		M&S	Andrew Potter (AL)	<i>Leading the way as a hydro nation in Scotland – supporting student transitions within a strategic partnership between Glasgow Clyde College, The Open University in Scotland and Heriot-Watt University</i>  <i>Joint PL - Developing students and tutors perceptions of good mathematical communication on level one service mathematics module MU123: an investigation</i>	May-17	Project completed	Sep-19	In conclusion, we can strongly recommend our approach for the first round of observations, noting the importance of our three-step process, and its value in terms of impact on teaching practice. Feedback from ALs at a recent professional development event indicated no immediate appetite for another round of observations, however ideas from both rounds continue to provide food for thought and benefit to AL practice. We conclude, therefore, that the paired-peer observation scheme has worked extremely well as part of on-going professional development initiatives within the community. All participants noted that as a result of this intervention they planned to take actions to develop their practice in various ways. The impact on students is beyond the scope of this project, but forms part of on-going professional development work in the community. Our thoughts on peer observation was shared with colleagues in the wider higher education community through presentation papers delivered by both authors (Crighton & Potter, 2018a) and by the first named author (Crighton & Potter, 2018b).
29	14	Jan-19	19D-SCAPGG-MS-01	Sally Crighton, Andrew Potter and Gery Golding	<a href="#">Developing students and tutors perceptions of good mathematical communication on level one service mathematics module MU123: an investigation</a>	Employability	Good mathematical Communication, marking grid, focus groups, service teaching	MU123	M&S		<i>Crighton - Leading the way as a hydro nation in Scotland – supporting student transitions within a strategic partnership between Glasgow Clyde College, The Open University in Scotland and Heriot-Watt University</i>  <i>Crighton - Using peer observation within a Mathematics and Statistics community of practice in Scotland</i>  <i>Potter and Golding - Associate Lecturer Reflections on Student Perceptions of Usefulness of Level 1 Service Mathematics</i>  <i>Potter joint PL - Blended tutorials in Mathematics: simultaneous F2F and online learning events</i>  <i>Potter joint PL - Welsh-medium tuition in Level 1 Mathematics</i>	Apr-19	Project completed	Due Mar-22	
30	4	Oct-12	13G-BD-LHCS-01	Basiro Davey	<a href="#">SDK125 Student Intentions and Retention Study</a>	Supporting students	Retention, progression, online tutorials, support strategies, module choices	SDK125, SDK100	LHCS	Ellie Dommett (LHCS)		Jul-13	Project completed	Jul-14	The overall intended outcomes are to inform strategies for helping student support teams guide students towards appropriate module choices and enabling the module team to 'design in' improved pedagogic approaches to teaching difficult concepts and a tuition strategy that maximises retention and progression for the students we are currently losing.  This is particularly important given that SDK125 will be replaced in 2015 by a 60-credit module (SDK100) addressing similar curriculum areas and skills development, but with greater emphasis on virtual scientific experimentation and scientific literacy.
31	15	Jul-19	19I-SDCT-CC-01	Sharon Dawes and Chris Thomson	<a href="#">An investigation into the way Jupyter Notebooks enhance learning and teaching on TM351</a>	Technologies for STEM learning	Jupyter notebook, iPython, TM351, lab book, code, pandas, python, visualisation, study resources, study location, integrating theory and practice	TM351	C&C	Ann Walshe (C&C)	<i>Dawes joint PL - Accessibility of Jupyter Notebooks on M269</i>  <i>Thomson joint PL - Quality Assurance and Enhancement in Degree Apprenticeships: Developing New Approaches</i>  <i>Thomson - Workday day-time tutorials for apprentices – what is the best practice in Computing?</i>	Oct-19	Project completed	Due Mar-22	
32	2 AL	Mar-20	20G-LD-LHCS-01	Laura Dean	<a href="#">Learning and Development Needs of Autistic Adults: Studying STEM Subjects via Distance Learning</a>	Equality, diversity and inclusion	Autism, disability, autistic, communication		LHCS, FASS and WELs			Jul-20	Project completed	Jan-22	

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33	11	Jul-17	17I-AD-CC-02	Anton Dill	<a href="#">Development and evaluation of a software tool for automated Java specification marking</a>	Technologies for STEM learning	Java, specification, marking, coding, programming language, marking tool	M250	C&C	Sue Truby (C&C), Joseph Osunde (C&C)	Java Aloud	Oct-17	Project completed	Oct-18	<p>A prototype structural specification checking tool for Java was developed and tested on M250. In addition to a BlueJ plugin tool, a version of the software was deployed on the module's VLE, where it was used extensively.</p> <ol style="list-style-type: none"> <li>The software developed offers a way for students to check their understanding of specifications, to a large extent without the need to consult their tutor. Reuse of the tool offers iterative feedback of the student's progress towards completing code according to the required specification.</li> <li>CheckM250 offers a way of quickly checking some aspects of a solution, and we hope that tutors may therefore give more attention to other aspects of code that are less easily tested automatically, for example the readability of the student's code.</li> <li>Module teams have a tool they can use to check that provided solution code meets our own question specifications.</li> <li>Tutors who used the software observed that it helped them find errors in students' work, though it may have slowed them down somewhat. Some indicated that a changed workflow might lead to shorter working times. The tool could also act as a self-assessment of marking, depending on the workflow adopted.</li> <li>We noted that structural specification checking should succeed for unit testing to take place and that it may detect errors that unit tests have not catered for.</li> </ol> <p>Although there were some concerns expressed over the use of automated marking tools, we consider the project to have provided good evidence for the advantages of automated assessment of code quality in a variety of scenarios.</p>
34	1	Feb-11	11F-CD-CC-01	Chris Dobbyn	<a href="#">Transforming retention and progression in a new Level 1 course</a>	Innovative assessment	Models of assessment, tutor guides, retention, feedback	TU100	C&C	Frances Chetwynd (C&C) and Helen Jefferts (AL)		Jun-11	Project completed	May-14	<p>A key aspect of this project was the need for rapid and frequent feedback to the rest of the Module Team, to allow for ongoing development of the assessment and feedback regime in time for the following presentation (128) and to put in place additional resources and make module modifications in the fastest timescale possible. The interviews supplied us with material for many changes to the design of 128 TMA's and Tutor Guides.</p>
35	3	Oct-11	12B-HD-CC-01	Helen Donelan	<a href="#">Enhancing professional networking and engagement using social media</a>	STEM engagement	Engagement, professional, networking, social media, LinkedIn, blogs, wikis, career progression		C&C		Changing spaces for students' online interactions	Feb-12	Project completed	Aug-14	<p>It has provided a timely investigation that is pertinent to the engagement manifesto and current discussions on digital scholarship. Results have been shared with the Communications office and working relationships established with the 'Catalyst for Public Engagement with Research' team. These working relationships are ongoing and this project continues to contribute to the development of tools for running workshops on research impact and digital engagement.</p>
36	5	Sep-13	13K-CD-CC-01	Chris Douce	<a href="#">Understanding the challenges of learning to program at level 2</a>	Technologies for STEM learning	Programming languages, coding, technologies	TU100, TM129, TT284	C&C	Dave McIntyre and Jon Williams (ALs)	<p>Understanding on-line teaching practice: the importance of the observation</p> <p>Understanding STEM tutor motivation</p>	Dec-13	Project completed	Oct-15	<p>The biggest impact of this research is to provide a group of tutors a voice. It allows different module teams to learn more about how a group of tutors work together, and how they offer students additional support by creating additional materials. It has also been instructive in terms of exposing significant differences in OU Live practice.</p> <p>In terms of impacts on programming, a significant finding that will be continued to be communicated to module teams is the importance of helping students to carry out problem solving and troubleshooting by the use of different tools. To offer help to our students, tutors have created videos. A key recommendation is that video resources are used to show students how to work with code, whilst bearing in mind the importance of addressing accompanying accessibility challenges.</p>
37	9	May-16	17A-CD-CC-02	Chris Douce	<a href="#">Understanding on-line teaching practice: the importance of the observation</a>	Online/onscreen STEM practice	Tutorials, online, face-to-face, observations, feedback, STEM teaching practice, Staff Tutors, Associate Lecturers	TT284, TU100, TM129	C&C	Sarah Chyrlwsky (AL) and Brendan Quinn (M&S)	<p>Understanding the challenges of learning to program at level 2</p> <p>Understanding STEM tutor motivation</p>	Jan-17	Project completed	Jul-18	<p>The tutor discussions that took place can be summarised by a set of keywords: purpose, importance, dimensions, acknowledgment, dialogue, frequency, practicalities, negotiation, feedback, differences, opportunities and connections. Discussions from the staff tutor focus group can be summarised as: philosophy, relationships, dialogue, guidelines, feedback, online, experience, priority and opportunities. One of the immediate outcomes of these focus groups was to uncover a set of practical and adaptable guidelines that have been used for Science tutors.</p> <p>Looking towards the future, a systematic survey of tuition practice, attitudes and experience could be established. Also, since the research has been carried out within the Faculty of STEM, it may be useful to extend this work to other faculties to uncover a more detailed and broader attitudes surrounding tutorial observations. A further action is to complete and the writing of a formal academic paper that summarises the literature review and the findings from the two focus groups.</p> <p>To conclude, there are a number of key themes that are key to successful tuition observations, and this is reflected in the results from the two groups. These themes are of course, the importance of trust between tutor and line manager, and the importance of clear communication.</p>
38	12	Jan-18	18E-CE-EI-01	Claudia Eckert	<a href="#">Research and Education in Product Development for 2040</a>	Employability	Technologies, industrial trends, curriculum planning, engineering, design		E&I			May-18	Project completed	Aug-20	<p>Over the next 20 years:</p> <ul style="list-style-type: none"> <li>The world will be changing rapidly to respond to the pressing challenges of a changing climate, a polluted planet, depleting resources, and a growing and increasingly-mobile world population.</li> <li>New technologies, such as quantum computing will emerge, while other technologies like rapid manufacturing and nanotechnologies, will be widely deployed.</li> <li>Digitalisation will permeate every aspect of our lives and the world around us.</li> <li>Data will always be captured about individual people and objects, giving rise to both ethical questions and unprecedented evidence-based engineering.</li> <li>Product development plays a vital part in creating a sustainable and prosperous future for all. Whilst at the same time, it will be profoundly affected by the wider changes in our society.</li> <li>Product designers will increasingly be empowered by advancements in simulation and AI to design the desired behaviour before defining the system structure.</li> <li>Products will involve much greater integration between mechanical parts and software as sensors become cheaper and more effective, and products are connected to user data through the internet.</li> <li>While the rate of change in technology is increasing, the need to reuse existing components and systems will also rise to conserve resources. Components and subsystems will be shared across multiple products as consumers demand integrated solutions.</li> <li>Principles of circularity will become mainstream and new materials will come to the market to replace those that become scarce.</li> <li>The ability to simulate product behaviour in multiple use contexts almost instantaneously will open up the possibility to design behaviour together or even before the structure is defined.</li> </ul> <p>Modelling and simulation will become common throughout the development process and enable companies to simulate individual-use cases and product life cycles. This will be supported through analysis of user performance data. With rising computer power, simulations will become instantaneous. This leads to a gamification of product development where designers can try out options and build up product intuition through rapid feedback. This will bring about a new logic to product development, where product behaviour can be placed at the centre of the process. Instead of a process of transforming requirements through design and evaluation to produce verified products, desired behaviour can be explored with users, and created by combining existing solutions with novel</p>
39	15	Jul-19	19I-EEAG-LDS-01	Elizabeth Ellis and Alice Gallagher	<a href="#">Learning behaviours and successful outcomes in STEM students</a>	Supporting students	Learning behaviour, student success, retention, progression, learning design		LDS	Alice Peasgood (Educational Research Consultant), Melanie McCabe (AL)		Oct-19	Project completed	Dec-20	<p>Students who demonstrate learning behaviours could be likelier to progress.</p> <p>Relationships exists between Learning Behaviours, and that certain behaviours appear to trigger each other.</p> <p>Learning Behaviours are present in the learning design of modules and could trigger specific behaviours in students.</p>

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40	1	Feb-11	11D-ME-EI-01	Mark Edean	<a href="#">Online practical work for science and engineering students</a>	Online/onscreen STEM practice	Online, practical work, computer-based experiments, virtual, science, engineering, China, international collaboration, intercultural awareness	T216	E&I	Nick Braithwaite (SPS)	<i>Longitudinal impact of visiting scholarships on the professional practice of scholars from China</i>	Apr-11	Project completed	Aug-12	The impact on thinking and practice in Shanghai has yet to be established but the reflections outlined in Appendix 2 of the final report suggest that contact with the OU has already added an extra dimension to their view of teaching. Collaboration with the OU is seen by many of the online colleges to be a mark of 'quality' and is highly sought-after. Discussions have recently been had, and support in principle obtained from the Dean of MCT, around the inclusion of engineering in developments arising from the successful Wolfson bid. This will require commitment of time and effort from a number of individuals if progress is to be made.
41	11	Jul-17	17J-EI-MEDC-01	Mark Edean and Daphne Chang	<a href="#">Longitudinal impact of visiting scholarships on the professional practice of scholars from China</a>	Academic professional development	Visiting scholars, international scholarship programme, knowledge exchange, international strategy		E&I		<i>Edean - Online practical work for science and engineering students</i>  <i>Chang - Impact study of the taught MScs in Technology related subjects on students' employability</i>	Oct-17	Project completed	Oct-20	As a result of our findings, our initially inward-looking study revealed the profound influence the OU has had on a number of distance education communities in China and has triggered several initiatives to promote new inter-community collaboration. Among these to date have been: <ul style="list-style-type: none"> <li>• An invitation from Shanghai Open University (SOU) to the OU to join the UNESCO UNITWIN distance learning network, managed by SOU.</li> <li>• A bid (unsuccessful) to the British Council's UK-China Belt and Road Initiative Countries Partnership Fund in 2018.</li> <li>• A delegation from SOU to the eSTeEM Annual Conference in 2019 with a special session organised around internationalisation of scholarship.</li> <li>• A joint colloquium with University of London Worldwide and Leicester University, both concurrent hosts with the OU of scholars from OUC in 2019, accompanied by a commitment to further collaboration in connection with visiting scholars. Sino-British Fellowship Trust were in attendance.</li> <li>• The adoption by the PVC (RES)/IET of the future management of visiting scholars from OUC in collaboration with the leads from all the OU scholarship centres.</li> <li>• A programme to invite 20 international scholars to the OU in May 2020. This call received 45 applications from all over the world. Unfortunately, this event had to be postponed due to the COVID pandemic. We aim to resume it as soon as it is feasible.</li> </ul>
42	1 AL	Feb-19	19I-SEWGM-CC-01	Shirley Evans, Winston Graham and Manish Malik	<a href="#">Strategies to support students and tutors with online collaborative projects: an action research project</a>	Supporting students	Online collaborative learning, distance learning, teaching strategies	T215	C&C			Sep-19	Project completed	Sep-20	Low-level strategies were put in place to support students to engage with the group work i.e. weekly bulletins, project group tutorials and 'progression calls' and these were well-received and could be implemented in the future (see the recommendations below).  Initial synthesis of the results indicates that lack of engagement by some students is a key issue for both students and tutors. Some tutors are expending time and energy on strategies to engage students including setting up the project groups and encouraging engagement but in many cases this may have little or no impact on those not engaging either because they do not want to and/or because they do not have sufficient time and/or because they are prevented by social anxiety for example.  On reflection the research question and aims would be better framed around strategies to support students to engage and strategies to help tutors to engage in the online group work. However a bright light has been shone on the context in which tutors are working and the types of strategy that could have impact on student engagement.  A majority of students do enjoy the group work, at least in the end, and that in terms of achievement marks and TMA responses indicate that learning is taking place. The impact on learning and teaching is not known and it is not possible to come to any conclusions about strategies to 'best support' students and tutors.
43	15	Jul-19	19J-JFW-WELSCC-01	Jo Fayram and John Woodthorpe	<a href="#">Supporting student academic skills development - an evaluation of an English for Academic Purposes pilot</a>	Supporting students	Academic skills development, English for Academic Purposes, individual support sessions, student experience, student performance, student retention, student support		WELS and C&C	Lina Adnroff (WELS), Kayleigh Robinson (SRSC) and Kester Roberts (SRSC)	<i>Woodthorpe - An investigation into the use of Artificial Neural Networks to predict student failure, and the efficacy of sustainable additional support for those students</i>  <i>Woodthorpe joint PL - How students' use of language relates to learning, retention, and performance in assessment on TU100: Implications for learning design, assessment strategy, and tuition practices in the MCT faculty</i>	Oct-19	Project completed	Dec-21 - with TC for review	
44	2	May-11	11H-PF-EI-01	Pam Furniss	<a href="#">Exploring global potential for WASH distance education materials</a>	International curriculum delivery	International development, water, sanitation, hygiene, OERS, World Vision, UNICEF,	U116	E&I		<i>OpenWASH evaluation</i>	Aug-11	Project completed	Oct-16	The OpenWASH Modules and Trainers' Handbook are now available in pdf and Word for print in English and are being translated into four Ethiopian regional languages. They are also available online as OERS. The modules will be piloted in eight Ethiopian colleges where they are being used for curriculum support for face-to-face teaching. The project was inspired initially by a combination of personal experience from making a series of videos for the undergraduate module U116 Environment: Journeys through a changing world and from participating in the HEAT (Health Education and Training) programme in Ethiopia. OpenWASH was therefore informed by and is informing OU teaching as it now brings added value to the rewrite of U116, currently in progress, and demonstrates the beneficial links between OU teaching and applied development work. As well as the tangible output of the Modules and Handbook, the project also led to successful incountry capacity building that will contribute to sustainable improvement in learning delivery. The experiences of the Ethiopian authors were assessed in a short survey. This revealed overwhelmingly positive responses and demonstrated the emergent secondary benefits that can result from a collaborative international teaching project of this type. The planned next phase is to extend the benefits of OpenWASH to a wider audience in other countries. As OERS, the OpenWASH modules can be used and adapted for WASH projects around the world, supporting the United Nations' Sustainable Development Goal to achieve safe drinking water and adequate and equitable sanitation and hygiene for all by 2030. The OpenWASH resources are available at: <a href="http://www.open.edu/openlearnworks/OpenWASH">http://www.open.edu/openlearnworks/OpenWASH</a>
45	13	Jul-18	18K-PF-EI-02	Pam Furniss	<a href="#">OpenWASH evaluation</a>	International curriculum delivery	International development, water, sanitation, hygiene, OERS, World Vision, UNICEF, WaterAid		E&I	Ellen Scott (IDO)	<i>Exploring global potential for WASH distance education materials</i>	Nov-18	Project completed	Oct-19	The interviews revealed that OpenWASH has been highly successful and had a positive impact on WASH teaching and training in Ethiopia. All current users are enthusiastic about the modules and value the added dimension and innovation that OpenWASH has provided. There is considerable scope for expanding the use of OpenWASH by wider dissemination to more colleges and to other potential users. The report concludes with a set of recommendations for possible future activities to further develop the impact of OpenWASH in Ethiopia. The recommendations are: <ol style="list-style-type: none"> <li>1. Expand use of OpenWASH to other colleges</li> <li>2. Provide more Training of Trainer events</li> <li>3. Clarify links between OpenWASH and Occupational Standards</li> <li>4. Promote use of OpenWASH in Inclusive WASH in Ethiopia</li> <li>5. Organise an OpenWASH publicity event</li> <li>6. Establish an OpenWASH user network</li> <li>7. Complete translation work.</li> </ol> The recommendations include some suggestions for possible implementation.

