

# Universal Design for Learning 2: Evaluation Interim Report

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# UDL2 Evaluation Interim Report

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## 1. Executive Summary

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The aim of UDL2 was to manage the transition of Universal Design for Learning (UDL) to the academic, cultural, quality and operational infrastructure created by the first phase of the project, which rolled out UDL principles across DMU. The overall aim is to ensure that the UDL framework is embedded as part of the DMU student experience by September 2020.

This interim report gives an overview of the evaluation work stream so far. This includes the collection of qualitative data via interviews with key stakeholders, a workshop with DMU staff and analysis of relevant documents. Quantitative data on student good honours, continuation and satisfaction, as well as data relating to DMU Replay has also been collected. The purpose of this work was to ascertain the impact of UDL at DMU on staff and student stakeholders, and the extent to which it has been embedded across the institution at a range of levels.

The report makes four key recommendations for areas of focus and activity for the continued monitoring and evaluation of UDL at DMU.

- I. The institution should be clear about the deep interconnections between UDL, and FTA, Athena SWAN, ULTAS and research-engaged teaching, in order to create an enhancement-focused, pedagogic environment.
- II. The development of an on-line mechanism for sharing good practice and case studies across the University will amplify engagement.
- III. The co-created implementation of a strategy for understanding student perceptions of UDL, focused upon academic practice and the student experience should underpin these case studies.
- IV. An integrated evaluation of technology that supports UDL, combining an analysis of DMU Replay with the employment of other assistive technologies, should be undertaken, in order to shift the focus of UDL away from the former towards enhancement.
- V. A strategy for external communication and internal branding should be developed to give a clear message about what UDL at DMU is, aimed at specific stakeholder groups.

An evaluation plan for the next two years forms an appendix to this report, which builds on present analysis to ensure the development of a meaningful process.

## 2. Introduction

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The underpinning idea of Universal Design for Learning (UDL) is to embed inclusivity and choice for both students and staff. The three core principles of UDL are:

1. flexible learning resources;
2. flexible ways of learning;
3. flexible ways to demonstrate knowledge.

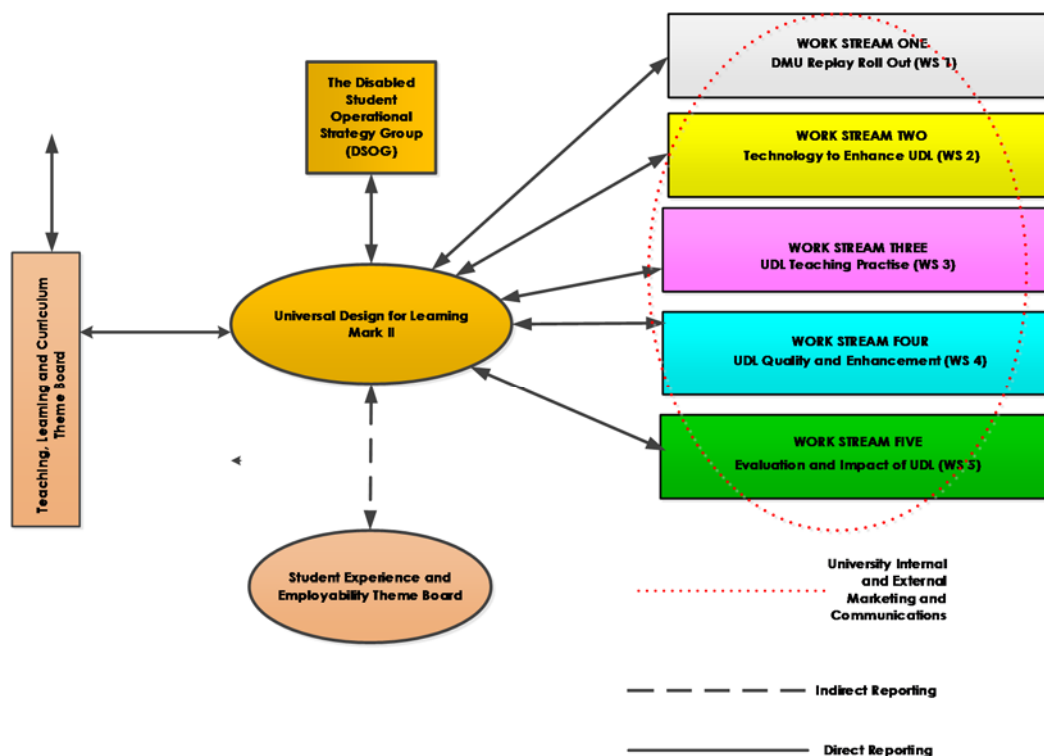
UDL at DMU is a model of best practice for teaching and learning, which aims to provide an equal and inclusive learning experience for every DMU student. It is based around the three core principles of UDL and six key ideas, which are:

1. Teachers make learning materials available to students in a modifiable format 48 hours before each teaching session.
2. Self-directed learning is signposted in each teaching session.
3. Students are provided with opportunities for active learning and knowledge checks.
4. Students able to review, replay or revisit teaching sessions in the Virtual Learning Environment
5. Do modes of assessment provide the opportunity for all students to demonstrate knowledge and understanding?
6. Do module VLE shells meet the DMU Threshold for the use of technologies in the curriculum?

### 2.1 Project outline

DMU is currently in the second year of implementation of UDL2. The aim of UDL2 was to manage the transition of UDL to the academic, cultural, quality and operational infrastructure created by the first phase of the project to roll out key DMU UDL principles across DMU. This overall aim is to ensure that the UDL framework becomes business-as-usual (BAU) and embedded as part of the DMU student experience by September 2020.

The project is organised into five work streams: DMU replay rollout; technology to enhance UDL; UDL Teaching Practise; UDL Quality and Enhancement; Evaluation and Impact of UDL. These are modelled in the following figure.



The evaluation work stream aims to understand how the University’s UDL framework is being applied, its interrelationship with curriculum work being delivered under other projects at the University and the potential for understanding the impact on learning outcomes for a range of students. This interim report seeks to identify the following.

- How the implementation of DMU’s UDL framework is impacting the student experience.
- The implications for the academic practice of staff that emerge from the implementation of UDL.
- A strategy for evaluating UDL2 in 2018/19, based upon consultation with key project stakeholders and wider DMU staff.

A discussion of existing literature on UDL and relevant studies in the field can be found in the literature review produced by the evaluation work stream.

## 2.2 Literature Review Headlines

A literature review was conducted to inform the scope of the evaluation. This focused on existing literature on UDL and other topics relevant to the project including lecture capture, widening participation and inclusive education more broadly. The review also provides details of the scope of resources available to support the application of UDL, inclusive teaching and learning as well as assistive technologies in post-secondary education. As there are over 800 different research

studies about UDL, the review focused on studies of UDL within post-secondary education. The headlines from the literature review are as follows.

- Research scope: the majority of research on UDL focuses on school-based education and there is less research on the implementation and impact of UDL in post-secondary education (Smith, 2012).
- Research methods: the majority of studies, which examine the impact of UDL on staff and students use qualitative methods including questionnaires, focus groups and interviews. Roberts et al (2011) argued that there was little existing research to demonstrate that UDL had a positive impact on the attainment and retention of post-secondary students. Only a few examine the impact on attainment (Burgstahler and Moore 2015; Dean, Lee-Post & Hopke, 2016) and scholars note the difficulty of measuring the impact of UDL on attainment because of the other variables that can have a bearing on results (Smith Canter *et al* 2007).
- Impact: the majority of studies on UDL report a positive impact on staff and students. Staff typically reported an increased confidence in meeting the multiple needs of students after receiving training on UDL and adopting its principles (Zhang 2005; Shelly, Davis & Spooner, 2011; Shelly, Davis & Spooner, 2013; Izzo, Murray & Novak, 2008), whilst students reported a greater level of engagement with their courses and declared a preference for the increased choice and flexibility UDL provided (Kumar and Wideman, 2014; Watchorn *et al* 2013; Smith, 2012; Rose *et al* 2006).
- Theory and practice: a number of studies raised the issue of a gap between the theory and evidence of UDL, noting that although the theory supporting UDL is well developed, studies still tend to be descriptive in nature and lack rigour (Rose *et al*, 2006; Roberts, 2011; Capp, 2017). Additionally, studies tend to be small in focus, concentrating on a single course or module.
- Resource limitations: funding, resources, training and time can limit the continued adoption and embedding of UDL within educational settings (Silver 2002; Smith Canter *et al* 2007; Kumar and Wideman 2014; Zeff, 2007).
- Focus on disabilities: given the emergence of UDL to support students with disabilities several studies focus on the effects on these students (Burgstahler and Moore 2015; McGuire & Scott, 2006; Embry, Parker, McGuire & Scott, 2005; Parker, Robinson & Hannafin 2007-08).
- UDL or inclusive teaching: there is an overlap between UDL and broader ideas of inclusive teaching and learning (Bryan, 2015; Warren, 2016; Hockings 2010).
- The focus on technology: there is much scholarship on lecture capture and opinions are divided on its impact on attendance, attainment and staff. One study finds lecture capture conducive to supporting a UDL framework (Watt *et al*, 2014).

The full literature review is available at: <http://hdl.handle.net/2086/17059>.

## 2.3 Institutional Policy

UDL is underpinned by or connects to two institutional strategies and two institutional projects. UDL is one of the three pillars of the new University Learning, Teaching and Assessment Strategy (ULTAS) for DMU that is in place from 2018 to 2023 (DMU, 2018). Within the strategy UDL is described as DMU's 'flagship approach to make learning accessible to all regardless of circumstance' alongside the other two pillars 'co-creation' and 'building capacity'. The strategy outlines the intended benefits of UDL as follows.

### KPI

- Reduction in the BAME attainment gap
- Incremental development of programmes supporting flexible, multi-modal and part-time degrees
- Diverse and accessible curricular in all programmes

### KPT

- Measurable improvements in non-continuation, module assessment average and Good Honours outcomes in programmes selected for Course Specific Intervention
- #DMUglobal/DMUworks opportunities embedded in every programme of study
- Overall student satisfaction significantly above the NSS benchmark; CLF student satisfaction consistently above 75%; MLF feedback scores consistently above 3.5.

The intention that UDL will contribute to a reduction in the BAME attainment gap, demonstrates the overlap of the UDL project at DMU with the Freedom to Achieve (FTA) project.

