

Academic Policy Statement APS 27:

Research Data Management

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1. Introduction

Middlesex University¹ is committed to supporting and facilitating research excellence². Excellent research is underpinned by high quality data and as such it is essential that research conducted within the institution be subject to Research Data Management (RDM) best practice. Supporting the principles of the Universities UK Concordat to Support Research Integrity³ and the University Code of Practice for Research,⁴ it is Middlesex University's responsibility to encourage and enable researchers to adhere to good practice.

¹ Middlesex University in this context means all Middlesex University campuses including overseas campuses: <https://www.mdx.ac.uk/about-us/what-we-do/our-campus>

² Middlesex University Corporate Strategy Towards 2031: <http://mdxstrategy2031.co.uk/wp-content/uploads/2020/11/Middlesex-Towards-2031.pdf>

³ Universities UK – The Concordat to Support Research Integrity: (May 2022): <http://www.universitiesuk.ac.uk/highereducation/Pages/Theconcordattosupportresearchintegrity.aspx>

⁴ Middlesex University Code of Practice for Research (April 2016): <https://www.intra.mdx.ac.uk/media/intranet/document-library/c/CoP-for-Research-approved-15-Apr-2016.doc>

The benefits of managing research data effectively include:

- Improving the integrity, longevity and utility of research data.
- Mitigating the risk of accidental data loss.
- Enabling data sharing and re-use, increasing the visibility, impact and integrity of research.
- Mitigating the risk of inappropriate release of sensitive data.
- Ensuring appropriate long-term preservation of and access to data.

Each research council has its own data sharing and management policies and guidance to follow.

Funders expect that “publicly funded research data are a public good, produced in the public interest, which should be made openly available with as few restrictions as possible in a timely and responsible manner [while complying] with legal, ethical, disciplinary and commercial requirements for the release of research data.”⁵

Funders emphasise the importance of good data management practices and data management and sharing plans^{6,7,8,9} with reference to the FAIR Principles.¹⁰

2. Scope

This policy aims to:

- Promote RDM best practice at Middlesex University.
- Raise awareness of funder’s RDM requirements.
- Delineate Middlesex University’s expectations of its researchers.
- Describe the services that Middlesex University provides to assist researchers.
- Reference RDM-related Middlesex University policies and frameworks.
- Acknowledge that RDM falls within the remit of a range of stakeholders and that they will work together to develop a comprehensive and cohesive RDM infrastructure and support service.

3. Researcher Responsibilities

As part of best practice, the University expects researchers to manage their data according to appropriate standards throughout the research data lifecycle.

⁵ UKRI Common Principles on Research Data, formerly RCUK Common Principles on Data policy (2015): <https://www.ukri.org/manage-your-award/publishing-your-research-findings/making-your-research-data-open/>

⁶ UKRI Guidance on best practice in the management of research data (June 2018): <https://www.ukri.org/publications/guidance-on-best-practice-in-the-management-of-research-data/>

⁷ Open Access guidelines for Horizon Europe (April 2022): https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/programme-guide_horizon_en.pdf

⁸ Final NIH Policy for Data Management and Sharing (October 2020): <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-013.html>

⁹ Data and Data Management Plans – Information for ERC grantees (April 2022): https://erc.europa.eu/sites/default/files/document/file/ERC_info_document_Open_Research_Data_and_Data_Management_Plans.pdf

¹⁰ FAIR research data principles (2016): <https://www.go-fair.org/fair-principles/>

- **(3.1)** All research projects that are expected to process data, will be accompanied by a Data Management Plan irrespective of whether submission of such plans is required when applying for research funding.
- **(3.2)** The **principal investigator** involved in a research project is ultimately responsible for the management of research data. Where research students are not principal investigators, the **director of study** is responsible.
- **(3.3)** Relevant Ethics guidelines,¹¹ Intellectual Property Rights (including commercial implications),¹² Copyright,¹³ and Data Protection¹⁴ must be considered.
- **(3.4)** Appropriate data should be selected for preservation post-project for 10 years unless funder or legal requirements¹⁵ specify otherwise, at which point a review process will be triggered.
- **(3.5)** Each **researcher** must make themselves familiar with and adhere to the requirements of their particular funder, publishers and other relevant stakeholders.
- **(3.6)** Research data should be made as open as possible unless there are legal, ethical, commercial, intellectual property or other reasons not to do so.
- **(3.7)** An appropriate licence should be applied to manage the re-use of this data.
- **(3.8)** The **data owner** will adhere to safeguarding measurements and apply due diligence with regards to safeguarding of sensitive information.
- **(3.9)** The **researcher** will not share any data that would infringe any right of title or copyright or intellectual property regulation.
- **(3.10)** The **researchers** will ensure that a data access statement is present in all outputs arising from the research data.¹⁶