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46	15	Jul-19	19I-HGIW-LHCS-02	Hannah Gaudi and Janette Wallace	<a href="#">Evaluating a new STEM AL induction programme</a>	Academic professional development	Higher Education, induction, tutoring, novice ALS		LHCS		Assessing the effectiveness of the induction process for novice Associate Lecturers in the School of Life Health and Chemical Sciences in preparing them for the Associate Lecturer role  Wallace - Does attendance at unrecorded online module wide tutorials on a science module enhance student enjoyment, engagement and success? How might this impact tuition strategy for current and future LHCS modules?  Wallace joint PL - Impact of introducing new practical and dataset project options to the science undergraduate capstone project module (S390)  Gauci joint PL - Summer Series of Journal Clubs: an opportunity to develop employability skills and a sense of community amongst students in secure environments  Gauci joint PL - Impact of introducing new practical and dataset project options to the science undergraduate capstone project module (S390)	Oct-19	Project completed	Jul-21 - with TC for review	
47	7	Feb-15	15C-AMGAW-EICC-01	Anne-Marie Gallen and Ann Walshe	<a href="#">Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders</a>	Supporting students	Tuition practice, group tuition, student-centered support		E&I & C&C	Anne Campbell (AS) and Mark Jones (SPS)	Gallen joint PL - Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders (part II: the student perspective)  Gallen joint PL - Evaluating the level 1 engineering tutors resource  Gallen joint PL - Factors influencing female participation in Physical Science Postgraduate Research Programmes  Gallen joint PL - Investigating students perception of some of the key learning activities in T272  Walshe - Towards A Structured Process for Involving ALS in Module Tuition Strategy Design and Review  Walshe joint PL - Investigating the perceived benefits to computing students of remote pair programming	Mar-15	Project completed	Jul-17	Impact on student learning has been indirect through our increased understanding of the purposes of group tuition. This understanding is being applied when working with our colleagues to design module tuition strategies, write module materials and in writing online staff development materials for ALS to use. We are also able to apply our own increased understanding when developing our ALS through tutorial visits and other development events. Students everywhere have similar support needs and expectations of tuition. We can apply what we have learned from Open University tutors to a wider set of tuition models. The project is contributing to student success through increased expertise that has been passed on to our STEM ALS and other ALS in delivering group tuition through staff tutor discussions and staff development. Online staff development materials for ALS draw directly on the outputs of this project and invite a wide range of staff from all faculties to reflect and share their own thoughts on the purposes of tuition in groups - which has an effect on their practice and hence on their students. The inclusion of a discussion around the role of tuition in several level 1 modules has also raised this idea in the minds of learners. It is clear that this needs to be further developed in the future. The above benefits apply to students not directly involved in our project, indirectly through the ALS who we can develop with the expertise gained in the project. All students benefit from better informed and engaged tuition. We are gradually influencing module content and tuition strategies. We expect that others will have an interest in what makes effective and engaging tuition, and will be willing to share examples of good tuition practice, as well as reflecting on what they feel are students' perceptions of a tutorial. This, in turn, should influence how materials are developed, the design of teaching and learning materials and a desire to better understand the expectations of students.
48	11	Jul-17	17I-CG-CC-01	Christine Gardner	<a href="#">Analytics for tracking student engagement</a>	Supporting students	Analytics, informatics, OU Analyse	TM351, TM352, TM354, TM356	C&C	Allan Jones (C&C) and Helen Jeffers (AL)	Joint PL - Are virtual insight visits an effective way of engaging learners and supporting student retention in distance learning environments?  Early Start for TM470 project students	Oct-17	Project completed	Feb-21	The findings from this study suggest that there are several actions that could be taken, for example:  Give a clearer indication of time needed for the CALT activities (although obviously this will vary for each student). Add short descriptions about what kind of activity it is, for example interactive, video. Promote the activities in a new module introductory or revision video or podcast. Use the module forums to promote them Have 'talking heads' of students saying how useful they were.  Add further detail to the introduction to certain activities, for example to explain the orientation in the 'launching a wave' activity. Several of these ideas suggested via the interviews have already been implemented and others could be actioned in the future. For example, Figure 6 depicts a section of a resource that has been produced to give students an overview of the activity type and typical timings, alongside a direct link to the activity and an indication on where it fits in the student study calendar.  Also, a new revision podcast has been produced which specifically promotes the use of the CALT resource at revision time, hopefully resulting in more students revisiting the online resources. TM355 has a good retention rate, but there is always room for improvement. The research suggest that the CALT resources can be beneficial for students to use throughout their study of TM355.
49	8	Oct-15	16B-MQEMAC-MSEESWELS-01	Martina Gibbons, Elaine McPherson and Anactoria Clarke	<a href="#">Proactive support for students to make the transition from print material to online study</a>	Supporting students	Online study, print, access, transition, proactive support, ALS, retention, progression	Y033, S141, S111	M&S, EEES & LTI		Clarke joint PL - Evaluating Access for Postgraduate Study  McPherson joint PL - Engaging students as experts in the trial and evaluation of Disability Language Guidance  McPherson joint PL - Accessibility and inclusion in tuition (AccIT)  McPherson - Investigating the motivations of female students choosing an open versus named qualification	Feb-16	Project completed	Due Feb-22	
50	9	May-16	16I-VHMC-LHCS-01	Vikki Haley-Mimar and Carol Midgley	<a href="#">SDK100 - what aspects of this online only module are the students engaging with?</a>	Online/onscreen STEM practice	Engagement, interactive, video, self-assessment questions, investigative activities, skills development, student workload.	SDK100	LHCS	Graham Healing (IET)	Haley-Mimar joint PL - Investigating factors which affect active student participation during tutorials in online rooms	Oct-16	Project completed	Mar-21	The lessons learnt about student engagement with different types of interactive components will feed into upcoming Level 1 Health Sciences modules production and assessment design to optimise student workload and retention by focussing on the most useful activity types. It is difficult to significantly alter a module during presentation lifespan, but the module team has produced extra supportive video resources, including a set of 'getting started' introductory videos introducing aspects of the module and also some basic English skills and maths skills mini-tutorial videos. The maths skills videos were associated with a separate eSTeEM project assessing a series of live online maths workshops (Nicola McIntire and Linda Thompson REF) but have been retained as a permanent resource and were recently made more widely available on the S-Science Qualification website.
51	1 AL	Feb-19	19E-CHCB-LHCSOUSA-01	Catherine Halliwell and Cath Brown	<a href="#">How are students using extensions and what is the impact on success?</a>	Supporting students	Study intensity, TMA, extensions, modules, assessment, full-time study, flexible study, student success	SK299, S294, S295, SK228, SK4288	LHCS and OUSA		Halliwell joint PL - Can an asynchronous student conference in Open Studio develop students' critical evaluation skills?  Halliwell joint PL - Can a new OU Study App enhance the learning experience of students on S350, an online only module?	May-19	Project completed	Nov-21 - with MJ for review	

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52	1 AL	Feb-19	19E-CHD-LHCSPSEEEES-01	Catherine Halliwell and Jenny Duckworth	<a href="#">Can an asynchronous student conference in Open Studio develop students' critical evaluation skills?</a>	Supporting students	Asynchronous, OpenStudio, evaluation skills, peer-to-peer feedback, online, assessment, professional skills	S350	LHCS, SPS and EEES	Halliwell Joint PL - How are students using extensions and what is the impact on success?  Halliwell Joint PL - Can a new OU Study App enhance the learning experience of students on S350, an online only module?  Duckworth joint PL - Challenges of assessment for a level 3 interdisciplinary module: an AL and student perspective	May-19	Project completed	Due Jan-22	
53	2	May-11	11H-JH-LHCS-01	Janet Haresnape	<a href="#">Evaluation of assessed collaborative wiki activity and comparison with similar collaborative online activities in other contexts</a>	Innovative assessment	Assessment, online, collaborative, activity, wiki	S366, S295	LHCS	Skills progression in practical science within the Life Sciences	Aug-11	Project completed	Feb-17	The activity which was incorporated into S295, which is of a similar design to the one reported here, was also intended to be a confidence-building activity which helps weaker students. It is scheduled very early in the module presentation with the aim of helping S295 students to engage with others in their tutor group, and with their tutor, early in the presentation. This should help engagement and retention on S295.
54	10	Dec-16	17E-JH-LHCS-02	Janet Haresnape	<a href="#">Skills progression in practical science within the Life Sciences</a>	Employability	Employability, skills progression, practical skills, problem solving, Life Sciences pathway	S295, S317	LHCS	Evaluation of assessed collaborative wiki activity and comparison with similar collaborative online activities in other contexts	May-17	Project completed	Due Feb-22	
55	1	Feb-11	11D-CH-CC-01	Clem Herman	<a href="#">Career Development for STEM professionals</a>	Academic professional development	Employability, professional development, equality, gender differences, STEM returners, careers	T160, T161	C&C	Liz Whitelegg (SPS), Katie Chicot (M&S), Gill Kirkup (LTI), Abi Lewis (STEM Deanery)  Joint PL - e-Ambassadors and e-Portfolios: Exploring innovative methods to embed employability in practice based STEM distance learning  Level 1 IT and Computing – where have all the women gone?  Evaluation of a community partnership approach using open educational resources: Equate Scotland and the Returning to STEM BOC  Developing a strategy for an LGBT+ inclusive STEM Faculty	Apr-11	Project completed	Feb-13	During the dissemination of the project outcomes and via subsequent discussions with the Careers and Employability Project, the lessons and broader objectives of the project have been incorporated into ongoing discussion and development of the Employability Strategy of the OU in general and the STEM faculties in particular. Specific examples of how the project has contributed to the development of employability opportunities for students (who were not included in the project) include: • Employment related activities from T161 are being included within the new TM129 End of Module Assessment • The T163 Visiting Experts activity is being taken forward into a new STEM Ambassadors project being developed in partnership with STEMNET and the OU Careers Service (and the subject of a new eSTEM project in conjunction with Nigel Mason from Science) • The transfer of learning about using ePortfolios which is being implemented in TM129
56	10	Dec-16	17E-CH-CC-02	Clem Herman	<a href="#">Gendered Choices - Motivation and degree choices of Computing and IT students: a gendered analysis</a>	Equality, diversity and inclusion	Equality, gender differences, IT, computing, level 1, Athena SWAN	TU100	C&C	John Woodthorpe, Janet Hughes, Elaine Thomas, Helen Donelan (C&C) and Helen Jefferis (AL)  Career Development for STEM professionals  Joint PL - e-Ambassadors and e-Portfolios: Exploring innovative methods to embed employability in practice based STEM distance learning  Evaluation of a community partnership approach using open educational resources: Equate Scotland and the Returning to STEM BOC  Developing a strategy for an LGBT+ inclusive STEM Faculty	May-16	Project completed	Jul-19	The online survey showed that a higher proportion of men were already working in the IT industry, whereas more women were looking to enter into an IT related role for the first time. This suggests that studying computing and IT on its own may be more popular with students with well-defined career intentions, and already situated in the IT industry, whereas the broader joint honours may be of preference to those not yet working in the industry and seen as offering wider work and skills development opportunities. However, there were also examples where women deliberately chose a combination of subjects offered by the joint honours degree to provide entry into more specific roles, such as data science. Our findings also show that a higher proportion of women than men had a previous STEM-related degree. Nevertheless, some women expressed confidence issues, in particular about entering into careers in the industry rather than their ability to study IT. This suggests that employability in computing, even among women who have successfully completed STEM degrees in the past, or are already working, continues to be influenced by structural gendered barriers and behaviours.  As a response to the suggestions raised in the Focus Group about networking opportunities, we reflected on how we could meet these needs in the online and distance education context. Two new strategies have been developed to meet this need. We ran an online webinar on Ada Lovelace Day with an invited panel of senior women working in the technology sector, and over 50 students attended with a lively question and answer session. And we have recently initiated an Industry Mentoring project for women students with industry mentors, again to support the transition into employment.  We secured funding for the pilot Mentoring project mentioned above, which will involve recruiting Alumni who are already working in industry as mentors working with our women students.
57	10	Dec-16	17E-CH-CC-03	Clem Herman	<a href="#">Evaluation of a community partnership approach using open educational resources: Equate Scotland and the Returning to STEM BOC</a>	Employability	Employability, equality, STEM returners, BOC, OER	T160	C&C	Katie Chicot (M&S), Lesley Broadwood (The OU in Scotland) and Bernice Clark (E&I)  Career Development for STEM professionals  Joint PL - e-Ambassadors and e-Portfolios: Exploring innovative methods to embed employability in practice based STEM distance learning  Gendered Choices - Motivation and degree choices of Computing and IT students: a gendered analysis  Developing a strategy for an LGBT+ inclusive STEM Faculty	May-17	Project completed	Aug-19	a) Student experience As immediate impact of the project the women returners programme successfully supported over 60% of the pool of 40 women returners into placements, full time work in STEM or to pursue further STEM qualifications. The successful outcomes reinforce the conclusion that even within a small group of relatively similar learners, one size does not fit all, and that with a range of ways to engage with content and support, participants can personalise their own learning and benefit from whichever of the components are appropriate.  In terms of the contribution of the project towards increasing student success, with the BOC at the core of Equate Scotland's blended learning programme, participants were able to enrich their current knowledge, gain accreditation and develop their own individual pathways back into STEM employment. "In a nutshell, the programme's got me from, in the beginning, not knowing where to start, to now, in a couple of week's time, I'm going to start a 6 month placement."  The model of blended learning in a community partnership could be adapted for other under represented groups, thus benefiting students who have not yet directly been involved in the project.  b) Teaching The publication of the journal article has enabled OU colleagues as well as external scholars to learn from this model. We hope to be able to roll the mode out to a wider audience through further funding.  c) Strategic change and learning design The Returning to STEM BOC and community partnership model has been cited as an example within the OU's Women in STEM campaign – it is frequently cited in policy responses and funding bids as an example of the university's commitment to equality and diversity. The OU in Scotland has included this as an example of good practice in their Gender Action Plan.
58	8	Oct-15	16B-CH-WELS-01	Christothea Herodotou	<a href="#">Understanding and improving students' learning experience and engagement with practical science on-line: The case of virtual and remote microscopes</a>	Online/onscreen STEM practice	Online, virtual, remote, student learning, engagement, microscopes	16B-CH-WELS-01	WELS	Simon Kelley (EEES), Eileen Scanlon and Maria Aristidou (WELS)  Evaluating the design of the virtual microscope with students	Feb-16	Project completed	Jan-19	• A major success of this project is the collaboration with the University of Aberdeen that resulted in the implementation of a comparative study examining different teaching and learning conditions and their impact on students' perceptions. • The project requested and has been successful in securing additional funding from eSTEM for analysing, in addition to the students' perspectives, the teachers' perspectives. • The project provided valuable insights as to how to improve the pedagogy around the use of VMs in online modules. These insights could inform module teams and the eSTEM final report guidelines design or design of modules that make use of the VM. The dissemination of outcomes outside the university can contribute to informing the pedagogy in other HE institutions. • We have been less successful in directly influencing the teaching practice at the OU as constraints (financial and others) made impossible the application of insights to practice i.e. improving the design of existing activities that make use of the VM in Health and Earth science courses.
59	16	Jan-20	20D-CH-WELS-02	Christothea Herodotou	<a href="#">Evaluating the design of the virtual microscope with students</a>	Online/onscreen STEM practice	Evaluation; virtual microscope; student learning; interface design		WELS	Understanding and improving students' learning experience and engagement with practical science on-line: The case of virtual and remote microscopes	Apr-20	Project completed	Dec-21- with TC for review	