The FTA project focuses on reducing the BAME attainment gap. This is the difference between the proportion of white students who are awarded good honours degrees (1<sup>st</sup> or 2:1) and the proportion of BAME students who are awarded the same degrees. FTA began in March 2017 and will run for 3 years, until 2020. DMU is working with several institutions for this project, which is led by Kingston University. It is one of seventeen such projects funded by the Office for Students to address barriers to student success.

Central to the project is embedding Kingston University's value-added metric and an inclusive curriculum framework. The Inclusive Curriculum Framework (McDuff & Hughes, 2015) has three key principles.

- Create an accessible curriculum

- Enable students to see themselves reflected in the curriculum
- Equip students with the skills to positively contribute to and work in a global and diverse environment

Both the ULTAS and FTA place issues of co-creation, participation and diversity at their heart, with a focus upon the student's relationship to herself, her curriculum and her institution. In this way, they clearly connect to the universal design principles of the UDL project, and a critical issue is ensuring the clarity of these connections for staff and students in the design, delivery and assessment of the curriculum.

In moving this process forward, the principles of UDL were initially adopted as part of the Disability Enhancement Programme (DEP) implemented in 2015. This programme was implemented in response to changes made to Disability Students' Allowance (DSA) (DMU, 2015). The government placed greater onus on universities to provide adequate support for students with disabilities under the 2010 Equalities Act and withdrew DSA from groups of students previously included for support. The stated outputs for DEP were:

- Developing measures to ensure accessibility for all students to all learning and teaching activities within the university
- The development of a DMU disability assessment centre
- Reviewing specialist accommodation provision
- Increased availability of lecture-capture technology across the University
- Extending the provision of accessible software
- Widening the use of multimedia as an enhancement to teaching and learning resources
- Enhancing digital access to published academic content
- Providing relevant staff and student training and development opportunities (DMU, 2015)

The adoption of UDL initiatives sought to reduce the need for adjustments for students with disabilities. DEP ensured DMU's continued position as a sector-leader in its provision for students with disabilities. The programme was a runner up at the Guardian University awards 2017 in the category of student diversity and widening participation.

## 2.4 Teaching Innovation Project (TIP)

The 2016 TIP scheme project entitled, 'Towards Equitable Engagement: the Impact of UDL on Student Perceptions of Learning' examined the perceptions and feelings of Level 4 students about UDL strategies on their engagement with, and experience of,



Higher Education. The aim was to engage students from each faculty and from a wide range of backgrounds to understand whether there are differential impacts of UDL. It also sought to evaluate how the six UDL ideas and three UDL principles are interpreted and applied by students at DMU.

Initial findings produced from the TIP scheme highlighted some key issues.

- Firstly, a much wider qualitative survey was recommended in order to ascertain if the implementation of UDL had helped to recruit and retain students with a wide range of learning styles.
- Secondly, it argued that UDL as an institutional set of heuristics needs to be adapted locally, at the module and programme-level, in order that it appropriately represents the dedicated learning support that some students require.
- Third, it argued that any future evaluation strategy should be co-created through participative action research with students.

## 2.5 National Policy

The adoption of UDL at DMU was initiated in response to changes the government made to DSA. This was against a backdrop of an increasing proportion of students attending university declaring disabilities. In line with the changes made to DSA, from the start of the 2016/17 academic year, universities rather than government had to meet the costs of transcription services and non-medical support roles without passing on the cost to students (Crockfield *et al*, 2018). This is reflective of the current government's aim to treat universities as competing businesses, legally obliged by the 2010 Equality Act to make reasonable accommodation for customer difference.

DMU has a comparatively large population of students with declared disabilities and a reputation for leading the sector in its provision for such students. In the latest HESA data for the academic year 2016/17, 16.6% of DMU students had a declared disability compared with a sector-wide average of 12%. The work of DMU in this area connects to that of the Office for Students (OfS), legally instituted as the sector regulator in the 2017 Higher Education and Research Act. The OfS has a focus upon student outcomes for the full range of students, including running data and analysis of differences in student outcomes by disability status.

In addition, UDL formed a key part of DMU's submission to the Teaching Excellence Framework (TEF), in which DMU achieved gold status in 2017. The stated aim of TEF is to measure teaching quality across universities in the UK and is determined by a mix of quantitative metrics and qualitative evidence submitted by participating

institutions (Beech, 2017). Universities provided metrics on age, disadvantage, ethnicity, sex and disability of their students and the TEF also draws on nationally collected data on student satisfaction (via the National Students Survey), continuation (using HESA data) and employment outcomes (via Destination of Leavers from Higher Education Survey).

### 3. Methodology

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This evaluation took a mixed methods approach to provide a detailed picture of the implementation and impact of UDL. Collating both quantitative and qualitative data gave a fuller account of students and staff experience at DMU. Thematic analysis was conducted in order to identify key topics and issues that resonated across the data collected. This mixed methods strategy and thematic analysis also informed the ongoing evaluation plan.

#### 3.1 Data Collection

##### Qualitative data

Quantitative data collected included the following.

- Interviews with UDL champions and project board members;

The aim of the interviews with Champions was to gain their views on what would be the most effective way in which to evaluate UDL at DMU and identify impact. Questions were also asked about their experience of being a Champion and the response they had received within their respective faculties. A topic guide was produced to support these interviews, however Champions were also encouraged to raise ideas and issues that they felt were important. A questionnaire was subsequently sent to Champions. However, there was a poor response rate and, therefore, this data collection activity will be conducted again next year.

- Outcomes from a co-creation event with DMU staff at the University's teaching and learning conference.

The workshop delivered by the evaluation team at the DMU Teaching and Learning conference in September 2018 collected qualitative data from staff about their experiences of UDL. This also enabled the evaluation framework to be refined and validated through discussion with a range of DMU staff about what they felt would be the best way to engage with the student voice moving forward.

- Documents related to the project, comprising external examiner report comments, away day documents and documents from the TIP scheme.

The spreadsheets of external examiner report comments from 2015/16 before UDL principles were embedded in external examiners documentation were compared with the spreadsheets from 2016/17, the most recent data available.

## Quantitative data

Quantitative data on student good honours, retention and satisfaction was collected. Three sets of data were collected from Strategic Planning Services (SPS).

- Good honours data from 2013/14 to 2016/17
- Continuation data from 2012/13 to 2015/16
- NSS data from 2017 and 2018

For good honours and continuation data the most recent data was collected. The questions on the NSS changed in 2017 and, therefore, only data from last year and this year are comparable.

In addition, quantitative data of DMU Replay views was collected. The UDL project requested two reports relating to Panopto usage.

- A data extract from Panopto giving all students views between August 2016 and August 2018.
- The demographics for Panopto usage extracting data from QL/SAP.

## **3.2 Data Analysis**

### Qualitative data

- Themes from the interviews conducted with UDL Champions and the Project Board were identified and examined against existing literature on UDL to determine common and divergent themes.
- Themes from the workshop at the learning and teaching conference were also identified and examined. These have been used to inform the ongoing evaluation strategy.
- Key word searches were conducted of external examiners' report comments from 2015/16 and 2016/17 to identify perceptible changes in the comments made since an explanation of UDL was embedded in this quality assurance process.

### Quantitative data

Comparative analysis of the data on good honours, continuation and NSS was carried out. Comparing data across several years enabled changes over time to be identified. Good honours and continuation data was also split by Faculty to detect differences across the institution. Furthermore, all data were split by a range of demographic groups including age, gender, ethnicity, disability and study mode to enable patterns between particular groups of students to be identified.

The two reports collected on Panopto data will be combined to enable the demographics of students using DMU Replay to be analysed. The initial data

collected will provide baseline data for the ongoing monitoring and evaluation of student engagement with DMU Replay.

## 4. Findings

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### 4.1 Student Data

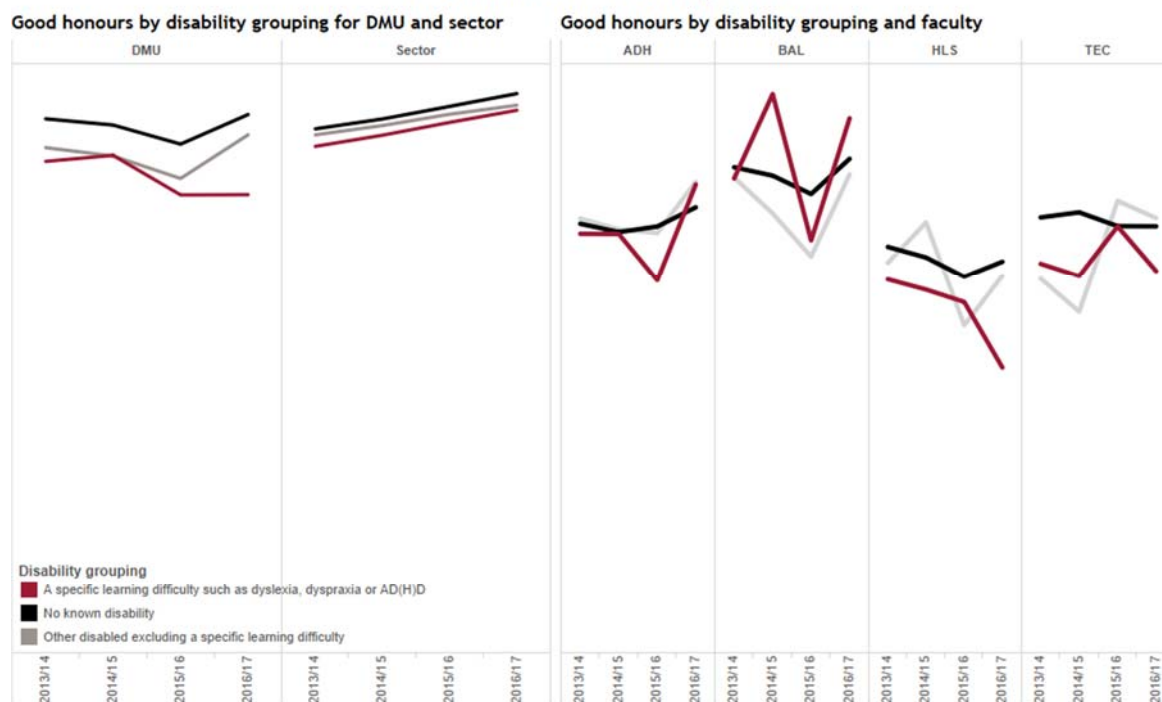
The data collected from SPS sought to address the stated aims of the project to improve the attainment, retention and satisfaction of students. As a result, good honours (1<sup>st</sup> or 2:1) data, continuation rates and results of the National Student Survey were analysed. For the good honours and continuation data the overall picture for DMU is examined and then looked at by Faculty. The data are also split by disability, ethnicity, age, gender, mode to distinguish patterns amongst particular student groups. Given the fact that UDL was originally adopted to support students with disabilities in light of changes to DSA, the graphs are included for the disability view. Graphs are also included for the ethnicity view because of the overlap of the UDL project with the FTA project.