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60	6	Jun-14	14L-RH-MS-01	Rachel Hilliam	<a href="#">Enabling Mathematics and Statistics Associate Lecturers to achieve their potential</a>	Academic professional development	Equality, gender differences, Athena SWAN, career development, progression, CDSA, ALS, Staff Tutor, recruitment, retention		M&S	Alison Bromley, Carol Calvert, Katie Chicot, Martina Gibbons (M&S), Emma Street (CIO) and Rosaria Gracia (AL)	<i>Joint PL until 31 Jul 18 - Supporting the student's learning journey through the transition of mathematics and statistics from level 2 to level 3</i>  <i>Investigating the careers of Staff Tutors in STEM for Athena SWAN</i>	Dec-14	Project completed	Mar-17	Associate lecturers feel hugely valued and supported by their staff tutor, but ALS consider the wider Open University to be distant. There is a real need to ensure the staff tutor and AL relationship is maintained in order to both facilitate an AL academic community to avoid isolation and to provide professional support for this highly skilled group of staff. However ALS also express a feeling that the wider university does not value their professionalism and, as such, there is a need articulate the wider role that ALS play in the organisation.
61	6	Jun-14	14L-RH-MS-02	Rachel Hilliam	<a href="#">Investigating the careers of Staff Tutors in STEM for Athena SWAN</a>	Academic professional development	Career development, progression, Staff Tutors, Athena SWAN, equality, gender differences		M&S	Carol Calvert, Katie Chicot, Martina Gibbons (M&S), Elaine Thomas (C&C), Emma Street (CIO), Shirley Northover, Victoria Pearson, Jean McCoughy (SPS), Rosaria Gracia (AL)	<i>Joint PL until 31 Jul 18 - Supporting the student's learning journey through the transition of mathematics and statistics from level 2 to level 3</i>  <i>Enabling Mathematics and Statistics Associate Lecturers to achieve their potential</i>	Dec-14	Project completed	Jun-16	Recommendations <ul style="list-style-type: none"> <li>• Clear definition and communication of the Staff Tutor role and the value the role plays in the organisation</li> <li>• Organisational commitment to ensuring good quality online access to all meetings as routine</li> <li>• Urgent review of the new promotion framework and analysis of feasibility for Staff Tutors to meet all the criteria.</li> <li>• Increased administrative support</li> </ul> The need for good quality remote access to meetings in Milton Keynes on a routine basis is a constant theme throughout the responses. This recommendations alone would enable Staff Tutors to free up time to engage more deeply with the non-managerial part of their role. More importantly it would ensure that Staff Tutors were always visible, connected with central campus, had the same opportunities as central staff to serve of committees and equally considered in all opportunities. There is an urgent need for a review of the new promotions criteria and a thorough analysis of both the promotions data and an analysis of the feasibility for Staff Tutors to engage with these criteria. This analysis needs to be carried out in the context of the closure of locations, which has a substantial impact on the working conditions and career opportunities for Staff Tutors. These recommendations have been disseminated to each STEM Athena SWAN group and Heads of Departments to be used in Athena SWAN submissions. The University Secretary's Office, PVC Academic, STEM Executive Dean and Strategy Office have considered recommendations in this report as the basis for requirements for home working. The University Promotions Committee have also been considering how this work can feed into a review of the promotions criteria.
62	14	Jan-19	19E-RH-MS-03	Rachel Hilliam	<a href="#">The Mathematics and Statistics community of learners</a>	Supporting students	Student Experience, Learning Community, Student Journey		M&S	Gaynor Arrowsmith (M&S), Alexander Siddons (AS), Derek Goldrei (AL) and Cath Brown (AL, formally OUSA)	<i>Enabling Mathematics and Statistics Associate Lecturers to achieve their potential</i>  <i>Investigating the careers of Staff Tutors in STEM for Athena SWAN</i>	May-19	Project completed	Dec-20	It is unfortunate that the analytics are only available for students registered on one of the mathematics and statistics qualifications. However it was clear from the analytics available that there is a steady increase in the number of students who use the study site. Early feedback gathered in the project fed into the creation of a communication strategy to highlight the study site to all students studying the M&S modules, which took the form of a series of emails over the summer months. In September 2020 there was a noticeable jump in the number of students using the study site. The questionnaire results show that students find all of the Discover Your Module resources helpful, both in terms of choosing their next module, making a head start ahead of the module presentation and updating their existing knowledge with the revise and refresh material. Ensuring students are studying a module for which they are well prepared helps with completion, retention, progression and satisfaction. One of the main impacts of the study site is the extent to which educational and senior advisory staff in the SRSC use the site both to enhance their own knowledge about the curriculum but also directly in conversations with students. Making sure students are on the correct module and having this wrap-around support is helpful not just in terms of retention, but also in strengthening the link between the SST team and the School. Other Schools, in particular C&C, are already using the M&S study site as a template for updating and enhancing their own study site.  Recommendations <ul style="list-style-type: none"> <li>• The structure of the site should be improved, in particular students find the fixed main headings unhelpful.</li> <li>• A site map and/or A-Z should be added to the site which is automatically updated as content is changed.</li> <li>• The ability to edit the front page with links etc, may help with navigation around the site.</li> <li>• The way students are routed to study sites needs to be more obvious as many students do not know these sites exist.</li> <li>• An introduction to the study sites should be included in one or more of: AL inductions, ongoing AL staff development and AL CDSAs, since many ALS are unaware of the study site.</li> <li>• Some form of briefing or training should be included for all SRF staff on the study sites as some advisors are unaware of the site and therefore do not point students towards the resources.</li> <li>• Other schools who are currently populating their study sites should make sure SST staff are included in the development. One of the main successes of the M&amp;S Study Site is the way SST staff (not just in M&amp;S) constantly use the site for their own information and point students towards the resources.</li> </ul>
63	4	Oct-12	12L-LHRA-LTIA-01	Laura Hills & John Rose-Adams	<a href="#">How it is different to before? Science student perceptions of the study experience in an era of curriculum and technological change</a>	Equality, diversity and inclusion	Inclusivity, disabled students, science curriculum, widening participation, technological advancements		LTIA			Dec-12	Project completed	Oct-15	The research found that the experience of the students taking part was similar to that which has been reported of the majority of Open University students. The Open University was chosen in response to personal circumstances and family commitments and was seen a place where study would be flexible. Technology had played a part in this flexibility by enabling students to study in ways and at times to suit. However, there was concern about the implications of the increasing use of online experimentation on students' preparedness for work. Interaction with other students was also seen as an issue and was key to perceptions of the value for money offered by the Open University.
64	14	Jan-19	19D-MH-KMI-01	Martin Hlosta	<a href="#">Disproved predictions of at-risk students: Some students fail despite doing well, others succeed despite predicted as at-risk</a>	Supporting students	Students at-risk, OUAnalyse, Predictive Learning Analytics, Error Analysis, Interviews		KMI	Christothea Herodotou, Tina Pagathoma, Anna Gillespie (WELS), Václav Bayer and Zdeněk Zdrahal (KMI)	<i>Joint PL - Understanding the BAME attainment gap at the OU by means of quantitative and qualitative data analytics</i>	Apr-19	Project completed	Oct-20	We aimed to include different types of suggestions on how to deal with the limitations of the predictions in the future: 1. Enhancing the predictive models with data that is already collected at the OU yet not captured in the predictions. 2. Recommendation to collect new data, which might be relevant for predictions. 3. Possible intervention strategies for students to escape from being at-risk to succeed. These can be also fed into the developed personal study recommender. 4. Set of possible issues to pay attention, which can be made available to tutors and students at the beginning of the module. The set of possible issues to pay attention to as well as the link to the report is now being incorporated in the new training materials for ALS and will be available in the Tutors' induction information in TutorHome and referenced from OUAnalyse dashboard directly. Despite the short time that the research has been available so far, it has attracted attention. It has been referenced by Simon Buckingham Shum in his blog post Should predictive models of student outcome be "colour-blind"? [6], where he stresses the importance of models and errors understanding.

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65	14	Jan-19	19E-GH-EI-01	Georgy Holden	<a href="#">Qualification Study websites, uptake and practice</a>	Supporting students	Qualification, study websites, student engagement, learning communities		E&I	Derek Jones (E&I) and Nicole Lotz (E&I)		May-19	Project completed	Feb-21	<p>The recommendation would be that all Subject sites are available to students, or potential students, as early as possible - this could be achieved by reviewing permissions across the different elements of the site. Considering the current content of the Subject sites there are no obvious reasons why the majority of information should not be publicly available.</p> <p>A further recommendation would be to consider using the subject site as the student's landing page instead of StudentHome, in other words to reconceptualise the site as the spine of the study journey.</p> <p>A recommendation would be that either students should be able to opt for access to a subject site when they first sign up to the OU or they should be automatically allocated to one related to their first module with the option to change sites if automatic allocation does not reflect their interests.</p> <p>This has been an evaluation of existing sites; however, it is hoped that looking at these sites and making the comparisons between them in terms of their use and success might inform future practice which might in turn have a beneficial effect on student learning. The use of these sites has the potential to improve retention and to help students to chart and articulate their employability throughout their studies. The recommendations in the conclusions above point to the need for increased visibility of the sites and universal access.</p>
66	13	Jul-18	19A-CH-MS-01	Chris Hughes	<a href="#">Evaluating the accessibility of an alternative format of module materials in Maths &amp; Stats</a>	Equality, diversity and inclusion	Accessibility, RNIB, assistive technology, DAISY talking books, print-disabled students	MU123, MST124, MST125, M140, MST210, M248, ME625, ME627, M208, MST224, M249, M303, M337, MT365, M343, M346, M347, M373, MST326, MS327, ME626, ME625	M&S	John Clarke (AS), Chet Colwell (WELS) and Kaye Williams (LDS)	<p>Joint PL - Sanification of depictions of numerical data</p> <p>Joint PL - Sanification partial pilot on M140</p> <p>Joint PL - Usage of Early Alerts Indicators on two level 1 modules</p> <p>Joint PL - Welsh-medium tuition in Level 1 Mathematics</p>	Jan-19	Project completed	Feb-20	Based on the results of this project we recommend that the school of Mathematics and Statistics adopts this alternative format across the curriculum in addition to its existing outputs. We propose that the output be named DAARA: Designed As A Reasonable Adjustment.
67	15	Jul-19	19J-JHAW-CC-01	Janet Hughes and Ann Walshe	<a href="#">Investigating the perceived benefits to computing students of remote pair programming</a>	Supporting students	Pair programming, distance learning, community	TM112, TM129, M250	C&C	Brendan Murphy and Robert Law (ALs)	<p>Walsh joint PL - Perceptions, Expectations and Experience of Group Tutor: towards a shared understanding amongst stakeholders</p> <p>Walsh joint PL - Towards A Structured Process for Involving ALs in Module Tutor Strategy Design and Review</p>	Oct-19	Mar-21	Oct-21	This remote pair programming project was designed to explore the non-technical benefits of different methods of experiencing remote pair programming. Results indicate that students perceived that working remotely with another student increased their verbal communication skills and their ability to collaborate, problem solve, make decisions, and take initiatives -- and slightly enhanced their sense of learning from others. Paradoxically, the area which most merits further support is in feeling connected to others in a module, which is a key issue for Open University students and for others in education in a locked-down pandemic world. However, other benefits identified by participants related to reassurance, mentoring, and learning to ask for help -- and student participants were keen for further understanding of the experience of programming in the real world. We provide recommendations for module teams and tutors to consider when designing remote pair programming experiences.
68	10	Dec-16	17E-RJEMEFJ-LHCSWELS-01	Rob Janes, Elaine Moore, Elizabeth FitzGerald and Io Iacovidis	<a href="#">Utilising the Teaching Tricky Topic process to Identify and Address Student Misunderstandings across These OU Modules</a>	Supporting students	Tricky topics, conceptual misunderstandings, barriers, threshold concepts	S215, MST124, H880	LHCS & WELS	June-Barrow-Green (M&S) Rebecca Ferguson (WELS), Claire Turner (LHCS), Anne Adams (WELS), Lesley Boyd (WELS), Anne Pike (RES), Tom Olney (STEM Deanery), Leadership in Digital Innovation team led by Allison Littlejohn and Will Woods and LTI Translation (TBC)	<p>Moore - Students' study of online modules</p> <p>Janes joint PL - Using technology-enabled learning networks to drive module improvements in STEM</p> <p>Janes joint PL - Blending labcasts and remote/virtual experimentation: students' perception in practical skill development alternative</p>	May-17	Project completed	Jan-19	<p>The workshops lead to the identification and prioritising of key Tricky Topics by the module team and ALs. The module teams were asked to consider putting in place new interventions into their modules to address one or more of these Tricky Topics. This was underpinned by the ambition to help students increase their understanding and lead to higher student success rates/satisfaction and progression.</p> <p>Results of the project are mixed, with very positive results from one particular module (S215), and more ambiguous results from the other two modules (MST124 and H800). However, the process itself has been evaluated and shown to produce excellent outcomes, when key elements are in place. The most critical of these we have identified, is the engagement, or buy-in of the module chair(s) and also the ALs; however this is heavily related to, and dependent upon, available time in which to put in place any subsequent interventions.</p>
69	1 AL	Jul-19	19J-HJ-CC-01	Helen Jeffers	<a href="#">All change, but does tuition in cluster groups work?</a>	Supporting students	Tuition, cluster groups, level 1, digital experience	TM111	C&C	Chris Gardner and Frances Chetwynd (C&C)	Joint PL - Visualising the code: are students engaging with programming at level 1?	Oct-19	Project completed	Sep-21	<p>One of the key findings was that several students were confused about tutorials. This confusion included not being sure where to find out about tutorials, expecting more tutorials to be released during the module and not being aware that they could attend tutorials without booking. There was also confusion about the naming of tutorials as students felt this did not give them a clear idea of what would be covered; in addition, some students were unsure of the purpose of tutorials; this confusion was expressed by both new and continuing students. It is therefore recommended that module teams provide much clearer information to students about tutorials e.g. how to find them; the need to book (or not) and the content and purpose of tutorials.</p> <p>It is also clear that booking tutorials too far in advance meant that students were often unable to attend the tutorial, either because they forgot or because they had other commitments. The automatic reminders about the tutorials were not always helpful, with some students not noticing them and others finding they came too early. It is therefore questionable whether providing a list of all the planned tutorials right at the start of a module is really an advantage to students in addition arranging tutorial timing so far ahead also means that tutors are unable to respond to the particular needs of a student cohort as all their tutorial hours are already allocated. Students stated that they expected to book tutorials throughout the module; however, without prompts and reminders it seems likely that many forget to do this.</p> <p>Traditionally OU tutorials have happened on weekday evenings and on Saturdays. However, for both new and continuing students there was no clearly favoured time nor day for a tutorial to be held. It would therefore be sensible to try and offer a variety of times and days to cover all students' requirements. Students were also asked if they had attended any tutorials that were not a good use of their study time. Whilst a few had some criticisms overall students felt that the tutorials (and specifically the tutors) helped them with the module and many made very positive comments. It would be good to make this much clearer to all students as early in their studies as possible so that they could all benefit.</p>
70	2 AL	Mar-20	20H-KJ-CC-01	Katharine Jewitt	<a href="#">A review of the use of Office 365 and Adobe Connect for active learning by ALs tutoring on T227 and TXY227</a>	Technologies for STEM learning	Digital skills, digital technology, AL development, building digital capacity, sharing digital experience	T227, TXY227	C&C			Aug-20	Project completed	Due Feb-22	

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71	1 AL	Feb-19	19G-BJ-EI-01	Barbara Jones	<a href="#">Online module forums: espoused, actual and improved</a>	Supporting students	Forums, asynchronous discussion groups, asynchronous messaging, tutor interventions, peer-to-peer interactions, tutor-peer interactions, forum moderation, computer-mediated communication	T313, T317	E&I			Jul-19	Mar-21	Jul-21	It has certainly proved possible to collect and analyse message content and metrics in the TMM/EMA forums in T313 and T317. An emergent outcome is a framework for analysing large module forums which can be applied to any forum messages in any modules and faculties.
72	2	May-11	11H-MI-SPS-01	Mark Jones	<a href="#">Developing practice in online synchronous tuition by peer observation, feedback and reflection</a>	Online/onscreen STEM practice	Online practice, peer observation, peer-support, feedback, reflection, synchronous tuition, student engagement, ALs, teaching practice		SPS	Anne-Marie Gallen (E&I), Sid Biedokoglou, Mario Campanelli, Iain Chapman, Grahame Danby, Anthony Jones, Ian Malcolm, Craig McFarlane, Sam Nolan, Roberts, Gillian Stansfield, Thomas Wilks, Stan Zochowski (ALs)	<i>Joint PI - Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders</i> <i>Joint PL - Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders (part II: the student perspective)</i> <i>Online Team Investigations in Science (OTIS)</i> <i>Joint PL - Evaluation of Assessment and Tuition Changes for S284 Astronomy</i>	Aug-11	Project completed	Feb-16	The issues raised by this small-scale study into peer observation for online synchronous tuition need to be considered in the wider context of providing staff development for teaching practice using this medium. While the study set out to explore peer observation in an online setting, it is important to stress that the key issue is the facilitation of effective development, rather than the promotion of peer observation per se. This is particularly pertinent in an educational environment, where peer review is taken as an indication of the commitment to institutional quality assurance: 'Peer review' risks becoming the goal, rather than a means, to achieving more meaningful developmental goals.
73	11	Jul-17	17H-MI-SPS-02	Mark Jones	<a href="#">Online Team Investigations in Science (OTIS)</a>	Online/onscreen STEM practice	Online, teaching, team investigations, student engagement, peer-learning, assessment strategies, Mars Rover simulation, PIRATE robotic telescope	S382, S818	SPS	Susanne Schwenzer, Ulrich Kolb, Judith Crosston and Sheona Urquhart (SPS)	<i>Developing practice in online synchronous tuition by peer observation, feedback and reflection</i> <i>Joint PI - Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders</i> <i>Joint PL - Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders (part II: the student perspective)</i> <i>Joint PL - Evaluation of Assessment and Tuition Changes for S284 Astronomy</i>	Oct-17	Project completed	Due Feb-22	
74	4	Oct-12	13E-SI-SPS-01	Sally Jordan	<a href="#">Thresholded assessment: Does it work?</a>	Innovative assessment	Assessment, summative, formative, thresholded, TMAs, ICMA's	SK277, S141, S207, S240, S382, S383	SPS	John Bolton (SPS), Lynda Cook, Saroj Datta, Jon Golding, Janet Haresnape, Kerry Murphy, Ruth Williams (LHCS), Richard Jordan (external consultant) and Karen New (AL)	<i>Concept inventories in physics: from development to impact</i>	May-13	Project completed	Sep-14	<ul style="list-style-type: none"> <li>Many students and ALs have a poor understanding of our assessment strategies, including conventional summative continuous assessment. This is in line with a frequently found result that students have poor understanding of the nature and function of assessment.</li> <li>No evidence has been seen to support a return to summative continuous assessment. However, it has rightly been pointed out that examinations cannot authentically assess all aspects of university-level skills. The use of two components contributing to the "overall examinable score" (OES), e.g. an examination and an experimental write-up, seems a sensible way forward, with the formative thresholded components helping students to prepare for both components.</li> </ul>
75	2	May-11	11H-KK-CC-01	Karen Kear	<a href="#">Online Presence for Learning and Employability: students' use of profiles in social networking environments</a>	Employability	Employability, online, student, community, profiles, social networking, Facebook, LinkedIn	TU100	C&C	Frances Chetwynd (C&C) and Helen Jefferis (AL)		Aug-11	Project completed	Jan-14	The findings suggest that personal profiles and photos in Moodle forums helped some students to feel in touch with each other. Others, however, did not feel the need for these facilities, had privacy concerns or preferred to focus on the forum postings. Students also had privacy concerns in relation to social network sites, although their concerns were allayed somewhat after studying material on social networking in TU100. These findings will inform the design of the replacement module using what has been learnt from the project and also the experience of teaching the previous module to help students to understand about online social networking and how it relates to employment and also to their educational experience.
76	7	Feb-15	15F-CKPS-LHCSWELS-01	Claire Kotecki & Prithvi Shrestha	<a href="#">Academic literacy and communicating assessment to students in Level 1 science module: building the foundations for retention and progression</a>	Innovative assessment	Assessment, terminology, academic literacy, retention, progression, level 1,	S111, S112	LHCS & WELS		<i>Single component assessment on Level 1 science modules: a quantitative and qualitative evaluation of the assessment journey from TMA to Feedback</i>	Jun-15	Project completed	Aug-19	<p>We make the following recommendations based on the findings of this study:</p> <ul style="list-style-type: none"> <li>Continue with the good practice of keeping assignments simple to begin with and gradually make them more sophisticated</li> <li>Provide clearly the word limit for each question</li> <li>Develop and embed academic literacy and/or scientific literacy materials in Level 1 and possibly Level 2 for students on how to write explanation, discussion and reflection texts in science and if possible build on what has been done in Y033 (this may include providing good examples of these text types in the short term)</li> <li>Conduct student needs analysis in terms of their scientific literacy and academic literacy regularly via module surveys</li> <li>Conduct more scholarship work or research on widening participation on students in science modules with regard to their academic and scientific literacy to inform future module designs.</li> </ul>
77	1	Feb-11	11D-SKM-CC-01	Soraya Kouadri Mostéfaoui	<a href="#">Assessing 'alternative media' elements: is there a generic model?</a>	Innovative assessment	Assessment, framework, non text-based, media artefacts	T215	C&C	Judith Williams (C&C)	<i>Joint PL - Visualising the code: are students engaging with programming at level 1?</i> <i>Joint PL - Supporting Degree Apprenticeship students: Tutors' and Students' perspectives</i> <i>Joint PL - Are You Ready for Your Studies - Are we Assessing Students Readiness? An evaluation of the usefulness of the Level 2 ARFY quizzes</i> <i>Joint PL - Using BiteSize Videos to Enhance Students' Experiences in a Level 2 Programming Module</i> <i>Kouadri Mostéfaoui - Assessing 'alternative media' elements: is there a generic model?</i> <i>Kouadri joint PL - Modern Container-based Learning Interface and Delivery Infrastructure (MCLDI)</i> <i>Kouadri Mostéfaoui joint PL - Analysis of COVID-19's impact on BAME students' attainment (A case study of Level 1 C&amp;C Open University modules)</i>	Apr-11	Project completed	Jan-13	The main findings are that the T215 model has potential to provide a flexible and consistent way of assessing a wide range of alternative media artefacts. In its current form it lacks the facility to assess the artefacts holistically but this can be addressed by slightly modifying the existing model's criteria. However, the T215 model can be difficult to retrofit and is not easily applicable to process-based assessments.



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78	11	Jul-17	17I-SKM-CC-03	Soraya Kouadri Mostéfaoui	<a href="#">Supporting Degree Apprenticeship students, Tutors' and Students' perspectives</a>	Supporting students	Apprentice, student support, tutor support	TMX130, TMKY130	C&C	Christine Gardner (C&C)	Assessing 'alternative media' elements: is there a generic model?  <i>Paving the Way Towards an Extended Assessment Model</i>  <i>Joint PL - Visualising the code: are students engaging with programming at level 1?</i>  <i>Joint PL - Modern Container-based Learning Interface and Delivery Infrastructure (MCLIDI)</i>  <i>Kouadri Mostéfaoui joint PL - Analysis of COVID-19's impact on BAME students' attainment (A case study of Level 1 C&amp;C Open University modules)</i>	Oct-17	Project completed	Aug-21	The results of this eSTeEM project (our small-scale research study for level 1 DA modules), have highlighted certain difficulties that apprenticeship students face in the area of assessment; in particular, relating to assessment on work-based learning modules. This has informed discussions with module teams of DA modules within the C&C school and at a wider faculty and University levels. We will hopefully continue to do so through various channels. The project also led to initiatives such as assessing the usefulness of the provision of day-time tutorials. This project has also inspired Christine Gardner to research the topic of apprenticeship assessment in more depth, in the context of her EdD studies. The findings have helped Christine shape her research questions and informed her research methodology. Moreover, following on from the project, Christine Gardner was also invited to join the RPEL (Recognition of Prior Experiential Learning) group and has been involved in implementing RPEL for the C&C apprenticeship programme.
79	7	Feb-15	15F-AL-EI-01	Andy Lane	<a href="#">The impact of technology on the teaching and assessment of 'systems diagrams'</a>	Technologies for STEM learning	Diagramming, technology, systems thinking,	T219, T319	E&I			Jun-15	Project completed	Jan-16	It was found that few students seriously used diagrams before their study of the modules; that they were either enthusiastic or sceptical about their value although most said they would use them in future; that the number of diagrams and the technologies used to create and share them were often burdensome in the two modules investigated; and that the group work could provide a better experience for using diagrams but that this too could be blighted by timing and technical issues. In addition many students disliked the mainly online delivery of the two modules, wanting printed books, and would like to have seen face to face tutorials where diagrams could be created and discussed. Open Design Studio has not proved helpful as a sharing technology compared to other modules and more work is needed to understand this and to find a technological solution that does suit students and ALs alike to compensate for the lack of face to face events.
80	7	Feb-15	15F-NL-EI-01	Nicole Lotz	<a href="#">Are we making progress? Progression through learners' interaction in OpenStudio across a qualification</a>	Technologies for STEM learning	Progression, OpenStudio, students' interaction, student learning, design and innovation, engagement, professional skills	U101, T217, T317	E&I	Derek Jones and Georgy Holden (E&I)	<i>Developing a sense of community through cross-level engagement between staff and students in creative industries subjects</i>  <i>Joint PL - Understanding the mental health attainment gap in Design modules</i>	Jun-15	Project completed	Oct-17	The findings have impact on efforts to improve the student experience across the qualification, including designing module specific inductions to OpenStudio, the redesign of modules and OpenStudio module activities in the qualification, and the implementation of the Student Advisory Website. A wider audience of STEM academics and LTI staff benefitted from the project findings in the workshop which took thinking beyond the implementation of OpenStudio in individual modules to think about progression strategies across a qualification. Finally, the project opened up new avenues for collaboration with external academics and bidding for external funding to investigate the design of social online learning environments in design and innovation.
81	11	Jul-17	17K-NL-EI-02	Nicole Lotz	<a href="#">Developing a sense of community through cross-level engagement between staff and students in creative industries subjects</a>	Supporting students	Community of Inquiry, Student Engagement, Students as Partners	U101, T217, T218, T317	E&I	Lisa Bowers (E&I), Bernie Clark (E&I), Asma Chowdhry (E&I), Georgy Holden (E&I), Derek Jones (E&I), Emma Dewberry (E&I), Theodore Zamenopoulos (E&I), Katerina Alexiou (E&I), Sally Anne Imme (Deanery), AnnMarie McKenna (AL), Tema George (AL), Jenny Burke (AL), Laura Fletcher (AL), Cive Hilton (AL), Elouise Huwor (AL), Rod Dowling (AL)	<i>Are we making progress? Progression through learners' interaction in OpenStudio across a qualification</i>  <i>Joint PL - Understanding the mental health attainment gap in Design modules</i>	Nov-17	Project completed	Jun-20	Bringing staff, faculty and students together in cross-level engagement events and working as partners in organising and running these events offered an excellent experience for everyone. Students felt more confident about their study direction, skills and abilities, and they became more aware about their progression pathways. Students gained experiences that proved valuable for employability and building their CV's. Moreover, some students became advocates of the qualification to other students and the public. The community building aspect of the cross-level events has been embedded as an ongoing process and is now considered routine by the Qualification team.  This project had a strategic change in mind from its onset, but was taken by surprise about the real impact it has achieved in this area. We were able to secure MSQ funding to investigate a second year of trials, exploring different locations and types of events. We were then able to secure School funding to make these events a permanent part of curriculum delivery. The project already had wide-ranging impact on strategic change of how the curriculum is delivered. Future events will even go further. The cross-level events for the coming year will trial employability workshops to offer student applied experience in solving real world problems through design thinking. These events facilitate the generation of new ideas for the 'b'ides', our new Design Qualification, with a true cross-level and qualification wide approach to its curriculum design.
82	10	Dec-16	17E-HM-LHCS-01	Hilary MacQueen	<a href="#">Factors affecting student success in the Workplace</a>	Employability	Higher education, Distance learning, Work-based learning, Student experience		LHCS	Fiona Aiken (EEES)		May-17	Project completed	Sep-19	<ul style="list-style-type: none"> <li>Student experience: the Foundation Degree in Paramedic Sciences has been discontinued because professional requirements have changed and the entry qualification for a Paramedic is now a Bachelor's degree. Thus any benefit to students from this work will affect future students on cognate qualifications. Nevertheless, we believe that the impact of our findings could be significant for students if our recommendations are implemented, giving them a better learning experience and thus enhanced success in their studies and careers.</li> <li>Teaching: our findings have fed directly into plans for a Laboratory Scientist Apprenticeship (STEM Faculty), and the module team for the WBL components of this qualification have spent considerable time and effort to design a student support framework that will improve their workplace experience. We have also disseminated our results to colleagues elsewhere in the OU, and our project has been used as a case study on the Employability Hub <a href="https://learn3.open.ac.uk/course/view.php?id=300840&amp;cmid=158516">https://learn3.open.ac.uk/course/view.php?id=300840&amp;cmid=158516</a>.</li> <li>We hope that as a result of this our findings will guide colleagues' plans as well. Outside the OU, we have presented our data at an international conference (10th EDEN Research Workshop, Barcelona), where it was well received by teaching practitioners.</li> <li>The work has already benefitted the STEM Faculty's practices, and we anticipate it being useful to colleagues elsewhere in the University.</li> <li>We have received no additional funding so far, but the publication of our findings in a peer-reviewed journal (see below) has resulted in an invitation to examine a Masters thesis for Central University, Queensland.</li> <li>Both Fiona Aiken and Hilary MacQueen have been asked to act as reviewers for the journal Higher Education, Skills and Work-Based Learning.</li> </ul>
83	4	Oct-12	12L-NMCH-SPSC-01	Nigel Mason & Clem Herman	<a href="#">e-Ambassadors and e-Portfolios: Exploring innovative methods to embed employability in practice based STEM distance learning</a>	Employability	Employability, e-ambassadors, e-portfolios, STEM Ambassadors,		SPS & C&C	Rosania Gracia and Rachel Ferris (ALS), Clare Riding, Wendy Woolley (AS), Diane Butler, Claire Rothwell (LHCS)	<i>Herman - Career Development for STEM professionals</i>  <i>Herman - Level 1 IT and Computing - where have all the women gone?</i>  <i>Herman - Evaluation of a community partnership approach using open educational resources: Equate Scotland and the Returning to STEM BOC</i>	Dec-12	Project completed	Jul-13	Students expressed their support for both face-to-face and online asynchronous and synchronous ways of communicating with each other, with the course team and with employers. The main proposals put forward included the opportunity for peer conversations and mentoring; interdisciplinary work within courses; networking with students, professionals and academics; a forum open at different times of the year; career planning using the careers advisory service linked to job centres; provision of notice boards for information; industry webinars; links with the National Vocational Qualifications (NVQ) system to add to qualifications; access to careers fairs, and more opportunities for face-to-face practical class opportunities. This report highlights the importance of the relationship between the OU and prospective employers; inclusion of module teams in responding to employability concerns, and maximisation of both student and tutor skills as well as specific tools that could support students' employability.