#### Good honours (2013/14 – 2016/17)

Good honours data concerns the percentage of first degree graduates achieving a first or upper second class honours. This is a performance indicator that DMU records data for and is collected by the Higher Education Statistical Agency (HESA). The good honours information is split by disability, ethnicity, study mode, gender and age and includes a comparison to the sector and a breakdown to Faculty-level.

## Disability

### Good Honours - disability view



Good honours by disability grouping for DMU

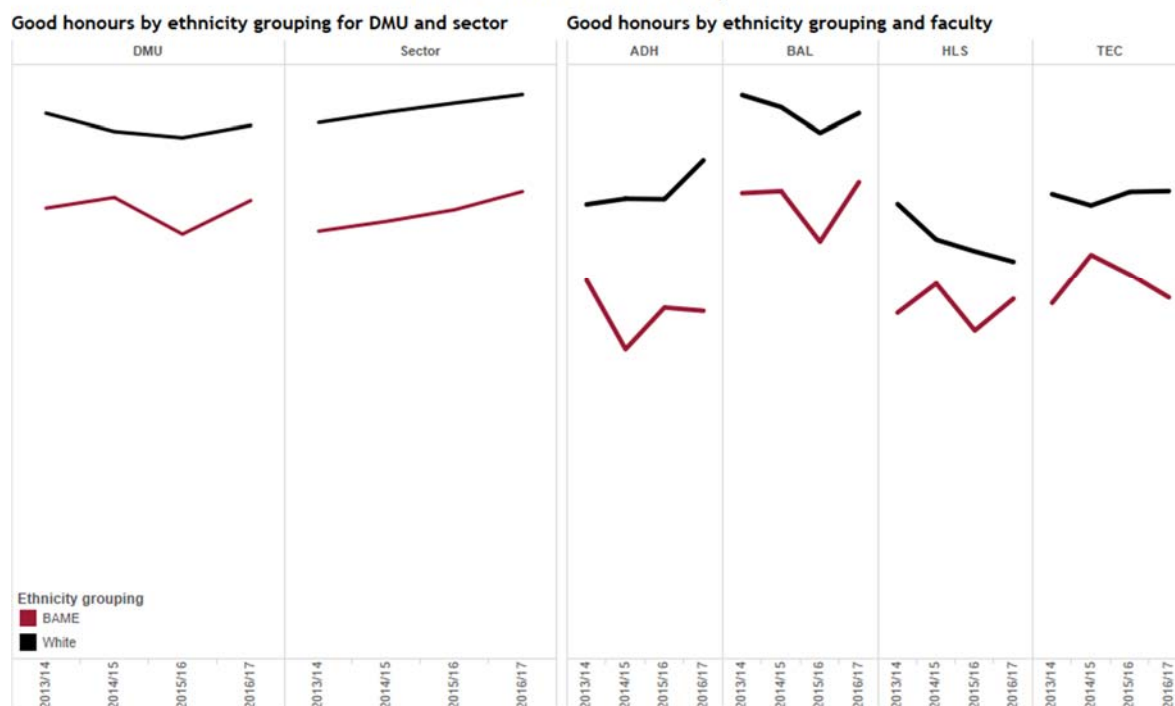
	2013/14			2014/15			2015/16			2016/17		
	A specific learning difficulty s..	No known disability	Other disabled excluding ..	A specific learning difficulty s..	No known disability	Other disabled excluding ..	A specific learning difficulty s..	No known disability	Other disabled excluding ..	A specific learning difficulty s..	No known disability	Other disabled excluding ..
% good honours	66.0%	71.8%	67.7%	66.9%	70.9%	66.8%	61.6%	68.4%	63.8%	61.6%	72.3%	69.6%
a_good honours base pop	424	3,873	415	359	3,220	364	385	3,242	298	328	3,801	365
a_good honours number	280	2,779	281	240	2,283	243	237	2,216	190	202	2,748	254

This view distinguishes students by 'no disability', 'specific learning disability' and 'other disability'. Overall the proportion of students at DMU without a disability achieving good honours has slightly improved over the period, whereas for students with a disability it has declined. The proportion of students with no disability achieving good honours is consistently higher than those with a declared disability. The proportion of students with a Specific Learning Difference (SLD) gaining good honours was 66.0% in 2013/14. This declined sharply in 2015/16 to 61.1% and remained at this level in 2016/17. The sector shows a steady rise in all areas and higher proportion of good honours than DMU

At a Faculty-level there is a lot of variation. There was a sharp decline in the proportion of good honours for students with an SLD in HLS, whereas in other faculties the proportion of good honours for this group fluctuates. Noticeably, the proportion of good honours for students with 'no disability' fluctuates less in each Faculty and improved in BAL and ADH.

## Ethnicity

### Good Honours - ethnicity view



Good honours by ethnicity grouping for DMU

	2013/14		2014/15		2015/16		2016/17	
	BAME	White	BAME	White	BAME	White	BAME	White
% good honours	63.8%	76.8%	65.2%	74.4%	59.5%	73.5%	64.5%	75.3%
a_good honours base pop	1,632	2,276	1,401	1,755	1,461	1,771	1,562	1,855
a_good honours number	1,042	1,748	913	1,306	870	1,302	1,007	1,396

The graph highlights the attainment gap between white and BAME students at DMU and in the sector. Whilst the sector shows a steady rise in attainment for both groups, the picture at DMU is more mixed.

The Faculty results reflect the broader picture in revealing attainment gaps between white and BAME students, although there are differences between faculties to be noted. Whilst BAL has the highest proportion of students attaining good honours there is still a gap between white and BAME students. However, the starkest attainment gap between white and BAME students was in ADH. The results from HLS reveal a decline in attainment for white students, although the results for BAME students are more variable. In FOT the attainment of white students has remained fairly consistent, and the attainment for BAME students peaked in 2014/15, although has since declined.

## Mode

There is a gap in attainment between full-time and part-time students at both DMU and the wider sector. There has been a sharp decline in attainment for part-time



students whereas the attainment for full time students had remained consistent. DMU previously had better attainment for part-time students than the sector, however this has declined sharply and the sector has since out-performed DMU.

Again the picture at a Faculty-level is mixed. In ADH, the attainment of part-time students has sharply declined from 100% (14/14) in 2014/15 to 50% (4/8) in 2015/16. However, HLS had the sharpest decline in attainment for part-time students from 62% (114/184) in 2013/14 to 22% (13/58) in 2016/17. Conversely, in FOT there has been a sharp increase in attainment for part-time students from a low of 36% (5/14) in 2014/15 to 69% (9/13) in 2016/17. BAL, overall, has a narrower gap in attainment between part-time and full-time students

### *Gender*

At DMU females have higher attainment than males. The gap between female and male students is smaller at DMU compared with the sector, although the attainment in the sector has increased and the latest figures exceed those at DMU.

At a Faculty-level, females have a higher proportion of good honours than males in each Faculty apart from HLS where the data are more mixed. In both ADH and BAL the proportion of good honours increased over the period. In HLS, for the academic years 2013/14 and 2016/17 males had a higher proportion of good honours, however, female attainment was higher in the years 2014/15 and 2015/16.

### *Age*

Young students have a higher percentage of good honours than mature students at DMU. This reflects the sector trend. Whilst the sector reveals an upward trend for both young and mature students, there has been a slight downward trend for mature students at DMU.

Within the faculties the picture is mixed. For ADH, attainment was very similar for young and mature students apart from 2015/16, when the attainment of mature students dipped. BAL has the biggest gap between young and mature students and the attainment for young students is highest in this Faculty. The figures from HLS reveal a downward trend for mature students and more of a mixed picture for young students. The gap between young and mature students has narrowed in FOT. This is the result of a downward trend in attainment for young student and upward trend for mature students.

With the data available it was not possible to look at intersectional patterns. However, this is analysis that the institutional needs to carry out, in order to identify the impact of UDL on specific groups of students.

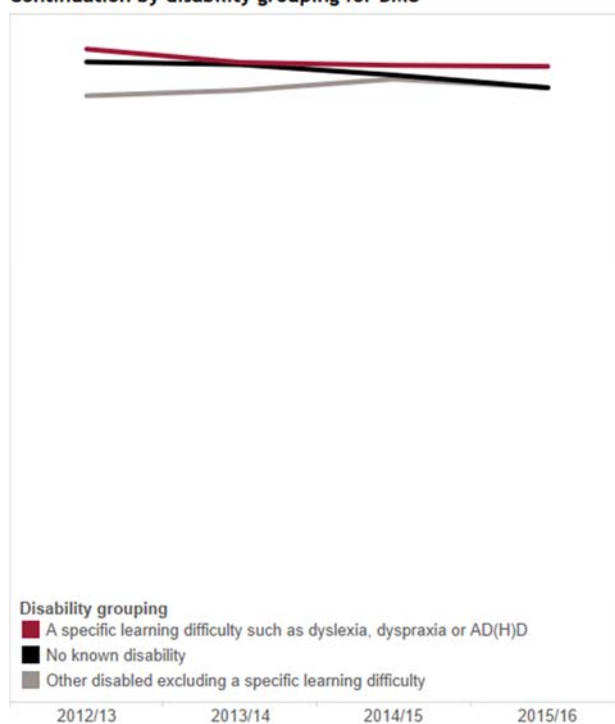
## Continuation (2012/13 – 2015/16)

Continuation data refers to the proportion of students who complete their degree course. This is another performance indicator that DMU records data for and is collected by HESA. Given this is based on completion rates and the latest figures available are from 2015/16 this data set does not cover the full roll out of UDL at DMU. The continuation information is split by disability, ethnicity, gender and age. It does not include study mode as this is a measure of full-time students. There is no comparable sector detail for this measure, but Faculty breakdown has been provided. Ethnicity is restricted to Home students only and excludes unknown or undisclosed information due to small numbers.