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84	13	Jul-18	18K-SM-MS-01	Sarah Mattingly	<a href="#">Developing programming, problem-solving skills using individualised screencasts</a>	Technologies for STEM learning	Programming, problem-solving, TMA feedback, screencasts	TM111, TM112	M&S	Christine Gardner (C&C), Richard Walker (AL)		Nov-18	Project completed	May-20	At the outset of the project we felt that the findings may have the potential to inform other modules in which problem-solving and/or programming feature. However actual feedback was that tutors and students found the greatest benefits of screencasting to be closely allied to the visual nature of the programming environment OUBuild, which is unique to TM111. It is not clear how that would translate into text-based programming languages such as Python used on TM112. Hence, we intend to continue to promote and develop individualised screencasting for TMA feedback on TM111 and explore more cautiously the possible extension of screencasting into other modules. We presented a poster on this project at the 2020 eSTeEM conference. Discussion with participants indicated interest in pursuing individualised screencasts for TMA feedback on other computing modules; and in assessing whether students with text disabilities (dyslexia etc) might particularly benefit from screencasts. We intend to discuss and pursue these ideas further as appropriate
85	13	Jul-18	19B-EMKL-EEESRES-01	Elaine McPherson and Kate Lister	<a href="#">Engaging stakeholders as experts in the trial and evaluation of Disability Language Guidance</a>	Equality, diversity and inclusion	Inclusion, disability, language, accessibility, education, support, participation		EEES & RES	Anne-Marie Gallen (E&I), Victoria Pearson (SPS), Tim Coughlan (WELS), and Trevor Collins (K&M)	<i>McPherson joint PL - Proactive support for students to make the transition from print material to online study</i>  <i>McPherson - Investigating the motivations of female students choosing an open versus named qualification</i>  <i>McPherson joint PL - Accessibility and inclusion in tuition (AccIT)</i>	Feb-19	Project completed	Aug-21	This report has presented an account of how, building on precursor studies and adopting a participatory approach, an issue was identified, researched, and steps were taken to address it in practice through co-created and co-refined guidance.  A key factor throughout this project has been the participatory approach. This has been of incalculable value to the project and has been an extremely positive experience for the project team. Stakeholders raised a variety of issues that enhanced the guidance and would not have been identified from the research alone. This collaboration and participation strengthened the research and was extremely valuable in supporting the application to practice.  Engagement throughout the project has also been a positive experience for the student and staff stakeholders. Both students and staff commented on how pleased they were to be involved and consulted; and both groups have demonstrated a sense of ownership over the outputs, promoting it to peers and colleagues. This sense of ownership is likely to be a direct result of their participation in the project.  Using a participatory approach to turn research findings into guidance for practice, and engaging stakeholders as experts in this journey, has been both valuable and enlightening. It has modelled inclusive practice while seeking to investigate and promote it. This highlights the need for researchers to listen to and collaborate with students and practitioners when translating research into practice, as tangible benefits to research design and application to practice can be gained, as well as modelling positive ways for researchers, students and practitioners to work together and learn from each other.
86	6	Jun-14	14I-SMTA-CCEES-01	Shailey Minocha & Tom Argles	<a href="#">Evaluation of The OpenScience Lab's 3D Virtual Skiddaw application</a>	Technologies for STEM learning	Virtual Skiddaw, virtual fieldtrips, VFT, virtual fieldwork, environments, 3D, 2D, OpenSTEM Lab, app		C&C & EEES		<i>Argles - Geospatial technologies in distance learning and teaching in Science</i>	Oct-14	Project completed	Oct-19	We would prefer to see VFTs being used to support, enhance and extend physical fieldwork so that students can make the most of their time out in the field. We perceive VFTs an invaluable aid in the goal to maintain physical fieldwork in the curriculum - at all levels.  The discussion and examples on VFTs in this and other sections of the report are from Geography, Geology, Environmental Sciences and Biology - disciplines that have a long tradition of physical fieldwork and first-hand experience of phenomena out-of-doors - and these disciplines have been our focus in this project.
87	6	Jun-14	14L-EM-LHCS-01	Elaine Moore	<a href="#">Students' study of online modules</a>	Online/onscreen STEM practice	Online delivery, onscreen modules, student experience, perception, online activities	S206, S209, S215, S217, S295	LHCS	Wikki Haley-Minar, Vicky Taylor (LHCS), Julie Robson, Kadmieł Maszyk (EEES) Catherine Halliwell (AL), Rob Everett, Jim Moffatt and Richard Moat (E&I)	<i>Joint PL - Online Chemistry Support Clinics</i>	Dec-14	Project completed	Aug-17	The main changes to modules in response to feedback from this project, forum postings and SEAM surveys are: S206/SXF206 – 1) Including link to Studying online in StudentHome in the module guide. S209 – 1) Linking to a Virtual Microscope screencast much earlier in the module 2) Shifting an activity using Visible Geology (an external website tool) earlier in the module, and creating a screencast on how to use the tool 3) Link out to a resource on using Excel (from Physics) 4) Addition of larger image option for several more figures 5) Provide central 'home' for Errata, rather than just on forums 6) We will also provide links to the 'Studying online' material – not sure where as yet, possibly in the Module Guide but maybe also in the Study resources section. S215 – 1) Making the second halves of the final 2 blocks optional. 2) Moving one of the more difficult blocks later in the module. 3) Including link to Studying online in StudentHome in the module guide. 4) Adding document giving advice to students from students on the 14J presentation. 5) Adding 'Are you ready for' quiz to website. 6) Spelling out exactly what students are supposed to study each week and giving an estimate of time taken. 7) Noting in the Study guide for each block which activities need to be studied online. 8) Providing print-on-demand. S295 – 1) Introduction of a template for navigating the site and making notes. 2) Amended items on ISJ website in real time. Mark amended items by crossing through title on link.
88	10	Dec-16	17E-CMSO-EI-01	Carol Morris and Sally Organ	<a href="#">Engineering qualifications at the OU – what motivates women to study?</a>	Equality, diversity and inclusion	Equality, diversity, engineering, female students, intentions, Athena SWAN, level 1		E&I	Kim Littlewood and Moira Dunworth (ALs)	<i>Morris joint PL - Understanding factors influencing BAME students' achievements within Engineering and Innovation</i>	May-17	Project completed	Oct-19	The significant findings from the project will inform future curriculum developments – case studies need to reflect the spectrum of prior experience of all students, not only those who already work in engineering roles. Extra support has been put in place for female students, eg annual conference to celebrate International Women in Engineering Day, networking through a dedicated Women in Engineering forum, currently working with employers to find potential mentoring opportunities for final year students, working with Careers and Employability to encourage student placements, Women's Engineering Society student group established.  The E&I School has gained a Royal Academy of Engineering Visiting Professor for 'Transforming Engineering Cultures' (Carol Morris is Co-I). The outcomes of the project are informing the work of the Visiting Professor on inclusion. This will be of benefit to all future engineering students.

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89	13	Jul-18	18K-FMKN-LHCS-01	Fiona Mooman and Karen New	<a href="#">Online journal clubs in distance higher education: an opportunity to develop skills and community?</a>	Online/onscreen STEM practice	Journal club, online, adobe connect, presentation, PROMPT, community	S112, S294	LHCS	Hazel Church (STEM Deanery)	<p><i>New - Use of augmented reality in a second level human biology module: benefits and challenges</i></p> <p><i>Summer Series of Journal Clubs: an opportunity to develop employability skills and a sense of community amongst students in secure environments</i></p> <p><i>STEM ISSS - where are we now? Evaluating awareness, usage and effectiveness of individual student support sessions</i></p> <p><i>An evaluation of use and impact of zero grades in assessment; are we being consistent, fair, and transparent?</i></p>	Nov-18	Project completed	Jan-20	<p>The findings from our facilitator focus group indicated that our practitioners valued the OJC experience in terms of their own development. Feedback suggested that the experience was transformative for their AL practice, resulting in their tuition becoming more facilitative with a student-centred approach, rather than being solely tutor-led. Facilitators suggested that the experience of the student-led ethos of OJC might be of interest to the wider AL community, and accordingly we propose that offering this opportunity to a wider AL audience may provide opportunity to influence AL teaching style.</p> <p>We presented our OJC model and preliminary findings related to participant and practitioner experience at the Advance HEA Teaching and Learning Conference, (July 2019). Additionally, we have had external enquiries from the University of Swansea about our OJC experiences and approach. We hope that this interest may lead to incorporation of OJC models into tuition at other higher education institutes.</p> <p>OJC was identified as an example of best practice in the 2019 Quality Monitoring and Enhancement (QME) Board of Study reports. Our innovative model of facilitative teaching and learning during OJC events was discussed during a LHCS tuition workshop (April 2019), so may have influenced development of tuition across our unit.</p> <p>Online journal clubs have been included within early start initiatives of S112, S294 and S390 capstone project modules</p> <p>Our project has involved fruitful collaboration of mutual benefit with colleagues in different units across the University, for example, discussions with colleagues in the OU Library resulted in addition of links to library resources being added to the OJC website and hosting of adverts for OJC events on the library Training and events page. The involvement of Curriculum Manager Hazel Church facilitated creation of our dedicated OJC website and quiz and collaboration with FutureLearn colleagues led to the generation of the OJC microbadge. Indeed, enthusiasm for a digital microbadge, not only from OJC participants, but also visitors to the OJC website, suggests that provision of badged online content to support study skill development may be welcomed by students.</p> <p>We propose an online journal club for ALs, to offer them the opportunity to enhance their academic currency and deepen connections with other ALs as part of an academic community; AL OJC might provide a vehicle for CPD, which compliments programmes currently in place. We envisage that AL journal clubs could take the form of mini presentations by several ALs followed by time for collegiate discussion. Examples of possible topics could include an overview of an aspect of their research or scholarship project, some interesting news in their academic field, discussion of a case-study to illustrate an aspect of student support / teaching, or an update about an aspect of their involvement within the University e.g. what it is like to serve on the AL Assembly. We have submitted a proposal to the STEM By-ALs for ALs programme to pilot this type of journal club.</p> <p>Following on from the success of OJC, our model was adapted to transfer the enriching experience of journal club to the face-to-face</p>
90	16	Jan-20	20E-VM-WELS-01	Victoria Murphy	<a href="#">Students' support networks during lockdown.</a>	Equality, diversity and inclusion	Social network analysis; student support; mental health; COVID-19; longitudinal		WELS	Eileen Scanlon (WELS), Kate Lister (RES) and Laura Dean (AL)	May-20	Project completed	Due Feb-22		
91	5	Sep-13	13L-SNST-EI-01	Suresh Nesaratnam and Shahram Taherzadeh	<a href="#">The use of smart phones to enhance teaching in environmental engineering and environmental science modules</a>	Technologies for STEM learning	Smart phone, apps, environmental science, engineering, noise measurement, water quality analysis		E&I		Dec-13	Project completed	Sep-14	<p>This report has shown that there are several apps available that can be used in the field of environmental monitoring. Two of the apps were tested by novice groups of users. The apps, many of which are free, can be incorporated into the teaching of environmental engineering and environmental science. Importantly, the apps can be used in teaching communities to generate real-time data that can be uploaded to a central server and can then be available for others to use.</p>	
92	12	Jan-18	17F-SNST-EI-02	Suresh Nesaratnam and Shahram Taherzadeh	<a href="#">Pilot trial of a smart phone App for ascertaining water quality</a>	Technologies for STEM learning	Smart, App, water quality, practical activities, practical skills	T868	E&I		Jun-18	Project completed	Mar-19	<p>The use of smart phone Apps promises potential for skills development amongst students studying technological subjects. For T868, these Apps can be a means of acquiring environmental data from diverse regions, and this data can be used towards teaching environmental engineering. It is best if bespoke Apps are created specifically for use on the module.</p>	
93	13	Jul-18	18K-KN-LHCS-01	Karen New	<a href="#">Use of augmented reality in a second level human biology module: benefits and challenges</a>	Technologies for STEM learning	Augmented reality, AR, biology, student perspective, practitioner perspective, SK299	SK299	LHCS	Kerry Murphy and Lynda Cook (LHCS)	Nov-18	Project completed	Apr-20	<p>As primary stakeholders, the results of the project have been discussed with the Module Team Chair (Kerry Murphy) and the author of the Cardiovascular Topic (Lynda Cook) to consider impact on teaching strategy. The results suggest that some students may have found downloading and running the Heart App challenging, and as a result, the instructions associated with the Heart App within the OpenScience Laboratory have been made clearer. It may be the case that once this initial step is made clearer to students, there will be an impact on later experiences. These instructions will also need clarification with the Apple App Store, as the Heart App is available to a wider audience beyond the OU - this will impact users outside of the confines of the module.</p> <p>As the majority of students who responded to the 181 and 171 student surveys reported that they had not used augmented reality applications before, a short video has also been produced, which will be added to the SK299 module website, to clearly demonstrate to students what the Heart App should look like, when it is running in full AR mode. This should remove any uncertainty as to whether the Heart App is running in desktop 2D mode, or AR mode and ensure that the students can fully use all the designed features, and hence may more fully support learning. Additionally, the check boxes and radio buttons have been maintained on the module website, and it is anticipated that these will be collected data each year, to assess usage of the Heart App.</p> <p>This project found that over three quarters of students reported that they would like to see augmented reality used more often to support learning, which suggests that students have an appetite for the use of new technologies.</p> <p>The results of the project indicated that ALs may not necessarily be aware of the Heart App and as a result of this, as Link Staff Tutor for SK299, in conjunction with the Module Team, we will provide further guidance to encourage them to use the Heart App themselves, to help them appreciate the student experience. ALs will also be encouraged to post a message in their tutor group forums, to support students use of this learning tool.</p>	
94	14	Jan-19	19F-KNFMHG-LHCS-01	Karen New, Fiona Mooman and Hannah Gauci	<a href="#">Summer Series of Journal Clubs: an opportunity to develop employability skills and a sense of community amongst students in secure environments</a>	Supporting students	SISE, Secure units, prisons, journal club, skills, community		LHCS	Lynn Scott and the wider OU SISE Team (AS)	Jun-19	Project completed	Jan-21	<p>In order to incorporate student voice into Summer Series events, students were also asked what could be done to improve Summer Series journal club events, and over half the students would have liked more time for each event. Students in both prisons were keen to have more journal club events. Our findings suggest that students are keen to take advantage of opportunities for educational activities and that Summer Series events may provide the 'mechanism' towards education (Safins, et al., 2018). Summer Series events would therefore seem to be in alignment with Crabbe and James (2016) who, although talking about accredited courses, suggested that a series of very short courses, not necessarily academic, might provide transferable skills aiding future employment.</p>	

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95	5	Sep-13	13L-VN-EEES-01	Victoria Nicholas	<a href="#">Gathering student perception about online/distance practical science at level 1</a>	Online/onscreen STEM practice	Online, practical science, student perception, level 1	S141, S155	EEES	David Robinson (EEES), Steve Swithenby (LHCS) and Jane Kendall-Nicholas	<i>Gathering student perception about online/distance practical science at level 2</i>	Dec-13	Project completed	Feb-16	The interviews confirmed the anecdotal evidence that students felt more positive about studying practical science online after they had studied the modules and 71.2% of students were pleased that they participated in the module. High percentages of students agreed that they were able to carry out practical science when it suited them and that they were able to design experiments and draw conclusions from experiments with other distance learners. There was an increase in students agreeing that they were able to learn well by reading text on screen. Only a low percentage of students agreed that their group found it easy to make group decisions together, this aspect of collaborative group work forms the basis of another ongoing eSTeEM project.
96	7	Feb-15	15G-VN-EEES-02	Victoria Nicholas	<a href="#">Gathering student perception about online/distance practical science at level 2</a>	Online/onscreen STEM practice	Online, practical science, student perception, level 2	S382, SXP288, SXHL288	EEES	Nicholas Braithwaite (Deanery), Mark Hirst (LHCS), Ulrich Kolb (SPS), Marcus Brodeur (Deanery), Dave Edwards and Sarah Chyirwsky (ALs)	<i>Gathering student perception about online/distance practical science at level 1</i>	Jul-15	Project completed	Due Feb-22	
97	8	Oct-15	16A-AN-SPS-01	Andrew Norton	<a href="#">Assessment analytics of student engagement with, and performance on, S217 online quizzes</a>	Innovative assessment	Assessment, analytics, student engagement, online quizzes, TMA's	S217	SPS	Alan Cayless (AL)		Jan-16	Project completed	Aug-16	As a result of these investigations, some adjustments to the placement of the quizzes in the Study Calendar and to the structure of the self-reflection questions in each TMA have been made for the next module presentation.
98	10	Dec-16	17E-AOADIAB-WELSKMIEH-01	Ale Okada, Anna De Liddo and Andrea Berardi	<a href="#">VISION - Visual Interfaces for Systematisng and Interpreting Online Notes</a>	Online/onscreen STEM practice	Lightmap, Onscreen Annotation, Digital reading, Paperless learning, Higher Education	T891	WELS, KMI & E&I	Michelle Bachler, Anna Karine Rocha, Alexandre Costa (KMI), Luzianna Rosa and Simone Bechler (LDS)		May-17	Project completed	Feb-21	This exploratory study has provided important insights for further investigations about student experience, teaching including supervision of PhD students interested in annotation and mapping. The impact of this project outside the OU was through LiteMap community of external users; which has increased significantly with examples provided by the COLearn Community. Previous studies show that mapping supports forum discussions, writing and teamwork (Okada et al, 2014). However, there is not enough research on annotation and how it can improve both mapping and interpretation of online content. This study enabled: <ul style="list-style-type: none"> <li>• Technological improvement of LiteMap,</li> <li>• Showcase of examples of annotations and maps applied in various contexts,</li> <li>• New approaches for online learning through annotations and mapping including hint-icons</li> </ul>
99	10	Dec-16	17E-SPCH-MS-01	Sue Pawley and Chris Hughes	<a href="#">Supporting MST224 students with bridging material during their transition from level one mathematics</a>	Supporting students	Bridging interventions, revise and refresh, transition, retention, tutor support forums, level 1, level 2	MST124, MST224	M&S	Tim Lowe and Robert Hasson (M&S), Anne Rhodes, Linda Brown, Paul Twine (ALs)	<i>Pawley - Exploring the extent of maths anxiety within the STEM faculty at the Open University</i>  <i>Hughes - Evaluating the accessibility of an alternative format of module materials in Maths &amp; Stats</i>  <i>Hughes joint PL - Usage of Early Alerts Indicators on two level 1 modules</i>  <i>Hughes joint PL - Welsh-medium tuition in Level 1 Mathematics</i>  <i>Hughes joint PL - Sonification of depictions of numerical data</i>  <i>Hughes joint PL - Sonification partial pilot on M140</i>	May-17	Project completed	Nov-18	The revise and refresh for MST224 site has now been augmented to cover revision for students preparing to study MST125: Essential mathematics 2 and M248: Analysing data.  We are currently liaising with two teams within the School of Mathematics and Statistics who are creating further R&R sites, one for level 3 mathematics and statistics modules, and another for MST210: Mathematical methods, models and modelling and M208: Pure mathematics, which will both be launched in 2019. Along with revise and refresh for MST124, this suite of resources will then cover the majority of the modules for the mathematics and statistics undergraduate qualifications as well as modules taught as part of degrees within other schools such as engineering and science.  The team are in the early stages of discussions for disseminating the information to the Sigma (mathematics support centre) Network steering group who are interested in our distance learning support techniques to further
100	1 AL	Feb-19	19F-CP-CC-01	Cathryn Peoples	<a href="#">Personalised Student Support Plans: Examining the Effectiveness of Support Recommendations made by Students</a>	Supporting students	Accessibility of support, personalised support, student diaries, instant chat, online learning community, synchronous support, asynchronous support	TM354	C&C		<i>Support for Students. Teaching for Tutors. An Investigation into the Encouragement of Lower-performing Students to Engage with their Module, their Peers, and their Tutor</i>	Jun-19	Project completed	Jan-21	It was found during this study that the students who engage more regularly and routinely with increased levels of support are the naturally stronger and more competent students. The students who may benefit the most from more support and from a supportive learning environment were found to not engage. Overall engagement with the support on offer during the programme was therefore on a lesser scale than anticipated. However, it is significant to note that retention on the module during the academic year when the programme was running was significantly improved in comparison to the previous academic year. This finding is an interesting one, given who and how many students engaged. The finding may provide evidence that not all students wish to be part of a learning community, but that the fact of knowing that the support is available is enough to encourage students to continue with their study in a way which is satisfying to them.
101	2 AL	Mar-20	20G-CP-CC-02	Cathryn Peoples	<a href="#">Support for Students: Teaching for Tutors. An Investigation into Ideas on Encouraging Students to Engage</a>	Supporting students	One-on-one support, lower performing students, peer support, widening access, pre-module student characteristics		C&C	Richard Foley (AL) and Leonor Barroca (C&C)	<i>Personalised Student Support Plans: Examining the Effectiveness of Support Recommendations made by Students</i>	Aug-20	Project completed	Due Jan-22	
102	1	Feb-11	11F-PP-CC-01	Paul Piwek	<a href="#">Argumentation Education (ArguEd)</a>	Innovative assessment	Assessment, argument, mapping, analysis, ICMA, OpenMark	TU100	C&C	John Woodthorpe (C&C), Crispin Boyd (STEM Deanery), Phil Butcher and Callum Lester (LDS)	<i>Joint PL - Student co-design of confidence-building formative assessment for Level 1 Computing &amp; IT students</i>	Jun-11	Project completed	Mar-14	A novel type of ICMA question was implemented (using OpenMark) and deployed in TU100 (~2000 students per presentation) and is still in use.  As a result of the analysis of student mistakes in the TMA question on argument mapping, material for a tutorial session was developed for the TU100 day school. This is in use by tutors at the day school.
103	14	Jan-19	19F-PPSS-CC-01	Paul Piwek and Simon Savage	<a href="#">Student co-design of confidence-building formative assessment for Level 1 Computing &amp; IT students</a>	Innovative assessment	Formative and summative assessment, quizzes, student engagement, student reflection, co-design, participatory design	TM112	C&C		<i>Piwek - Argumentation Education (ArguEd)</i>	Jun-19	Project completed	Jan-22	

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104	15	Jul-19	19I-APCB-MS-01	Andrew Potter and Colin Blundell	<a href="#">Blended tutorials in Mathematics: simultaneous F2F and online learning events</a>	Technologies for STEM learning	Blended tuition, online synchronous conferencing, remote access, mathematics learning, face-to-face tuition, online tuition, Adobe Connect, handwriting on screens, use of tablets for learning, technological innovation	M337	M&S		<p><i>Potter joint PL - Developing students and tutors perceptions of good mathematical communication on level one service mathematics module MU123: an investigation</i></p> <p><i>Potter joint PL - Associate Lecturer Reflections on Student Perceptions of Usefulness of Level 1 Service Mathematics</i></p> <p><i>Potter joint PL - Welsh-medium tuition in Level 1 Mathematics</i></p> <p><i>Blundell - Investigation into running course specific taster tutorials within prisons for non-OU students</i></p>	Oct-19	Project completed	Sep-21 - with TC for review	
105	14	Jan-19	19E-APGG-MS-01	Andrew Potter and Gerry Golding	<a href="#">Associate Lecturer Reflections on Student Perceptions of Usefulness of Level 1 Service Mathematics</a>	Supporting students	Service mathematics, service teaching, usefulness, student perceptions, student attitudes, threshold concepts, discourse	MU123, MST124, MST125, M140	M&S		<p><i>Potter and Golding joint PLs - Developing students and tutors perceptions of good mathematical communication on level one service mathematics module MU123: an investigation</i></p> <p><i>Potter joint PL - Blended tutorials in Mathematics: simultaneous F2F and online learning events</i></p> <p><i>Potter joint PL - Welsh-medium tuition in Level 1 Mathematics</i></p>	May-19	Project completed	Due Mar-22	
106	12	Jan-18	18F-NPSCCECR-LHCS-01	Nicholas Power, Simon Collinson, Eleanor Crabb and Rob Janes	<a href="#">Online remote experiments in chemistry - analysis of delivery, assessment, tracking and student perception</a>	Online/on-screen STEM practice	Online, remote access experiments, real science, student engagement, performance, perception, laboratory	S215, S315	LHCS		<p><i>Crabb joint PL - Developing responsive approaches to enhance personalized learning in selected LHCS modules</i></p> <p><i>Crabb joint PL - Improving success and satisfaction of credit transfer students entering L3 modules in Science</i></p> <p><i>Crabb - Online Summer Schools</i></p> <p><i>Janes joint PL - Utilising the Teaching Tricky Topic process to Identify and Address Student Misunderstandings across Three OU Modules</i></p> <p><i>Janes joint PL - Using technology-enabled learning networks to drive module improvements in STEM</i></p> <p><i>Collinson joint PL - Can a new OU Study App enhance the learning experience of students on S350, an online only module?</i></p>	Jun-18	Project completed	Due Mar-22	
107	12	Jan-18	18H-RQ-EI-01	Rongshan Qin	<a href="#">Visual Interactive Learning of Engineering Concepts</a>	Technologies for STEM learning	Visual interactive learning software, proof of concept study, interactive toolkit	T176, T276, T357	E&I	Richard Moat (E&I) and Salih Gungör (E&I)		Aug-18	Project completed	Aug-21	<p>The computing community in UK and the world has produced vast amount of code package and data to simulation engineering problem for research purpose. Many code packages are free to use for academic purposes. The publication of the raw data for sharing and further implementation becomes an increasing requirement by many journals. Those resources could be used in teaching to assist engineering students to achieve better understanding of the engineering problems, aware of novel solutions and get insight to the fundamental mechanisms.</p> <p>The sprint of the method is to have an interactive interface so that students are able to change the parameters in whatever ways they liked and to view and analyse the change of other related parameters in a virtual three-dimensional environment. This helps student to summarize and then build up a relationship between parameters in the engineering problem. From the visual interactive learning, the fundamental concepts are formed naturally in students' mind at more enjoyable manner. We have built up three cases during the period of this scholarship project.</p>
108	8	Oct-15	16A-LR-CC-01	Lucia Rapanotti	<a href="#">Measuring qualification effects of a new pedagogy which embeds learning and assessment activities within each student's rich professional context of practice</a>	Employability	Employability, research skills, professional context of practice, post graduate, assessment		C&C	Jon G. Hall, Steven Self, Mark Slaymaker (C&C) and David King (AL)		Jan-16	Project completed	May-17	<p>Overall, we think that the combination of techniques we have developed and applied to identify, extract and analyse data for this project can be seen as contributing to an overall evaluation framework, which could be used not just for this project, but in general for studies of a similar nature. That said, the framework still needs adjusting and evaluating, so that further work is required. In particular, this research will benefit from a follow-up project.</p> <p>The project has already triggered interventions within the modules under study in order to improve retention. Outcomes are being monitored on ongoing presentations.</p> <p>The project was able to surface and share good practice, which has already led to adaptations of some of the teaching and assessment within the modules</p>
109	14	Jan-19	19C-CRAMG-EI-01	Clare Reger and Anne-Marie Gallen	<a href="#">Evaluating the level 1 engineering tutors resource</a>	Academic professional development	Evaluation, shared resources, associate lecturers, tuition	T192, T193, T194, T198, T176	E&I	Cheng Lee (AL) and John Bromley (AL)		Mar-19	Project completed	Oct-19	<p>The project aimed to evaluate the existing resource site in terms of its usefulness, availability and accessibility for ALs. The anticipated impacts were the potential improvement of the current site and the development of a new site for level 2 Engineering modules, which were to be informed by AL feedback. In addition, it was hoped that if the findings suggested that the current arrangement has been useful for ALs, it would be possible to share the outputs to inform the development of a resource site for other departments or schools. In order to achieve this, it was hoped that a template could be developed to support the use of this approach elsewhere.</p> <p>For ALs, the intended impacts of the project were to be improved peer learning and sharing of resources whilst for students, it was hoped the impacts will be a greater consistency of AL support across modules and between presentations.</p> <p>Outcomes from the project were to be shared across the tutor forums of each of the modules participating, and across level 2 engineering modules and within the School of Engineering and Innovation; they could also be extended across STEM as well. Finally, it has been agreed that a SHARE First Friday session, led by the ALs working on the project, might also be offered in March 2020 and a poster presentation submitted for eSTeEM 2020.</p> <p>To date, the level 2 engineering site has only been shared with the T272 tutors, for use during their 2019D presentation. The next stage is to hold a hard launch for the site across the other modules including T271 in November 2019 and T276 in February 2020. The findings summarised in this report will also be shared with the tutors who were sent the survey initially. However, based on the outcomes above the team are seriously considering whether the site could be re-housed on a VLE site that better meets its needs.</p>
110	5	Sep-13	13L-MR-EI-01	Martin Reynolds	<a href="#">Enhancing Systems Thinking in Practice at the Workplace</a>	Employability	Employability, systems thinking, post graduate, work based learning, communities of practice		E&I	Ray Ison, Christine Blackmore (E&I), Rupesh Shah and Elaine Wedlock (AL)		Dec-13	Project completed	Aug-16	<p>The findings of this research will inform the future development of the STIP programme. One significant measure of success in the process of undertaking the research is the unique opportunity to engage with meaningful conversation around pedagogic development at postgraduate level amongst three sets of stakeholders:</p> <ul style="list-style-type: none"> <li>• STIP students outside of their OU module environment</li> <li>• STIPers – alumni of STIP – with their benefit of in-work post-study experience</li> <li>• STIPer – employers</li> </ul> <p>Each set of respondents demonstrated a keenness to continue with the conversation around clear mutually beneficial initiatives.</p>