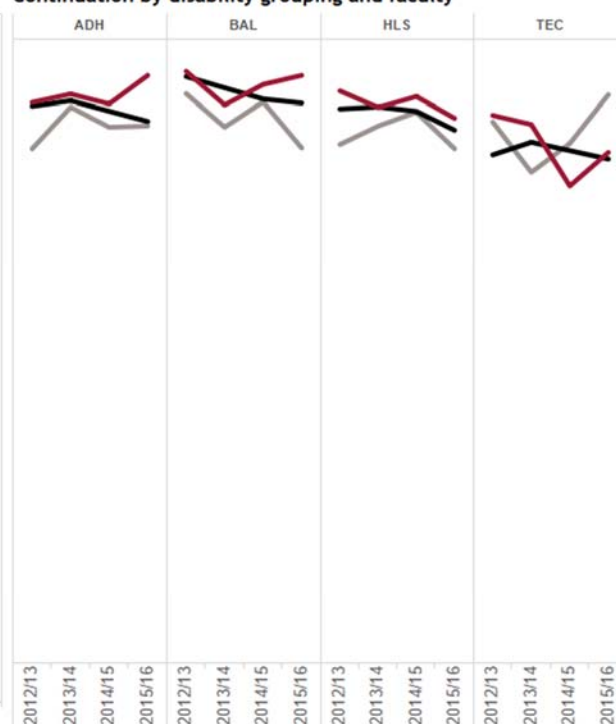
### Disability

#### Continuation - disability view

Continuation by disability grouping for DMU



Continuation by disability grouping and faculty



Continuation by disability grouping for DMU

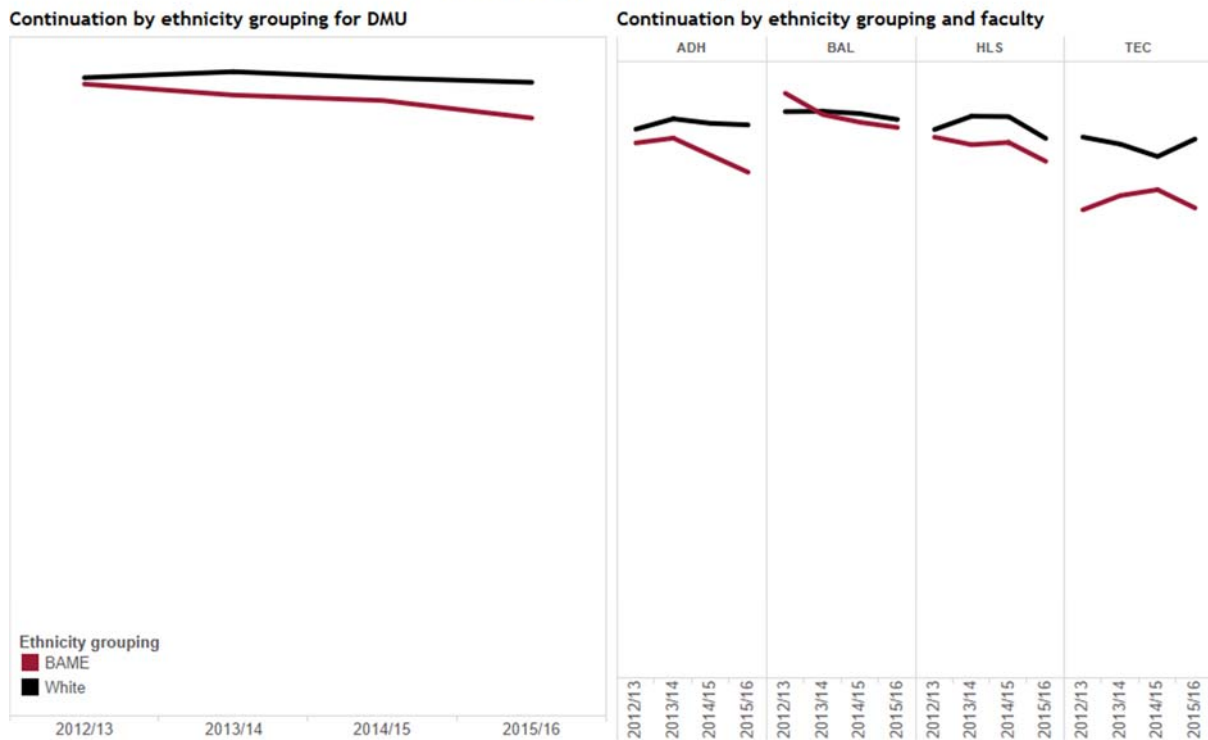
	2012/13			2013/14			2014/15			2015/16		
	A specific learning difficulty su..	No known disability	Other disabled excluding a..	A specific learning difficulty su..	No known disability	Other disabled excluding a..	A specific learning difficulty su..	No known disability	Other disabled excluding a..	A specific learning difficulty su..	No known disability	Other disabled excluding a..
% continued	91.9%	90.1%	85.3%	90.0%	89.7%	86.1%	89.6%	88.2%	87.7%	89.4%	86.4%	86.4%
continuationPop	283	3,023	325	333	3,297	272	379	3,414	270	390	4,029	357
continuationTotal	308	3,356	381	370	3,675	316	423	3,870	308	436	4,661	413

At DMU the continuation for 'no known disability' declined between 2012/13 (90.1%) and 2015/16 (86.4%). Continuation for SLDs dipped slightly although remained consistent over the period. There was a slight improvement of the continuation of 'other disability' students.

The picture was more mixed at Faculty-level. Within ADH and BAL, SLDs have the highest continuation rates. In HLS there was a decline for all groups between 2014/15 and 2015/16. Meanwhile FOT had lower rates of continuation compared to other faculties aside from 'other disability' and was far more mixed by ability/disability.

## Ethnicity

### Continuation - ethnicity view



Continuation by ethnicity grouping for DMU

	2012/13		2013/14		2014/15		2015/16	
	BAME	White	BAME	White	BAME	White	BAME	White
% continued	89.4%	90.3%	87.8%	91.1%	87.1%	90.2%	84.6%	89.6%
continuationPop	1,565	2,013	1,708	2,132	1,903	2,077	2,282	2,286
continuationTotal	1,751	2,230	1,945	2,340	2,186	2,302	2,698	2,551

The graph demonstrates a gap in continuation rates between white students and BAME students at DMU. BAME students have consistently lower rates of continuation and the gap has increased.

This gap in continuation is perceptible at a Faculty-level, although with some variation. FOT has the biggest gap in continuation between white students and BAME students, however in ADH the gap widened. Within BAL the gap between white and BAME students was much closer, although BAME continuation rates declined over the period. Within HLS the gap widened over the period.

### *Gender*

At DMU, continuation rates are consistently lower for males. This trend is reflected within the faculties. In HLS, continuation rates for both males and females declined. The gap between male and female continuation increased in both FOT and ADH. BAL had the highest levels of continuation compare to other faculties, but again reveals a downward trend over the period.

### *Age*

At DMU, young students have higher levels of continuation than mature students, although rates of continuation declined over the period. Within faculties the continuation rates of mature students fluctuate more than young students, particularly in FOT and BAL. Again, with the data available it was not possible to look at intersectional patterns, although this is work the institution needs to carry out.

### National Student Survey (2017 and 2018)

The National Student Survey asks questions about a variety of aspects of teaching and is aimed mainly at final year students. The questions on the NSS changed in 2017 and, therefore, only data from last year and this year are comparable. Whilst longitudinal trends cannot really be garnered from two years of data, DMU scores can be compared with sector scores and can also be split by age, disability, ethnicity (2 way and 4 way), gender and mode of study.

### *Overall satisfaction*

Overall student satisfaction at DMU is higher than the sector average in the NSS. There are divergences in satisfaction levels amongst different student which are noteworthy (in each case the percentage from the 2018 data will be given).

- SLDs (84.8%) and 'other disability' (79.7%) have lower satisfaction than 'no disability' (86.9%) at DMU, and are mixed compared to sector scores (81.3%, 81.1% and 83.8%).
- Satisfaction is higher for mature students (88.9%) than young students (85.4%) at DMU, although both are higher than the sector (83.5% and 83.5%).
- White students (87.2%) have a higher satisfaction than 'non-white' (85.0%) and 'not known' (85.0%) students at DMU. All of these percentages are higher than the sector scores (84.1%, 82.0%, and 82.0%).
- Females (86.6%) have a slightly higher level of satisfaction than males (85.0%) at DMU. Both are higher than the sector (83.9% and 82.8%).
- Part-time students (100%) have a higher level of satisfaction than full-time students (86.0%) at DMU, and both are higher than the sector (84.5% and 83.4%).

The implications of these statistics will be developed in Section 5 'Discussion'.

### Comments

In addition to overall satisfaction, scores from several questions warrant comment. DMU scores highly for satisfaction on Assessment and Feedback (Section 3) and Student Voice (Section 8) questions:

	DMU		Sector	
	2017	2018	2017	2018
3. Assessment and Feedback	76.1%	76.4%	73.4%	73.3%
3.1 The criteria used in marking have been clear in advance	74.6%	76.7%	72.9%	72.9%
3.3 Feedback on my work has been timely	78.1%	79.3%	73.0%	73.3%
3.4 I have received helpful comments on my work	77.1%	76.3%	74.4%	73.9%
8.3 It is clear how students' feedback on the course has been acted on.	71.4%	75.5%	60.2%	60.6%

Part-time students at DMU had 100% satisfaction on all 'Teaching on my course' questions and also gave very high scores in comparison to the sector on 'Learning Community' (Section 7) and 'Student Voice' (Section 8) questions:

	DMU		Sector	
	2017	2018	2017	2018
7. Learning Community	81.0%	92.3%	60.9%	62.4%
8.2 Staff value student's views and opinions about the course	90.5%	92.3%	68.1%	69.1%
8.3 It is clear how students' feedback on the course has been acted on	76.2%	84.8%	45.4%	47.9%

The high level of satisfaction in relation to Assessment and Feedback, particularly for the question, 'It is clear how students' feedback on the course has been acted on' suggests the inclusivity and flexibility at the centre of UDL provision at DMU has had a positive impact of student satisfaction. Furthermore, the distinctly higher levels of satisfaction for part-time students at DMU, suggests UDL strategies have contributed to an increased sense of inclusion and satisfaction for this student group in particular. More work is required to unpick these comments, in order to ascertain the impact of UDL in the curriculum.

## 4.2 External Examiner Reports

As part of the implementation of UDL an audit was taken of all programme/module validation documents and in instances where UDL principles were not in place programmes/modules were required to submit curriculum modifications. In line with this all review documents were updated, including the guidance and pro-forma given to external examiners.

External Examiners assess whether courses are of an appropriate standard. To produce their reports, external examiners have access to all programme material including Blackboard shells and students' work. To examine the embedding of UDL into quality assurance documents an analysis of external examiner report comments was conducted.

In the time frame of this initial evaluation it was not feasible to analyse every report produced as there are around 250 each year. Therefore, a keyword search was carried out of the external examiner report comments spreadsheet to identify comments that made reference to principles of UDL. This spreadsheet is used to flag noteworthy comments and items that need addressing. The spreadsheets from 2015/16 before UDL principles were embedded in external examiners documentation were compared with the spreadsheets 2016/17 to identify perceptible changes in the comments made.

The keyword search terms used were 'UDL', 'record' 'universal', 'flipped', 'multi', 'equitable', 'flexi-', 'includi-', 'capture', 'attain', 'attend', 'tech', 'film', 'disabil-', 'replay'. These words were used with the intention of finding entries relating to UDL and the flexible and inclusive teaching practice it is associated with, as well as entries referring to DMU Replay. Relevant comments were recorded and analysed.

The robustness of the analysis of this data was restricted because the spreadsheet was compiled independently of the UDL project and therefore the categorisation of entries did not incorporate UDL. A methodology was developed to analyse the data for what it could reveal about the impact of UDL, essentially retrofitting the evidence to the methodology. As a result, not all results for the keyword searches returned relevant entries. Therefore, in order to identify relevant comments all results from the keyword searches had to be read and recorded if pertinent to UDL. Future analysis of this data will take this consideration to ensure more rigorous analysis.

There were no entries that made explicit reference to UDL in relation to teaching. A comment from 2015/16 made a favourable comment about the planned implementation of UDL:

*I was invited recently to give comments on the latest curriculum modifications by DMU. The feedback/assessment policy and the UDL initiative are to be commended*

There were numerous comments in both the 2015/16 and 2016/17 spreadsheets in relation to flexible learning methods, assessment and learning opportunities. These comments also noted that such methods supported inclusivity. A number of comments from the 16/17 spreadsheet commented on the multiple forms of assessment and delivery built into programmes.

Two comments from the 16/17 spreadsheet referred to lecture capture. One related lecture capture to a drop in student attendance and the other raised concerns about the capacity of this technology to be used as a surveillance tool on staff. Elsewhere, positive comments were made in relation to use of Panopto for innovative practice, particularly when used in relation to assessment and feedback.

Due to the selective way in which the spreadsheet log is created and the limitations of key word searches to give a sense of all the comments (both spreadsheets have over 2,000 entries) it is time-consuming to identify particular differences between faculties and programmes.

### **4.3 Replay Data and Assistive Technologies**

#### **DMU Replay**

The aim of DMU Replay is to provide easy access content from academic-led sessions to use as a revision resource as well as supporting those with different learning styles and needs. These can range from international students for whom English is not a first language, to students with a specific learning difference or disability, to those with various learning challenges such as dyslexia. The institutional and change management implications of the roll-out of Replay is examined extensively in the report produced by Pettit and Hall (2018).

The evaluation work stream requested two reports relating to Panopto usage. The first is a data extract from Panopto giving all Replay views between August 2016 and August 2018. The second report will give the demographics for Panopto usage extracting data from QL/SAP. There was a delay in receiving these reports due to the system transfer at DMU from Tableau to SAP.

Given the delay in receiving the two reports relating to Panopto usage it has not yet been possible to compare the datasets. However, an initial analysis of the viewing figures has revealed the following:

- The total number of Replay hits stood at 1,195,727.
- 905,259 views were students, 108,247 were staff and 182,247 were unknown (i.e. no username).
- In terms of frequency, a total of 26,780 students used Replay with individual hits ranging from 1 to 1,415.

This evidences a pronounced engagement with DMU Replay, which was a key part of UDL provision at DMU. Views also peaked during the weeks leading up to exams, demonstrating that students use Replay as a revision tool. Further analysis is needed on what these figures mean for the impact of UDL on the student experience, which will be developed in Section 5 'Discussion.'

### Assistive Technology

An Assistive Technology officer based in the library was appointed to support students in making effective use of technology.

The following assistive technologies are available through Library and Learning Services (LLS).

- Mind mapping software including MindGenius, Inspiration, Mind View. This software enables project organisation, revision etc.
- Text-to-Speech software, including Claro Read Pro, TextHelp Read and Write, Include Me. This software reads on-screen text aloud.
- Speech-to-Text software. Dragon software is only available on assistive technology computers in the library. Using Dragon is faster than typing and can help students with dyslexia or a specific learning difference with getting started on assignments and typing up large reports or dissertations. Dragon can also help with proof-reading.
- Notetaking software including NoteTalker and Audio Notetaker. Note-taking editing software enables audio files of lecture recordings to be sorted and key moments highlighted. It makes it easier to go back to important points in the lecture as audio is visualized phrase-by-phrase. The edit software can be used to highlight key points and add notes alongside recordings.
- Make It Accessible. Convert text into an accessible format with Sensis Access. Convert PDFs, JPEGs and other types of files into text files, e-books, audio or braille.
- Screen Magnification. ZoomText Magnifier and Reader is an advanced screen magnification software that enlarges everything on the computer screen. It also



has colour controls to improve screen clarity and includes effects such as colour dyes, two-colour modes and replacement of problem colours.

Documents collating case studies of best practice have also been produced to support the innovative use of assistive technologies and Panopto. This includes 'Technologies to enhance UDL framework' which gives a scope of the material available and 'Case Studies of Technologies to Enhance UDL', which were made available on the CELT website to highlight good practice. These need to be incorporated within the case studies of best practice for UDL, the production of which are suggested in the recommendations of this report.

#### **4.4 Interviews, Workshop and Champions Questions**

A number of activities were carried out to gain an insight into the staff view of UDL.

##### **Scoping Interviews**

First, scoping interviews were carried out with the UDL champions in each academic Faculty (BAL, HLS, FOT, ADH) as well as LLS. Questions were asked about their experience of being a Champion and the response they had received within their respective faculties. They were also asked what shape they felt the evaluation should take. A topic guide was produced to support these interviews with five questions.

- What brought you to the project/your role within it?
- What do you see as the aim of the project and to what extent do you think it has achieved this?
- What do think the evaluation of UDL at DMU should achieve/look like?
- What do you think could be an effective methodological approach to the evaluation?
- What have been the challenges/barriers surrounding the implementation of UDL at DMU?

In addition to these questions, Champions were also encouraged to raise ideas and issues that they felt were important. The other members of the project board that led individual work streams were also interviewed to gain a broader perspective on the progress of the project. The notes taken during these interviews were collated and themed.

##### **Champion Questionnaires**

In response to the themes identified from the scoping interviews carried out with the Champions a follow-up questionnaire was sent to them via Google forms. The aim of

this was to identify specific examples about the impact of UDL at DMU.

Unfortunately, only one response was received. Given this poor response rate it was not possible to conduct analysis of responses. However, it is important to detail the questions asked as these remain relevant for the information that needs to be collected moving forward. The following questions were asked.

- Significance - How has your role contributed to the embedding of UDL within your Faculty?
- Benefits - What do you think have been the key benefits of UDL for your Faculty/staff?
- How has the implementation of UDL impacted on the approach of staff to teaching, assessment and feedback?
- Student benefits - What do you think have been the key benefits of UDL for your students? Do you have any evidence to support this?
- Evaluation of UDL - Do you have any evidence supporting the impact of UDL within your Faculty (feedback, data collection, reports)? If so, please provide a brief overview.
- Barriers - What have been the barriers/constraints to the implementation of UDL within your Faculty?
- UDL Case studies - Please provide a couple of examples of good practice within your Faculty and explain why these are good examples of UDL, in each case?

### Learning and Teaching Conference Workshop

The workshop delivered by the evaluation team at the DMU Teaching and Learning conference in September 2018 collected qualitative data from staff about their perceptions of UDL. Both academic and directorate staff attended the workshops. For the initial activity, attendees were asked to discuss in groups, 'What does UDL mean to you?' The aim of this was to capture the staff view of UDL beyond the UDL champions. Attendees were encouraged to write down key ideas on post-it notes and flip charts. These responses were written up and themes clustered.

A second activity asked attendees 'How do we effectively capture and embed the student voice to enhance practice?' Again attendees conversed in groups and were encouraged to write down key ideas on post-its and flip charts. These responses were written up and themes clustered to inform the ongoing evaluation strategy that will be discussed in greater detail in Section 10 'Next Steps' of this report.

## 5. Discussion

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### 5.1 Student data (DMU context)

The SPS data reveals some key trends for the UDL project.

#### Disability

The data reveal a mixed picture for students with a disability. There is a clear decline in the percentage of good honours for students with a SLD, which coincides with the withdrawal of DSA for many of this cohort. While there is a sector-wide gap in attainment between students with a declared disability and those without, this demonstrates a correlation between government funding and attainment. These findings correspond with findings of the Equality Challenge Unit's (now part of Advance HE) most recent report on student statistics, which found that,

*the proportion of disabled qualifiers who received DSA achieving a first/2:1 was larger than those not in receipt of DSA (73.9% and 72.5% respectively) (ECU, 2018, p.78).*

Moreover, fewer eligible students are claiming DSA. 'Among disabled students with a known DSA status, 38.2% received DSA in 2016/17, a decrease of 3.3 percentage points from 15/17' (ECU, 2018, p.77).

Comparison of DMU data with the findings of the ECU report requires further comment. Whilst the ECU data only disaggregates between ability/disability (rather than 'no disability', 'SLD' and 'other disability') it reveals an increase in good honours for students with disabilities. 'In 16/17, 73.2% of disabled first degree undergraduate qualifiers received a first/2:1, representing an increase of 1.4% since 15/17' (ECU, 2018, p.78). However, at DMU good honours in 2016/17 are lower for all groups (SLD's 61.6%, 'other' 69.6% and no disability 72.3%). These data indicate that the adoption of UDL has not yet mediated the impact of changes to DSA on the attainment of students with disabilities. However, the NSS results for students with disabilities compare favourably with the sector. For example, students with SLDs at DMU had far higher levels of satisfaction in relation to assessment and feedback (77.1%) compared to the sector (71.0%).

This highlights the need for qualitative research on the impact of UDL on experiences of students with disabilities to supplement the ongoing monitoring of these data. Crucially, it highlights the need for the gap between NSS results for students with disabilities and the attainment of those students to be mapped into

professional development activities and support for staff. This might usefully align with work being undertaken as part of the FTA project.