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111	10	Dec-16	17C-MR-EI-02	Martin Reynolds	<a href="#">Framing Professional Competencies for Systems Thinking in Practice</a>	Employability	Employability, systems thinking, work-based learning, communities of practice		E&I	Jitse van Ameijde (LDS), Rupesh Shah (AL)	<i>Enhancing Systems Thinking in Practice at the Workplace</i>  <i>Joint PI - Changing the way the game is played: transforming postgraduate curriculum praxis and workplace capabilities</i>	Mar-17	Project completed	Jun-18	As with the first phase of the eSTeEM project 'Enhancing systems thinking in practice at the workplace', the findings of this research will inform the future development of the STIP programme, particularly as it unfolds during the approved refresh of the two core modules for 2020. A continued measure of success in undertaking the inquiry is the opportunity to engage with meaningful conversation around pedagogic development at postgraduate level and the wider role of higher education in society amongst four sets of stakeholders:  <ul style="list-style-type: none"> <li>• STIP educators within and beyond The Open University</li> <li>• STIP alumni with their benefit of in-work post-study experience</li> <li>• STIP employers</li> <li>• STIP related professionals</li> </ul> Each set of respondents demonstrated a keenness to continue with the conversation around clear mutually beneficial initiatives.  Through orchestrated conversations, we will continue developing a platform for managing a system to support systems thinking in professional practice and/or systems thinking in practice as professional practice. The work here will provide a helpful complement to the development of a postgraduate (Level 7) Systems Thinking Practitioner Apprenticeship scheme being developed and led by Ray Ison and the ASTIP team at OU in collaboration with a consortium of employers from different sectors, with financial and human resource support secured from The Open University. The employer-led consortium will be responsible for setting up Standards for the proposed 'trailblazer' Systems Thinking Practitioner apprenticeship.
112	12	Jan-18	18E-MRRI-EI-01	Martin Reynolds and Ray Ison	<a href="#">Changing the way the game is played: transforming postgraduate curriculum praxis and workplace capabilities</a>	Employability	Employability, systems thinking, postgraduate, competencies, learning outcomes, apprenticeship	TU811, TU812	E&I	Rupesh Shah (E&I), Jitse van Ameijde (LDS), Helen Wilding and Mike Walker (ALs)	<i>Reynolds - Enhancing Systems Thinking in Practice at the Workplace</i>  <i>Reynolds - Framing Professional Competencies for Systems Thinking in Practice</i>	May-18	Project completed	Due Jan-22	
113	6	Jun-14	14L-LR-EI-01	Linda Robson	<a href="#">A quantitative and qualitative investigation into communications sent to students for selected level 1 MST and science modules</a>	Supporting students	Email communications, student experience, level 1	S142, S0K125, U1116	E&I	Linda Robson, Nicolette Haggood (LHCS), Nigel Gibson, Christine Harris and Carole Arnold (ALs)	<i>Assessment banking – useful break or deferred withdrawal? An investigation of the outcomes and experience for students who have assessment banked</i>	Dec-14	Project completed	Dec-15	The participants in this study told us that students prefer to receive the majority of communications from the OU by email. Whilst some feel that there is a need for more personalisation in the messages we send, they are happy to filter the messages themselves and select which are relevant. Students in all three of our sample groups underestimated the number of email communications they receive from the university, despite the majority of them checking spam filters giving a high level of confidence that messages are being received. Many students reported that they filter the messages themselves, which may account for the perception of receiving fewer messages. Despite the lack of awareness of the volume of messages being received, students are happy with both the mode and number of communications. <b>Recommendation 1:</b> Email should continue to be the primary mode of communication between students and the main hub of the university. <b>Recommendation 2:</b> The subject field of emails to students should be used thoughtfully to assist students in filtering and searching for particular messages or information. The scope of this study was focused on investigating student feelings regarding the volume of messages they receive. Analysis of the data has highlighted that there is significant variation in the number of messages being sent to students studying the same module. Further work needs to be carried out to investigate why there is such variation. <b>Recommendation 3:</b> Further work should be carried out to investigate the variation in number of communications sent to students studying a single module. Although participants were asked if there was any information missing from the communications they had received, this study did not carry out any evaluation on the effectiveness of messages sent. <b>Recommendation 4:</b> Further work to be carried out to evaluate the effectiveness of our email communications.
114	11	Jul-17	17J-KR-MS-01	Katrine Rogers	<a href="#">Active learning in synchronous online tuition: increasing student interaction</a>	Supporting students	Active learning, synchronous, online, tuition, Adobe Connect, student engagement, tutor, perceptions	MS7224, MS327, MS373, MT365	M&S	Claudi Thomas and Hilary Holmes (M&S)		Sep-17	Project completed	Jul-19	Our results were encouraging with high student engagement in all types of activity, and students reporting that they found them both useful and enjoyable. Some differences were apparent between the different types of activity, with chat-box activities being less favoured. Lack of time and confidence were given as the main reasons for not participating, and perceived benefits of engaging included the ability to attempt similar questions and benchmarking against other students. We also found that technological problems remain significant, and that the demands on tutors are high. Further AL staff development is necessary to encourage more wide-spread use of these tools for active learning in online tutorials in Adobe Connect; our results provide motivation and practical tips.  The results have informed ALSD (see deliverables), and will continue to do so through the M&S ALSD group. The aim is to increase active learning in online tutorials, and to add to the current research literature on active learning in synchronous online tuition, thereby reaching students both within and outside the OU.
115	3	Oct-11	12B-ER-EEEE-01	Emma Rothero	<a href="#">Flight of the Fritillary</a>	STEM engagement	Engagement, schools, citizen science, Floodplain Meadows Partnership, volunteers, public, data collection	S396	EEEE	David Gowing, Mike Dodd, Mandy Dyson and Irina Tatarenko (EEEE)	<i>Flight of the Fritillary phase 2</i>  <i>Floodplain Meadows Partnership Ambassadors</i>	Feb-12	Project completed	Feb-14	Our project was mainly focussed on volunteer engagement and learning. Our feedback questionnaires and volunteer attendance suggests we have successfully engaged volunteers, encouraging them to return to surveys and to attend workshops. Our data is used in S396 to allow students to develop analytical skills of exploring data and using correlation to develop hypotheses. This project was listed in the REF submission as engaging the wider public in research where it formed part of an impact statement that was used as an example for others to follow.
116	6	Jun-14	15A-ER-EEEE-02	Emma Rothero	<a href="#">Flight of the Fritillary phase 2</a>	STEM engagement	Engagement, schools, citizen science, Floodplain Meadows Partnership, volunteers, public, data collection		EEEE	David Gowing, Mike Dodd, Mandy Dyson and Irina Tatarenko (EEEE)	<i>Flight of the Fritillary</i>  <i>Floodplain Meadows Partnership Ambassadors</i>	Jan-15	Project completed	Jun-18	Over six years the project increased the numbers of volunteers more than three-fold through wide advertising. Annual workshops were run to enable volunteers to engage in the findings and the research process. Volunteer attendance at counts and workshops was maintained and volunteer engagement assessed through questionnaires and interviews. Evidence arising from the project has led to new ecological information about a rare plant found on internationally important sites for nature conservation and more in-depth volunteer research is showing a link between the snake's-head fritillary and bumblebees.  Data collected by the project are used in 3 Open University undergraduate courses (S206, S396 and S397) and the project has maintained a wide external profile, engaging with many organisations outside the University and with slots on Countryfile, BBC Farming Today and BBC Wiltshire.  This project will be listed in the REF21 submission as part of an Impact Case Study around engaging the wider public in research.

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117	9	May-16	161-HR-MS-01	Hayley Ryder	<a href="#">Use of STACK to generate formative assessment for level 3 Pure mathematics</a>	Innovative assessment	STACK, computer aided assessment, formative assessment, examination preparation, revision, past papers, self-efficacy	M303	M&S	Joe Kyle (AL)	<i>Joint PL - Use of OULive recordings of 'live mathematics' and discussion forums on a level 3 Pure mathematics module in order to enable students to move to a growth mindset in maths and to add a social dimension to learning mathematics</i>  <i>Joint PL - Does the provision of an 'own working space' for tutors enhance the learning experience for students</i>  <i>Joint PL - Evaluating the increase in student wellbeing brought about by informal online sessions and computer generated worked examples on a level 3 pure maths module</i>	Oct-16	Project completed	Nov-19	The above findings suggest that students may be more likely to engage with formative assessment in the form of online practice questions if they believe them to be directly relevant to the exam. Encouraging engagement is important because the results suggest that active engagement with online practice questions may help performance at pure mathematics at Level 3, especially for students with grade 2 or 3 passes in relevant modules at Level 2. Students can feel more confident if given plenty of opportunity to self-test on resources specifically designed to mimic examinations.  These results will be disseminated and will inform the development of other similar quizzes. In addition similar techniques could possibly be used to create TMAs, individualised TMAs or TMA-like questions.
118	10	Dec-16	17ESSMS-CC-01	Steven Self and Mark Slaymaker	<a href="#">Refining a framework for measuring qualification effects</a>	Employability	Employability, post-graduate, students' professional context, research skills, pedagogical approach, framework, computing qualification		C&C	Jon Hall and Lucia Rapanotti (C&C)		May-17	Project completed	Due Jul-22	
119	12	Jan-18	18E-BSRH-LHCSLDS-01	Bryan Singer and Rafa Hidalgo	<a href="#">Improving student engagement during online-only courses through the use of interactive question-embedded videos</a>	Online/on-screen STEM practice	Education, online, educational videos, interactive learning, distance learning, embedded questions, interactive video	SDK100	LHCS & LDS	Carol Midgley (LHCS) and Vikki Haley-Mimar (LHCS)	<i>Singer - Teaching psychological concepts through Virtual Reality (VR)</i>  <i>Hidalgo joint PL - Investigating students perception of some of the key learning activities in T272</i>	May-18	Project completed	Feb-21	This research has highlighted that video, with the implementation of formative and summative questions, can successfully provide students with their preferred form of instructional media, which is also engaging and effective at promoting efficient distance learning.
120	17	Jul-20	20K-CSCW-M5-01	Cathy Smith and Charlotte Webb	<a href="#">Effective support for reflective writing: learning from improvers</a>	Equality, diversity and inclusion - APP	Participation, Reflective writing, Student voice, Mathematics education, assessment	ME321, ME322, ME620, ME625, ME626, ME627	M&S			Dec-20	Project completed	Due Jan-22	
121	1	Feb-11	11D-JS-FASS-01	Joe Smith	<a href="#">Creative Climate Learning: common resources on environmental change</a>	Technologies for STEM learning	Online content, environmental communications, digital scholarship, OERs, OpenLearn		FASS	Christine Pearson (E&I), Susan Fawcett (AL)		Apr-11	Project completed	Jun-12	Data collected by the project are used in 3 Open University undergraduate courses (S206, S396 and S397) and the project has maintained a wide external profile, engaging with many organisations outside the University and with slots on Countryfile, BBC Farming Today and BBC Wiltshire.
122	1	Feb-11	11D-PT-LHCS-01	Peter Taylor	<a href="#">The use of peer assessment/review in distance teaching via the Moodle VLE</a>	Innovative assessment	Peer assessment, review, Moodle, VLE, self-assessment, student experience	S104, ED209, T320, A850, S390, S366, TU100, T320, Y181	LHCS	Antonio Martins-Mourao (LHCS), Janet Dyke, Mansh Malik, Frances Chetwynd, Helen Jefferis, Christine Gardner, Sue Nieland, Chris Middup, Krushil Watene, Richard Frederick, Charlotte Schulze, Bettie Matheson (ALS)		Apr-11	Project completed	Sep-14	S815 is using peer assessment in 2014. SX*390 has expressed an interest in using it to develop the students abstracts. It is being used in a number of modules in Social Sciences.  The University agreed a number of principles for assessment of which number 6 is "Students should be given opportunities to engage in and develop their skills in peer review and self-assessment."  As well as persuading LTI to release the workshop tool to all modules I have subsequently worked with LTI in developing a guide on workshop for Module teams to use.
123	6	Jun-14	14I-ET-CC-01	Elaine Thomas	<a href="#">Using OpenStudio in STEM learning</a>	Technologies for STEM learning	OpenStudio, audio visual resources, student interactions, artefacts, creative practices, community of practice		C&C	Leonor Barroca, Helen Donegan, Karen Kear and Jon Rosewell	<i>Hybrid/Digital Networked Learning scruffy mongrel or sleek new breed? Practices and implications of blending physical and digital resources for learning in HE</i>	Oct-14	Project completed	Dec-18	The design of activities involving OpenStudio should also take account of the following recommendations: <ul style="list-style-type: none"> <li>• Students should be provided with guidance on giving feedback to their peers and, importantly how to evaluate the feedback they receive from their peers.</li> <li>• Students need time to develop the confidence and the skills to offer more 'in-depth' feedback to their peers. Confidence increases with the student's experience of study.</li> <li>• Time management skills are particularly important for students carrying out activities in OpenStudio where students are dependent on each other for feedback, so they need advice on these skills.</li> <li>• Where possible, aligning the different stages of commenting activities to a specific time frame is helpful to ensure that students receive peer feedback at appropriate times.</li> <li>• The learning activity should take account of Kolb's experiential learning cycle so that students have an opportunity to review their artefact in the light of their reflection on the feedback they have received.</li> </ul> Finally, OpenStudio offers a means of collecting and curating digital artefacts for the duration of a module so students can look back over their work. However, it is not possible currently for students to carry over their work in OpenStudio from one module to another. This might be something to consider for further development of OpenStudio in future.
124	4	Oct-12	12L-ETSWSD-CCEES-01	Elaine Thomas, Steve Walker and Sarah Davies	<a href="#">Hybrid/Digital Networked Learning scruffy mongrel or sleek new breed? Practices and implications of blending physical and digital resources for learning in HE</a>	Technologies for STEM learning	Digital resources, networked resources, networked learning, hybrid digital material, PIRATE, SenseBoard		C&C & EEES	Steve Walker (C&C) and Sarah Davies (EEES)	<i>Thomas joint PL - Using OpenStudio in STEM learning</i>  <i>Walker - Infinite Bandwidth Zero Latency - IBZL2</i>  <i>Walker joint PL - Piloting OU Analyse and the Student Probabilities Model on 12 STEM Modules</i>  <i>Davies joint PL - Geospatial technologies in distance learning and teaching in Science</i>  <i>Davies joint PL - Disseminating inclusive field teaching - sharing resources and practices across disciplines and institutions</i>  <i>Davies - Place-making and student identity in fieldwork learning</i>  <i>Davies - Embedding research into teaching: practices, motivations and impacts</i>  <i>Davies - Investigating Barriers and Inclusive Messaging around Fieldwork Learning in the Earth, Environmental and Ecological Sciences</i>	Dec-12	Project completed	Nov-15	This project will be listed in the REF21 submission as part of an Impact Case Study around engaging the wider public in research.