Faculty trends in attainment at DMU also broadly correspond to patterns identified in the ECU report on the sector. In HLS and FOT the proportions of good honours for students with a declared disability were lower than BAL and HLS. The ECU report asserts, 'a larger proportion of disabled qualifiers from non-SET subjects achieved a first/2:1 than from SET (science, engineering and technology) subjects' even though a similar proportion of students disclosed a disability in each (ECU, 2018, p.77). This trend was also highlighted in the ECU's report of the previous year (ECU, 2017, p.76). HLS and FOT are not necessarily under-performing in comparison to ADH and BAL, but reflect broader trends in the sector. Although, some programmes within FOT and HLS would not be classified as SET subjects this trend is noteworthy.

It is apparent from the good honours disability view that the results for students with an SLD and 'other disability' fluctuate far more year to year than the results of 'no disability', which remain roughly consistent. This is evident in data for each Faculty, although it is unclear why. Further work is needed to understand what determined such fluctuation, for instance if it was because of varying numbers of students with a declared disability, the types of disabilities declared or other factors entirely. Moreover, the good honours data for ability/disability is far more mixed than other views where there are clear attainment gaps between white students and BAME students, old and young students and part-time and full-time students.

### Ethnicity

The good honours data related to ethnicity evidences the attainment gap between BAME students and white students, which is being addressed by the FTA.

Moreover, the continuation data also shows a retention gap between BAME and white students. This signals a wider set of challenges that BAME students face beyond the attainment gap that require ongoing monitoring. Crucially, the ECU report found that continuation rates varied considerably by ethnic group, with black Caribbean entrants have the lowest rate of continuation. It was not possible to analyse continuation rates by ethnic group from the data collected at DMU, however, this is a trend that should be addressed moving forward.

Satisfaction data also displays a gap between white students and BAME students. On questions of Learning Community, 'Non-White' and 'Not Known' students have lower rates of satisfaction than 'White' students at DMU, although they are higher than the sector. This suggests that students from BAME backgrounds feel less included at university and the other data indicates this could in turn be having an impact on

attainment and continuation. It will be imperative for the UDL project, moving forward to work closely with the FTA project to identify effective interventions.

## Faculties

The SPS data revealed some differences between faculties. HLS had the sharpest decline in the proportion of good honours for students with an SLD. Although, it has been noted that this is a pattern reflected in the sector, the decline in HLS was stark. The percentage of good honours for both white and BAME students also declined. Furthermore, they had the sharpest decline in good honours for part-time students from 62% in 2013/14 to 36% in 2016/17. The number of part-time students in HLS and other faculties has dropped as a result of changes to Government funding and this has been a trend throughout higher education. Across the sector, part-time registrations are now 37.2% lower than 2007-08 (Universities UK, 2018). There was also a downward trend for mature students in HLS.

Whilst BAL data follows the overall patterns already identified this Faculty does perform better than other faculties. For example, there is an attainment gap between BAME and white students. However the percentage of good honours is higher than other faculties. BAME students have lower continuation rates and good honours in ADH. This suggests that the incorporation of the UDL framework may have had a greater impact in this Faculty than others, although more work is required to analyse this.

In contrast, FOT has some outlier results. Some positive, for example, the attainment of good honours for part-time students increased from 36% to 69%. Other data for FOT was negative, such as the low continuation rates for BAME students.

The differences between faculties, demonstrates the need for further research to ascertain whether the nature of courses taught in some faculties lend themselves to the adoption of UDL principles more readily than others and the impact this has on attainment and retention of particular groups of students as a consequence. The intersectional impact of universal design on individual students and cohorts of students needs further analysis, in order to understand practice in relation to its universality and the ways in which design can be iterated. This also has implications for co-creation and participation for a range of students. This will help move beyond unhelpful binaries related to disability, gender, ethnicity, class and sexuality, and support the generation of a meaningful pedagogic approach.

## NSS

Whilst the good honours and continuation data may point to areas of concern, levels of satisfaction at DMU outperform the sector. The overall satisfaction of students at DMU was higher than the sector. This suggests the implementation of UDL has contributed to enhancing the student experience at DMU compared to elsewhere. Of particular note are the high levels of satisfaction amongst part-time students, which bucks the sector trend. The provision of learning materials on the VLE and the roll-out of DMU Replay, which provide greater flexibility for students, may be of particular benefit for part-time students that may otherwise struggle to access the required materials.

However, there are discrepancies in the satisfaction of students with disabilities, those from ethnic groups and male students. The satisfaction of these groups, although higher than the sector equivalent, remains lower than the rest of their cohort. The incidence of widening participation groups, including BAME students and students with disabilities, reporting lower levels of satisfaction is of particular concern, given the aim of UDL2 to improve attainment and satisfaction amongst these groups, as well as the larger student body.

## UDL

It is problematic to attribute patterns in the SPS data to the implementation of UDL. However, these data have highlighted differences for students with disabilities and BAME students that need to be monitored in the next phase of the evaluation. In particular, good honours data reveal that the withdrawal of DSA for students with SLDs has had a negative impact on attainment. This suggests that in terms of quality enhancement, UDL has not had the same impact on all students.

This needs to be explored further, to identify which interventions are working for particular groups of students and, which are not. Moreover, further research needs to be carried out to examine the impact of UDL at particular transition points in the student lifecycle. This will gauge differences in the impact of the UDL framework between first years, third years, postgraduates and so forth.

Apart from the NSS data, these data only cover the initial implementation of UDL and the years before. Therefore, more data is needed from the most recent academic years covering the second phase of the UDL project to discern change over time.

## 5.2 External Examiner reports (curriculum context)

From the keyword searches it is apparent that examiners have not explicitly engaged with the term 'UDL' in their comments. However, there are numerous references to flexibility and inclusive practice, which is associated with UDL. This suggests that examiners have greater confidence using terminology that may be more familiar because of its congruence with inclusive teaching and learning more broadly.

Comments from the 16/17 spreadsheet commented on the multiple forms of assessment and delivery built into programmes, which is characteristic of UDL. Moreover, such comments were not as evident from the keyword searches of the 15/16 spreadsheet, which does indicate external examiners have picked up on the UDL elements within programmes.

The negative comments made about lecture capture in relation to attendance and the potential surveillance of staff echo wider concerns in the sector about the impact of lecture capture that have been explored in existing literature (Edwards and Clinton, 2018; Joseph-Richard *et al*, 2018).

It must be reiterated that the spreadsheet analysed only includes noteworthy comments of good practice and points that require action, therefore the limitations of these data to identify the embedding of UDL in the curriculum context needs to be recognised. Whilst, external examiners may not explicitly mention UDL in their comments, this does not mean that UDL is absent in teaching practice at DMU. It is problematic matching the embedding of UDL into quality assurance documents with teaching practice in the classroom.

## 5.3 Replay data and Assistive technologies (technology context)

### Replay Data

As previously stated, the delay in obtaining data relating to Panopto limited the amount of analysis that could be undertaken in the timeframe. However, the initial breakdown of the one million hits is demonstrative of the need for further analysis of this data.

Students make up the majority of hits on Replay, although the frequency of use varied markedly between students. Therefore, further intelligence is needed.

- When are students accessing recordings?
- For what purpose are they accessing the recordings?

- How long are students listening to recordings for?
- Are certain groups of students using Replay more than others? If so, why?
- Does Replay meet the needs of students with SLDs who no longer receive DSA?

It is intended that the proposed plan to combine the data on Replay views with demographic data on students will shed light on some of these questions. Due to the fact only student records for those who have engaged with DMU Replay were collected it is not possible to consider ideas of retention and achievement in relation to these data as there are no control groups with which to compare it.

The adoption of lecture capture technology has been widespread in the higher education sector with little critical analysis taking place alongside this to assess the extent of its use. Indeed, there has been no examination comparing the extra workload placed on staff to produce and upload recordings with the viewing figures of students. The literature review produced by the evaluation work stream gives an overview of existing literature in this area.

### Assistive Technologies

The assistive technologies available in the Library were originally installed to help a small group of students with particular learning needs. However, they are now available to any students working on designated computers in the library. Therefore, much like the initial implementation of UDL, the availability of assistive technologies has been more widely adopted as their efficacy is recognised.

Further work is needed to evaluate the utilisation of assistive technologies. Individual faculties and departments may also have licences for assistive technology software packages and, as such, there is a need to comprehensively map the availability and employment of these technologies across the University. Related to this is the forthcoming launch of Windows 365 across DMU in this academic year. Evaluative and monitoring work is needed to consider how Windows 365 supports the UDL framework.

## **5.4 TIP, Champion Interviews and Workshop (professional development context)**

### TIP

The Teaching Innovation Project, Towards Equitable Engagement: the Impact of UDL on Student Perceptions of Learning, ran during 2016/17. Data collection points



involved interviews with staff in all four faculties and LLS, and students in each Faculty. The following outcomes emerged.

- Learning styles: it is difficult to ascertain whether implementing the aims and ideas of UDL across all of DMU's programmes is helping to recruit and retain students with a wider range of learning styles, or whether current students feel that it is practically enhancing their student experience. A much wider qualitative survey is recommended, and it is the intention of this research project to inform such research.
- Learning support: implementing UDL is unable to replace the dedicated learning support some of our students clearly benefit from, such as the specialist feedback provided by learning support tutors. Our initial findings suggest, however, that there is no difference between the perceptions of UDL by those with declared learning differences and those without.
- Technology: while technologies and relevant pedagogical principles are a response to changing financial support for students with the most extreme learning differences, they are in fact more appropriately considered here as radical opportunities for all students to interact differently with both learning materials and the institution that delivers them.
- Technology: a key issue is the focus on technology rather than UDL in practice in the classroom, especially in a team that uses technology already; the key issue is active learning and large groups. There remains confusion about relationship between principles and ideas which can be reduced to the implementation of Replay.
- Technology: while lecture capture technology is rolled out in classrooms and lecture theatres across the DMU campus, its usefulness at the core of design disciplines remains potentially limited, especially where they rely upon studio tuition. Analysis is required to understand whether the signature pedagogy and teaching space of architectural education is proving to be both practically and pedagogically incompatible with lecture capture, the potential impact of this element of DMU's interpretation of UDL remains limited to the traditional mode of teaching by lecture (Brown et al. (2017)).
- Student engagement: key outcomes focused upon student interpretation of/engagement with editable content, curriculum design and curriculum organisation; in particular students do not understand some of the aims of UDL,

such as having editable content; confusion is amplified across programmes where some areas are already compliant and making interventions all the time.

- Implementation: there is an issue here of corporate vs collegial implementation, focused upon compliance with replay or enhancement. As a result, it is difficult to measure impact on teaching, and further work is required with a focus upon asking students, an analysis of curriculum design and assessment rather than simply delivery.
- Enhancement: work is also required to understand what actually existing good practice exists. However, for some staff and students, changes are positive – there is access to richer content, alongside staff ownership of curriculum. As a result, there is a need to move beyond performance management, and beyond individualised engagement through a modules use of Replay, instead to focus upon team-based enhancement of the curriculum as a whole.

### Champion themes

Interviews with UDL Champions exposed several key themes. These will be outlined here to give a sense of the staff view and discussed in more detail in Section 8 'Themes', in which they will be compared with key themes from academic literature on UDL.

#### *One size fits all?*

Champions spoke of having to re-contextualise facets of UDL principles for their respective faculties and individual departments. While there was agreement that the overarching ideas of UDL held value, Champions noted that these had to be tailored to the culture of specific departments. For instance, advice on UDL-friendly teaching delivery that centred around lecture-led courses was not always relevant for courses that were practice driven e.g. arts and design.

#### *Uneven Uptake*

Some Champions felt that the three pillars of UDL had not been embedded equally. Notably, much emphasis has been placed on UDL-friendly delivery of teaching because of the roll-out of DMU Replay, whereas less attention had been paid to ensuring assessment and feedback met the principles of UDL.

#### *Innovation vs. Compliance*

Champions noted pockets of resistance amongst staff who equated UDL to adhering to institutional protocol that requires teaching to be recorded via DMU Replay. Therefore, rather than inspiring innovative teaching practice, UDL had been seen to have promoted a culture of compliance or resistance amongst staff.

## Workshop Themes

Four key themes emerged from the activity during the teaching and learning workshop that asked staff what UDL meant to them.

### *Pedagogy*

Several comments recognised UDL as a means for innovative teaching and learning practice. This included a comment that referred to multiple forms of delivery and assessment. Another comment stated that UDL was 'primarily for lectures', which reveals different levels of understanding of what UDL means amongst DMU staff.

### *Accessibility*

A number of comments related UDL to increased accessibility for all students and beyond a strictly pedagogical basis. For instance one comment stated, 'Changing and increasing the variety of ways that we offer support services so that a wide range (all!) students are able to and are willing to engage in and benefit from them'.

### *Staff Development*

Several comments noted that UDL had provided the opportunity to enhance their own practice. For instance, one comment stated, 'Allows me to reflect on what we currently do make changes if needed – continuous support for staff to achieve this'.

### *Challenges*

A number of challenges were raised in response to this question. This included, 'unintentionally creating other barriers' and 'practice is more difficult than theory', which suggests that some staff have had issues implementing UDL within their work. Another comment referred to the fact that 'UDL is more than Replay', which suggests their frustration at the misinterpretation of UDL amongst wider staff.

## Comments

Comparing themes from interviews with Champions and from the workshop with a broader selection of staff foregrounds some key points.

- The misconception that *DMU Replay is UDL* appears to be still widespread amongst staff and students at DMU. Given the heavily publicised roll-out of DMU Replay, this could be an issue of visibility.
- The pedagogical underpinnings of UDL have a less visible impact on course design and delivery than the enforced availability of lecture recordings.
- This highlights the need for the role of UDL Champions to be highlighted within faculties, as well as a consideration of how other staff within faculties such as SLTGs could facilitate a broader engagement with UDL.
- The planned transition of UDL into the Centre for Academic Innovation (CAI) needs to be accompanied with a strategy of how UDL as innovative pedagogy is communicated more effectively.

These themes also point up the persistent gap between the theory and practice of UDL. Whilst the principles of UDL are widely accepted amongst staff as best practice, the actual implementation of them on the ground presents ongoing challenges to ensure all students are included on an equal footing across all faculties and departments.

## 6. Evaluation Limitations

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There are a number of limitations to this present evaluation of UDL that must be outlined here and will be addressed in the ongoing plan for the project in Section 10. Firstly, the research assistants for the evaluation works stream were hired later than originally intended, taking up post in May 2018. This has limited the amount of evaluation work carried out on the UDL project thus far. This short timeframe and the fact that it coincided with the summer break meant that engaging with students and many staff proved problematic. Moving forward, this will need to be addressed and ethical reviews have been produced in readiness for this.

An operational difficulty has been the ongoing replacement of Tableau with SAP. This had an impact on the ability to get data in relation to management information and business information as well as student data to compare with Replay data.

At a methodological level there has been the difficulty of measuring the impact of UDL on specific outcomes. It is hard to attribute UDL solely to a rise in attainment and retention due to a range of other factors that can also influence these metrics, which is an issue acknowledged in existing literature on UDL. As there was no baselining carried out before the implementation of the project, the issue of measuring change as a result of UDL has been further exacerbated.

## 7. Dissemination

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DMU's adoption of UDL is recognised as sector-leading, and has resulted in praise from the Department for Education (DfE) and the Higher Education Funding Council for England (HEFCE), along with interest from other universities across the world.

### *External Dissemination*

A conference on UDL was held at DMU in June 2017 in which staff from the University shared ideas and best practice and, subsequently, a roundtable discussion on UDL was conducted with colleagues from different universities in November 2017. DMU staff have also shared their expertise of UDL with the Heads of Educational Development Group (HEDG). Additionally, UDL at DMU was cited as a case study of good practice in the Department for Education's guidance on inclusive teaching and learning (DfE, 2017) and in a publication by the Higher Education Funding Council for England (HEFCE) on supporting for students with disabilities (Williams *et al*, 2017). Most recently, Dr Abi Moriarty was invited to speak at CAST's 4<sup>th</sup> Annual UDL Symposium, 'Empowering Learners', held at Harvard University in August 2018.

### *Internal dissemination*

The Learning and Organisational Development (LOD) team deliver staff training, which supports the implementation of UDL throughout the University. UDL has been embedded into all the training sessions that LOD provides. This includes the PG Cert in Teaching and Learning in HE for new academics, which received extremely positive feedback from participants with a 100% satisfaction rate from the 2017/18 cohort. During the summer of 2018 three sessions, '5 Golden Ideas for... Teaching and Learning', '...Assessment' and '... Feedback' were open to all staff. There is also a UDL shell on Blackboard, which provides an introduction to the principle of UDL including links to research articles and some examples of good practice, although this is now slightly dated and requires updating.

CELT provides training for staff and students on using DMU Replay and other assistive technologies. Sessions are held frequently and new sessions continue to be developed. Most recently, a session 'EDL for UDL' was held for staff on the use of assistive technologies to support UDL.

### *Planned Dissemination Activities*

External dissemination activities will continue in this academic year. An international conference on UDL will be held at DMU in June 2019 and DfE have also expressed an interest in visiting the University to learn more about its approach. The website on UDL at DMU has been re-designed and will shortly go live. This includes updated information on UDL provision at DMU. Within the University, alongside the training already outlined, new sessions continue to be developed and delivered. For instance, within HLS a '3Ts Session on UDL' will be delivered in October 2018.

## 8. Themes

Several themes emerged from the literature review and the interviews conducted with UDL Champions and the UDL project board that require discussion. Common themes emerging from the literature review and these meetings will be discussed before turning to specific themes arising at DMU.

### 8.1 Common Themes

#### *Disentangling UDL*

Both the literature and the meetings highlighted the difficulty of disentangling UDL components of attainment and retention from other factors that can influence these data including (but not limited to) other curriculum innovations, cohort differences and changes in staffing. This theme was touched upon in Section 6 Evaluation Limitations, but warrants further discussion here too as both the literature and interviews conducted with Champions highlighted the need for demonstrable evidence of the effectiveness of UDL as pedagogical practice when embedded into curriculum design and delivery. Moreover, both raised the need to consider the impact of UDL on different aspects of quality enhancement such as curriculum design, delivery and assessment in turn. This will enable the identification of effective interventions and highlight areas that require further development.

#### *Enhancing Teaching and Learning*

Both the literature and interviews outlined the capacity for UDL to enhance teaching and learning. Whilst the metrics for measuring UDL may be difficult to gauge, the qualitative data gathered from staff and students is generally positive about the impact of UDL on teaching and learning and the flexibility it delivers. The provision of training for staff to facilitate inclusive teaching and learning has been positively reviewed at both DMU and more widely.

#### *Defining UDL*

Related to the previous point is the issue of defining UDL in the institution. There remains a problematic equation of UDL with technology rather than pedagogy (Edyburn, 2010). There is a danger of reducing UDL to the relevant technology used to support learning and scholars also point to the lack of research in the use of technologies that align to UDL (Roberts, 2011). This is resonant at DMU with many interviewees noting the equation of UDL with DMU Replay by staff and students rather than an innovative pedagogy.

#### *Intersectional differences*

Both activities identified the need to measure the impact of UDL on the diversity of students present in post-secondary education. The emergence of UDL out of disability studies has resulted in a number of studies considering whether UDL

enhances the learning of students with disabilities (Burgstahler and Moore 2015; McGuire & Scott, 2006; Kumar and Wideman, 2014). Given the adoption of UDL at DMU in response to government changes to DSA the impact on students with disabilities is of particular importance. In addition, the overlap of UDL with other projects including FTA necessitates identifying the extent to which UDL can effectively meet the multiple needs of students.

### *Institutional Change*

Similar risks were identified in relation to the continued adherence to UDL practices once initial projects finish and how institutional change is managed. Scholarship highlights the time constraints of staff in higher education to adopt UDL and their reluctance to invest a lot of time in course re-design when promotion decisions tend to be more tied to research outputs (Silver, 2002). In his study of UDL projects at US universities, Zeff (2007) noted that Universal Design (UD) initiatives were introduced with ample funding and senior-management buy-in. After this ended, enthusiasm for UD decreased and in some instances the only remnants were a collection of resources on archived websites. Similarly, interviewees alluded to risks around the continued monitoring and advancement of UDL once the project ends. There were concerns around maintaining UDL principles in 'business as usual', without the impetus of a dedicated project or funding, as well as the dedicated time of staff. This is of particular relevance to UDL at DMU moving forward and, indeed, similar themes surrounding institutional change were raised by Pettit and Hall (2018).

## **8.2 Divergent Themes (DMU specific)**

The adoption of UDL at DMU differs in important ways from existing studies and this caused divergent themes to arise in the interviews.