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125	9	May-16	161-ETSKMHJ-CC01	Elaine Thomas, Soraya Kouadri Mostefaoui and Helen Jeffers	<a href="#">Visualising the code: are students engaging with programming at level 1?</a>	Technologies for STEM learning	Programming teaching, visual programming, computer science education, student engagement	TU100	C&C		<i>Thomas joint PL - Hybrid/Digital Networked Learning scruffy mongrel or sleek new breed?</i>  <i>Thomas - Using OpenStudio in STEM learning</i>  <i>Kouadri Mostefaoui - Assessing 'alternative media' elements: is there a generic model?</i>  <i>Kouadri Mostefaoui joint PL - Supporting Degree Apprenticeship students: Tutors' and Students' perspectives</i>  <i>Kouadri Mostefaoui joint PL - Are You Ready for Your Studies - Are we Assessing Students Readiness? An evaluation of the usefulness of the Level 2 ARFY quizzes</i>  <i>Kouadri Mostefaoui joint PL - Using BiteSize Videos to Enhance Students' Experiences in a Level 2 Programming Module</i>  <i>Kouadri joint PL - Modern Container-based Learning Interface and Delivery Infrastructure (MCLDI)</i>  <i>Kouadri Mostefaoui joint PL - Analysis of COVID-19's impact on BAME students' attainment (A case study of Level 1 C&amp;C Open University modules)</i>	Oct-15	Project completed	Jul-19	The project began its work when the design of the new Level 1 Computing and IT curriculum had already been decided and production was underway. However, the main impact of this project is to establish that the School of Computing and Communications decisions on the design and development of the new Level 1 curriculum were well-founded. The project has confirmed that our impressions of the variation in students' responses to the teaching of programming in TU100 My digital life were correct. Therefore, the project will provide a reference point for future studies on the teaching of programming at Level 1 in the School. In addition to disseminating the work of project within the University, we were able to present our work at an international conference in Zagreb and so promote the School's approach to the teaching of programming to an international audience.
126	10	Dec-16	17F-LTNM-LHCS01	Linda Thomson and Nicola McIntyre	<a href="#">Online tutorial design: can we do better?</a>	Supporting students	Online, synchronous tutorials, group tuition policy, flipped lectures, tuition strategies, attendance	SDK100, SD329	LHCS	Gerry Golding (M&S)	<i>Thomson joint PL - The impact of live streaming module-wide events in student engagement and motivation</i>	Jun-17	Project completed	Due Feb-22	
127	12	Jan-18	18E-LTMV-LHCS01	Linda Thomson and Maria Velasco	<a href="#">The impact of live streaming module-wide events in student engagement and motivation</a>	Technologies for STEM learning	Online, tuition, interactive labcasts, science community building, student engagement	S111	LHCS	Kate Bradshaw (STEM Deaney)	<i>Thomson joint PL - Online tutorial design: can we do better?</i>	May-18	Project completed	Due Mar-22	
128	16	Jan-20	20F-MT-EI-01	Maria Townsend	<a href="#">The value to students of drop-in tutorials to support assessment</a>	Supporting students	Drop-in tutorials, online, student participation, assessment support	U116	E&I	Wendy Berndt and Emma Champion		Jun-20	Project completed	Due Feb-22	
129	7	Feb-15	15G-KVCH-M&S-01	Karen Vines and Chris Hughes	<a href="#">Sonification of depictions of numerical data</a>	Equality, diversity and inclusion	Inclusivity, visually impaired students, sonifications, numerical data,	MU123, MST124, M140, S104	M&S	Hilary Holmes (M&S), Vic Pearson, Laura Alexander (SPS), Claire Kotecki (LHCS), Chetz Colwell	<i>Sonification partial pilot on M140</i>  <i>Hughes joint PL - Supporting MST224 students with bridging material during their transition from level one mathematics</i>  <i>Hughes - Evaluating the accessibility of an alternative format of module materials in Maths &amp; Stats</i>	Jul-15	Project completed	Dec-16	The aim of this study was to see how effective sonifications can be as alternate accessible versions of plots and graphs in module materials. The results in this study show that the sonifications did enable most of the participants to get the gist of the plot; this was despite being initially unused to being presented with plot and graphs in this format. Greater experience with sonifications should only increase participants' ability to interpret plots and graphs given in this format. The sonifications also enabled the participants to gain an impression of the plot or graphs quickly; each of the sonifications was only 6 seconds long. Although participants generally listened to sonifications more than once, using them did not add significantly to study time. Participants indicated that listening to sonifications was not an unpleasant experience, and expecting students to cope with multiple sonifications in a single study session does not appear to be an unreasonable ask. Based on this we feel that sonifications of plots and graphs should, where possible, be made available to students. Phase two of the project is piloting sonification on M140
130	10	Dec-16	17E-KVCH-M&S-02	Karen Vines and Chris Hughes	<a href="#">Sonification partial pilot on M140</a>	Equality, diversity and inclusion	Accessibility, inclusion, visual impairment, disability, sonification, learning analytics	M140	M&S	Carol Calvert (M&S) and Chetz Colwell	<i>Sonification of depictions of numerical data</i>	May-17	Project completed	Apr-18	We have concluded the following: 1. It is possible to include audio graphs on modules website, even for modules where the material is not delivered via structured content. 2. Although only a minority of students appeared to get a benefit from the audio graphs, the instances in which it appeared to detract from the study of others were very rare. 3. Where audio graphs are to be used, guidance about how to interpret them should be offered. In particular reassurance about what is and is not reasonable to pick up from them. 4. Some further technical development of the method by which the audio graphs are produced is desirable.
131	2 AL	Mar-20	20G-RW-CC-01	Richard Walker	<a href="#">Remote sighted helper support for visually impaired students: exploring good practice: Stage 1</a>	Equality, diversity and inclusion	Accessibility, VI, sighted helper, remote support, visual programming	TM111	C&C	Christine Gardner (C&C) and Sarah Mattingly (M&S)		Jul-20	Project completed - need to amend category on website	Dec-20	TM111-specific recommendations In conducting this action research the project team became aware of TM111-specific issues for VI students: • As mentioned previously one student requested a comprehensive list of the OUBuild code blocks, in textual form, which the sighted helper drew up. This may well be useful to VI students more widely. The project team will make a version of this available to all students via the module website. • Questions in TM402, the programming part of the module assessment, typically have "starter projects", partially constructed OUBuild programs which students are asked to complete. Feedback from the RS helper indicates some VI students would benefit from textual descriptions of these starter projects. • At various points the online module materials direct the student to video resources but without providing a direct link. Although the videos are hosted on the module website VI students are likely to have  A synopsis of the report and guidelines above will be made available to RS helpers and VI students on future TM111 presentations. They will also be disseminated as appropriate across module teams and support staff involved in advising students with disabilities (precise details to be determined in consultation with advisory staff).
132	1	Feb-11	11D-SW-CC-01	Steve Walker	<a href="#">Infinite Bandwidth Zero Latency - IBZL2</a>	Technologies for STEM learning	Next generation networks, broadband, futrescaping, imagine/triple task		C&C	Simon Bell (E&I)	<i>Joint PL - Piloting OU Analyse and the Student Probabilities Model on 12 STEM Modules</i>	Apr-11	Project completed	Feb-12	Ww have used the IBZL approach successfully to engage over 40 people from a range of backgrounds in generating 25 named output ideas. Comfortably over half of these participants have either been engaged in the second phase or indicated that they would like to be. Three consortia have been formed to take on specific ideas to their next stage of development. The outcomes of the work of these consortia will be reported later. One area for improvement in future IBZL workshop activities is the reporting and recording of the work of the working groups within the workshop format, to allow both for a clearer link to subsequent developments and to support systematic evaluation. We have not attempted to define the kind of applications that can be developed. We are exploring whether the approach we have developed can be successfully used to address more specific NG problems (such as educational applications) as part of a significant extension of the IBZL approach in STEM.



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133	14	Jan-19	19D-JW-LHCS-01	Janette Wallace	<a href="#">Evaluating student perspectives of different types of learning events provided on SK228, a level 2 LHCS module</a>	Supporting students	SDK228, tutorials, interactive, enjoyment, engagement, informal, workshop	SDK228	LHCS	Isabella Henman (AL) and Claire Rastron (LHCS)	<p>Assessing the effectiveness of the induction process for novice Associate Lecturers in the School of Life Health and Chemical Sciences in preparing them for the Associate Lecturer role</p> <p>Does attendance at unrecorded online module wide tutorials on a science module enhance student enjoyment, engagement and success? How might this impact tuition strategy for current and future LHCS modules?</p> <p>Joint PI - Evaluating a new STEM AL induction programme</p> <p>Joint PL - Impact of introducing new practical and dataset project options to the science undergraduate capstone project module (S390)</p>	Apr-19	Project completed	Sep-21 - with TC for review	
134	12	Jan-18	18E-JWHG-LHCS-01	Janette Wallace and Hannah Gauci	<a href="#">Assessing the effectiveness of the induction process for novice Associate Lecturers in the School of Life Health and Chemical Sciences in preparing them for the Associate Lecturer role</a>	Academic professional development	Associate Lecturers, ALs, induction, academic support, novice, working practice, practitioner, confidence	SK299	LHCS		<p>Wallace - Does attendance at unrecorded online module wide tutorials on a science module enhance student enjoyment, engagement and success? How might this impact tuition strategy for current and future LHCS modules?</p> <p>Wallace joint PL - Impact of introducing new practical and dataset project options to the science undergraduate capstone project module (S390)</p> <p>Gauci joint PL - Summer Series of Journal Clubs: an opportunity to develop employability skills and a sense of community amongst students in secure environments</p> <p>Evaluating a new STEM AL induction programme</p> <p>Gauci joint PL - Impact of introducing new practical and dataset project options to the science undergraduate capstone project module (S390)</p>	May-18	Project completed	Jul-21 - with TC for review	
135	10	Dec-16	17E-AW-CC-01	Ann Walshe	<a href="#">Towards A Structured Process for Involving ALs in Module, Tuition Strategy Design and Review</a>	Supporting students	Tuition, Associate Lecturers, module group tuition strategy toolkit, module design, review		C&C	Simon Savage (C&C) and Sharon Dawes (AL)	<p>Joint PL - Perceptions, Expectations and Experience of Group Tuition: towards a shared understanding amongst stakeholders</p> <p>Joint PL - Investigating the perceived benefits to computing students of remote pair programming</p>	May-17	Project completed	Jan-19	<p>Although the intention of the review had been to collect feedback about the tuition strategy designs, much of the feedback was about how the strategies had been implemented and some feedback was about other aspects of the AL role. The resulting changes to the tuition strategies varied from module to module. Not all changes were a result of the AL feedback. Module teams and staff tutors continue to develop their own views in the light of experience about how best to design tuition strategies. Some changes appear to have been influenced by what other module teams were doing.</p> <p>If under GTP we continue to review module tuition strategies, it is important to allow strategies to stabilise and the tutors to develop their practice, and not to have a review with every presentation. It is recommended that a review should be started on the module tutor forum, with ALs alerted by email. Then a synchronous f2f or online meeting should be held, followed up with further forum discussion.</p> <p>As expertise develops and evidence of effectiveness of decisions is collected, this should be disseminated across and beyond the school so that future decisions can be based upon the expertise and evidence. We should learn from our ALs because they know how to deliver supported open learning at a distance to an exceptionally high standard.</p> <p>The emphasis should be on increasing flexibility within the tuition strategies, to enable ALs to develop and work within a community of shared professional practice, to share expertise between themselves, to trial new ideas and to adapt to the needs of their students. At the same time as reviewing the tuition strategy, staff tutors and ALs should have the opportunity to review how the strategy is implemented. Tuition strategies should be written in such a way that they allow ALs to use their professional expertise in providing dynamic and innovative tuition for the benefit of our students.</p> <p>This project is contributing to school discussions around developing tuition policy. Improvements in the appropriateness of tuition provision will benefit students.</p> <p>The findings from this project are feeding into discussions with the Director of Teaching to influence tuition policy. Discussions with colleagues involved in all aspects of module tuition will influence the direction taken.</p>
136	16	Jan-20	20D-GW-SPS-01	Gemma Warriner	<a href="#">How successfully are students engaging with the Python component of SM123?</a>	Supporting students	Python, engagement, physics, stage 1	SM123	SPS	Andy Diamant (AL)		Apr-20	Project completed	Nov-21 - with MI for review	
137	1	Feb-11	11D-MW-CC-01	Michel Wermelinger	<a href="#">Chart - Interactive Exploration of Data Charts</a>	Technologies for STEM learning	Interactive, visualisation tool, data charts, iScatter, scatterplot, maps,		C&C	Paul Piwek (C&C)		Apr-11	Project completed	Jul-13	There will be follow-up actions in presenting the final version to the OpenScience Lab and module teams.
138	9	May-16	16I-PWICKMTC-EEESKMI-01	Phil Wheeler, Julia Cooke, Kadmiel Maseyk and Trevor Collins	<a href="#">Assessing The 'Open Field Lab': Evaluating Interactive Fieldcasts for Enhancing Access to Fieldwork</a>	Technologies for STEM learning	Fieldwork, remote access, increasing confidence, decision-making	S206, SXF206	EEES & KMI	Julie Robson (EEES), Kate Bradshaw (STEM Deanery) and Sarah Davies (EEES)		Oct-16	Project completed	Dec-20	<p>While the fundamental design of the fieldcasts hasn't changed, we have continuously incorporated small changes, in response to feedback and technological advancements, to increase understanding of the process of conducting field investigations and increase students' sense of belonging.</p> <p>A significant change was to incorporate the fieldcasts into one of the module assignments rather than it being an optional activity. Previously the Stadium Live widgets have been used to check student understanding; we used it to enable student-led learning.</p>
139	13	Jul-18	18K-PW-CC-01	Patrick Wong	<a href="#">Understanding and mitigating students difficulties in undertaking complex practical activities on their computers</a>	Online/onscreen STEM practice	Practical activities, virtualisation, student support	TM129, TM255, TM351, TM352	C&C	Helen Donelan (C&C) and Tony Hirst (C&C)		Nov-18	Project completed	Sep-20	<p>The study informed the TM255 module team that the technical support forums were effective, tutorials and screencast videos going through the setup of the labs was useful and equivalent installation guide for Mac users was desired. As a result, screencast videos and installation guide for Mac users have been produced and made available for the 20I presentation. Tutorials covering the practical activities are scheduled for each presentation.</p> <p>The finding of this study shows that a more convenient (installation free) virtual lab option is not necessarily the students' preference. Many students value the skill and experience gained through the installation opportunity. This is in contrast of what our expectation was. Informal discussions among academics in the School of Computing and Communications implied that many academic expected students would prefer to do practical activities on a virtual lab.</p> <p>The study also finds that the RTSF survey is a valuable tool for obtaining students opinions timely.</p> <p>The School of Computing and Communications are considering provision of a virtual lab for modules across the school. This study informs the school that students want the virtual lab to be consistent in style and structure across all modules and want an alternative option as a backup.</p>

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140	11	Jul-17	17E-CWSW-EEESCC-01	Carlton Wood and Steve Walker	<a href="#">Piloting OU Analyse and the Student Probabilities Model on 12 STEM Modules</a>	Supporting students	OU Analyse, retention, progression, analytics, early alert indicators, predictive data		EEES & C&C	Maria Kantrou (STEM Deanery), Tom Olney (STEM Deanery), Anastasia Clarke (WELS), Carol Calvert (M&S) and Moira Dunworth (AL)	<i>Walker - Infinite Bandwidth Zero Latency – IBZL2</i>  <i>Walker joint PL - Piloting OU Analyse and the Student Probabilities Model on 12 STEM Modules</i>  <i>Wood - Assessing and supporting student experience of synchronous online tuition</i>	May-17	Project completed	Aug-19	<b>Recommendations:</b> 1. Learning analytics should be considered as one option in a range of retention strategies. 2. Learning analytics should be considered as one way to initiate conversations between tutors, students and module teams about students at risk. 3. The timing and content of training provided to tutors and module teams needs to be reviewed. 4. The development of new learning analytics dashboards and the strategies and guidance that goes with them, should be developed through consultation with tutors and owned by module teams. 5. For first presentation modules, module teams should make only TMA submission scores and VLE engagement data available to tutors before introducing OUA PLA on second presentations onwards if required. 6. Further research into uses for the OUA PLA should be undertaken, particularly in the field of producing static learning design visualisations.
141	5	Sep-13	13L-JW-CC-01	John Woodthorpe	<a href="#">An investigation into the use of Artificial Neural Networks to predict student failure, and the efficacy of sustainable additional support for those students</a>	Supporting students	Neural networks, predictive modelling, OU Analyse, tutor contact, retention, progression	TU100	C&C	Chris Dobbyn, Frances Chetwynd (C&C) and Helen Jefferts (AL)	<i>Joint PL - How students' use of language relates to learning, retention, and performance in assessment on TU100: Implications for learning design, assessment strategy, and tuition practices in the MCT faculty</i>	Dec-13	Project completed	Mar-16	Interest in this project from within the STEM Faculty and elsewhere in the University has been driven by the potential improvements in student retention and completion. That interest has been split between the neural network aspect and the role of the tutor contact part of the project. Coming at a time of increased emphasis on retention and on the use of data analytics to improve and personalise our support for students, the project has been very timely. Indeed it anticipated much of the current interest and has been a pathfinder for aspects of improving retention and support. Now the project has finished, the work has been taken up by the STEM Faculty, who are funding its continuation on the remaining presentations of TU100. This support includes determining the feasibility of training others to use the neural networks on TU100 and on other modules.
142	5	Sep-13	13L-JWID-CCWELS-01	John Woodthorpe and Jim Donohue	<a href="#">How students' use of language relates to learning, retention, and performance in assessment on TU100: Implications for learning, design, assessment strategy, and tuition practices in the MCT faculty</a>	Innovative assessment	Language, learning, retention, assessment, tuition practices, linguistic analysis	TU100	C&C & WELS	Nel Boswood, Caroline Coffin, Qian Kan, Sarah Mukherjee (WELS), Val Hancock, Mandy Honeyman, Cheryl McAndrew, Heather Morris (ALs)  <i>Jim Donohue joint PL until 31 Jul 15</i>	<i>Woodthorpe - An investigation into the use of Artificial Neural Networks to predict student failure, and the efficacy of sustainable additional support for those students.</i>	Dec-13	Project completed	May-16	Improvement in retention (in as far as the impact of changes implemented can be traced amidst multiple variables affecting student and tutor performance) Professional development for the 4-6 MCT ALs involved, and for the MCT and language central academics Development of repertoires of practice and a repository of products which will underpin MCTs retention and assessment strategies
143	1 AL	Feb-19	19F-AY-EI-01	Alan Yate	<a href="#">Do OU students understand the Learning Outcomes on courses in general and in T176, T192, T193, T194 in particular?</a>	Supporting students	Learning outcomes, academic literacy, student journeys, TMA	T176, T192, T193, T194	E&I	Steve Dutch (AL)		Jun-19	Project completed	Jan-22 - with TC for review	