### *University Wide Approach*

Whereas existing studies focus on the implementation of UDL in a particular course, DMU's University-wide adoption of UDL raised different themes. UDL has been embedded in process via quality assurance, but it is harder to see what this looks like on the ground. Essentially, all relevant documentation includes reference to UDL. However, it is harder to measure how this has been realised in practice. Indeed, the adoption across the University has raised issues of compliance. All staff are required to make learning materials available 48 hours before their lecture and the lecture must then be recorded and uploaded using DMU Replay. While compliance to the 48 hour rule has not been monitored, uploading material using Replay has. Interviewees highlighted that this had caused resistance from some staff and detracted from the core principles of UDL, which centre on innovative teaching



practice. In turn, this had impacted on the ability of Champions to promote good practice in their faculties.

The institution-wide adoption also highlighted differences between faculties that need to be explored in more detail. The different experiences of Champions in implementing and facilitating UDL within their faculties provides points of contrast to existing studies. Whereas the majority of existing studies were precipitated and carried out by staff with an interest in UDL, at DMU, UDL2 saw the roll out of UDL across the University as part of the wider learning and teaching strategy. Consequently, there was not necessarily complete staff buy-in for the project before it commenced. This may explain why themes of compliance and resistance emerged from the scoping interviews that were not evident in existing studies. In addition, it highlights the need for some alignment between UDL Champions and FTA Champions. Analysing the comparative success of these roles within different projects at DMU would be valuable for the perspectives this would offer on institutional change.

### *Champions*

While recommendations are made in literature for designated academic leaders to implement UDL within institutions, like the Champions at DMU, there has been no evaluation of such positions (UDLL, 2016). Therefore, interviewing Champions highlighted important details about the uneven nature of institutional change that has not been identified in existing literature. Some Champions highlighted that their role lacked a defined purpose and this led to confusion about their role amongst themselves and the staff in their respective faculties. Indeed, some noted that their role was increasingly seen in a negative light with perceptions that they were 'policing' the use of Replay amongst the staff in their faculties, rather than promoting and facilitating the adoption of UDL principles. As previously noted, the resistance of staff in some instances restricted the role of Champions.

### *UK Context*

There are no existing studies of UDL in a UK Higher Education Institution. This is significant given DMU's adoption of UDL in response to UK government changes to DSA. The unique set of circumstances in which UDL was initially adopted at DMU inevitably framed how key stakeholder spoke of the impact and successes of UDL, which imparted different themes than the existing literature. In addition to this, UDL was a key part of DMU's TEF submission. Again, the TEF is a measure of teaching at UK universities specifically. DMU's achievement of securing Gold in the TEF evidences that UDL is an effective framework for meeting the sector requirement for inclusive teaching and learning; however, there is inevitably no comparative discussion of this in the literature.

### *DMU Replay*

Whilst a key part of DMU's UDL strategy has been the roll-out of DMU Replay, previous studies of UDL have not considered lecture capture at any length. Further research is needed on the impact of DMU Replay on student learning across faculties as well as the diversity of students to see if it effectively replaces services previously provided through DSA. The decline in percentage of good honours for students with a specific learning difference since 2015/16 when the DSA changes came in to force suggests that Replay has not completely filled the gap of note takers and other services previously available to this group.

## 9. Challenges

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There are a number challenges for the project that must be raised before outlining the ongoing plan for evaluating UDL at DMU.

- The loss of project funding threatens the continued engagement with, and progression of, UDL at DMU. This has also created uncertainty over the future of Champion roles in each Faculty. Presently, it will be faculties that will decide the future of Champion roles, which has the potential to increase Faculty differences in the provision of UDL.
- It needs to be established where UDL will sit in relation to the CAI, which is due to open in the forthcoming academic year.
- There remains a lack of definition about what UDL stands for at DMU and it continues to be equated solely with Replay. Therefore, communication of UDL both internally to staff and students and externally to the HE sector is a priority.
- To tackle the pockets of resistance to UDL that remain there is a need to embed trust and move away from an idea of compliance associated with Replay.

## 10. Next Steps

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In response to these initial findings the UDL evaluation work stream team have identified several key areas for further work over the next two years. Appended to this report is an evaluation plan with proposed activities and the corresponding stakeholders that would be engaged with, as well as intended method of engagement. The plan is divided into the same thematic sections as this interim report (DMU context, curriculum context, technology context and professional development context) to demonstrate how the evaluation and analysis of each theme will be developed moving forward.

### Getting the Student Voice

The main priority for the ongoing evaluation will be engaging with students, which would fall under the DMU context strand. To supplement the SPS data gathered there needs to be qualitative data collected on student engagement with UDL and its impact on their experiences. It is intended that the thirteen newly appointed DSU students reps could be used as a steering group to decide the most effective way to get the student voice.

Crucially, this approach will enable intersectionality to be explored in more detail. The attainment, retention and satisfaction of intersectional groups could not be gathered via SPS due to the fact that the number of students that may fall in to such intersection could fall below five. When the cohort number falls below five the data is protected to maintain student confidentiality. Nonetheless, such groups need further investigation to understand the differential impacts of UDL. The latest ECU report of student statistics includes a section on intersectionality recognising the increasing focus on this by equality and diversity practitioners and it would be conducive for the UDL evaluation to incorporate this.

The intention is to conduct qualitative work via case studies and focus groups to gauge student perceptions and experiences. The aim would be to understand student perceptions of UDL and whether they are able to recognise UDL beyond DMU Replay. These activities would employ Participative Action Research (PAR) methods to enable students to become partners in developing the research methods and tools of the evaluation of UDL. The ethical review to conduct these activities has been completed.

The workshop held with staff at the learning and teaching conference enabled this strategy for engaging with students to be enhanced and validated as staff co-created evaluation activities that will be incorporated into the ongoing evaluation plan. The second activity at the workshop asked attendees 'How do we effectively

capture and embed the student voice to enhance practice?' They were encouraged to think about this question in relation to co-creation and to think about the integration and timing of such evaluation activities. Again, attendees conversed in groups and were asked to write down key ideas on post-it notes and flip charts. These responses were written up and themes clustered. The following themes were identified.

### ***Method***

Several responses highlighted the need for different methods to be employed to ensure maximum student engagement. In particular, responses raised the need for informal gatherings with students that would prompt richer responses than those typically given on questionnaires etc. It was felt that conversing with students face-to-face would provoke a more instructive dialogue.

### ***Consideration***

Related to the previous point about the ways in which students were engaged with, responses also stressed the need to ensure that there were opportunities for all student groups to be heard. For instance, one response placed emphasis on the 'size of groups to allow all voices to be heard.'

### ***Co-creation***

Participants raised the need to be responsive to the ways students wanted to engage in evaluation activities. For example, one response stated, 'Ask how students want to give their views.'

### ***Feedback***

Finally, several responses emphasised that the incorporation of the feedback given by students must be evident. Responses stated the need to 'close the loop' and 'use feedback to inform students'. This will ensure the meaningful inclusion of student views into evaluation activities and evidence the value given by their contribution.

## **Perceptions of Staff and Academic Leads**

Another aim is to engage with the wider staff at DMU. For this initial evaluation interviews were carried out with UDL Champions and members of the project boards and a workshop was held with at the DMU teaching and learning conference. This brought important themes to the fore and, moving forward, it will be instructive to see how these compare and contrast to the thoughts of the wider staff body at DMU. New Champions have been appointed in some faculties and it would be valuable to baseline the perceptions and understandings of these staff, which could then be re-examined at a later point. Importantly, this needs to include visiting and hourly paid lecturers to examine how the range of staff employed at DMU adopt the principles of UDL. Moreover, engaging with staff will be imperative for developing

case studies of good practice to share and for gaining a deeper understanding of the leaders and laggards in the adoption of UDL.

Related to this is the need to engage with academic leads in faculties to examine how UDL is considered within the learning and teaching strategy of each Faculty. Given the uncertain future of some of the Champion roles in the faculties, speaking with academic leads will ensure another avenue in which faculty buy-in can be explored.

More broadly, the impact of UDL must be considered in a broader discussion of quality enhancement at the University. This discussion should be one that considers enhancement within the context of other institutional initiatives including the creation of the CAI and the FTA project. It must also incorporate the strategic aims of the University as outlined in the ULTAS such as 'co-creation' and 'building capacity'. A move away from assurance and risk-based management of the curriculum, and away from a focus upon delivery alone, would engender a deeper focus with curriculum design. However, this must be implemented at the team-level.

### Evaluating technology

It has been requested that DMU Replay data be collected again in the oncoming year, which will enable continued monitoring of the usage of DMU Replay over the course of the project. Given the delay in receiving the Replay data it was not possible to conduct a thorough analysis of the viewing figures. Therefore, in addition to the continued collection of viewing data, further analysis is needed about which students are making use of DMU Replay and their viewing patterns.

During the next academic year Windows 365 will be rolled out across the University. Staff will need to be trained in the capabilities of Windows 365 to facilitate UDL practice and moving forward there needs to be an evaluative exercise put in place to measure the pedagogical impact of Windows 365.

Indeed, a key issue moving forward is the effective evaluation of assistive technology. There needs to be an integrated approach that considers the impact of DMU Replay alongside the other assistive technologies available for staff and students. In essence, the ecology and relationship of special technology to pedagogic practice and learning more broadly warrants further investigation.

### Wider Dissemination

These next steps will ensure the development of a meaningful evaluation that will facilitate the production of significant research outputs. It is intended that an article

will be submitted to a peer-reviewed journal in the next academic year that will ensure the wider dissemination of DMU's adoption of UDL.

## 11. Recommendations

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There are five recommendations emerging from this report, which should underpin the implementation of the project in academic session 2018/19, as UDL moves towards business-as-usual. This includes extending its deeper interconnections with work on FTA and the experiences of students-of-colour, interconnections with Athena SWAN and the gendered experience of the University, the co-creation strands of the ULTAS, and the research-engaged teaching strand of the Developing Researchers Effectively project. UDL has the ability to contribute to capability and capacity-building in each of these areas.

- I. The institution should be clear about the deep interconnections between UDL, and FTA, Athena SWAN, ULTAS and research-engaged teaching, in order to create an enhancement-focused, pedagogic environment.
- II. The development of an on-line mechanism for sharing good practice and case studies across the University will amplify engagement.
- III. The co-created implementation of a strategy for understanding student perceptions of UDL, focused upon academic practice and the student experience should underpin these case studies.
- IV. An integrated evaluation of technology that supports UDL, combining an analysis of DMU Replay with the employment of other assistive technologies, should be undertaken, in order to shift the focus of UDL away from the former towards enhancement.
- V. A strategy for external communication and internal branding should be developed to give a clear message about what UDL at DMU is, aimed at specific stakeholder groups.



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