4. Institutional Responsibilities

This policy recognises that researchers will require support within the University to ensure effective research data management that complies with funder and institutional obligations and exemplifies best practice in research. A programme of guidance and training in all areas of RDM for all relevant stakeholders will be provided by Library & Student Support (LSS) in consultation with all Faculties, the Research & Knowledge Transfer Office (RKTO), the Computing and Communications Systems Service (CCSS) and Staff Development.

The University provides the Research Support infrastructure that enables compliance with this policy and required governance procedures.

¹¹ Middlesex University Ethics Policy Framework Statement (May 2019): https://www.intra.mdx.ac.uk/media/intranet/document-library/e/ac_18-47b_-_mu_ethics_policy_framework_may_2019_-_update.docx

¹² Middlesex University Intellectual Property Rights and Protection Framework: <https://www.intra.mdx.ac.uk/tools-policies/policies-and-guidance/intellectual-property>

¹³ Middlesex University Guidelines to Copyright Law and Licensing: <https://www.intra.mdx.ac.uk/tools-policies/policies-and-guidance/copyright>

¹⁴ Middlesex University General Policy Statement (GPS4) – Data Protection Policy (June 2018): https://www.mdx.ac.uk/data/assets/pdf_file/0023/471326/Data-Protection-Policy-GPS4-v2.4.pdf

¹⁵ Middlesex University Retention Schedule: <https://www.intra.mdx.ac.uk/media/intranet/document-library/r/retention-schedule.pdf>

¹⁶ Middlesex University Academic Policy Statement APS 26 – Open Access Publications: https://www.mdx.ac.uk/data/assets/pdf_file/0035/169397/Open_Access_Publications_Policy_APS_26.pdf

- The Research Support Team (LSS) will provide guidance through dedicated webpages¹⁷ and the Research Data Management Libguide,¹⁸ which will be frequently updated to reflect changes in the research policy landscape.
- The Research Support Team (LSS) will provide training on research data management to faculties and postgraduate research students and advise researchers on an individual basis.
- The Research Support Team (LSS) and the Research and Knowledge Exchange Office (RKTO) will provide general and specific support for research data management, including the reviewing of data management plans prior to an external funding application and guidance on data management and sharing.

5. Research Data Repositories

Research data can be deposited in any general or discipline-specific research data repository that meets approved technical requirements¹⁹ and adheres to funder policies.

- Open data resulting from Middlesex University's Research activities should be deposited in the Middlesex University Research Data Repository.²⁰

6. Beyond this Policy

This policy is recommended as a general framework to ensure best practices for research data management at Middlesex University. This policy recognises that the Middlesex University research data landscape is evolving. For further guidance, please contact the Research Support Team (research-data@mdx.ac.uk).

7. References to related Middlesex University policies

This policy should be read in conjunction with the following references:

- Research Policy statement (APS 4) (November 2015):
https://www.mdx.ac.uk/_data/assets/pdf_file/0036/197838/Research_APS4pdf.pdf
- Code of Practice for Research (April 2016):
https://www.intra.mdx.ac.uk/_media/intranet/document-library/c/CoP-for-Research-approved-15-Apr-2016.doc
- Ethics Policy Framework Statement (May 2019):
https://www.intra.mdx.ac.uk/_media/intranet/document-library/e/ac_18-47b_-_mu_ethics_policy_framework_may_2019_-_update.docx
- General Policy Statement (GPS4) – Data Protection Policy (June 2018):
https://www.mdx.ac.uk/_data/assets/pdf_file/0023/471326/Data-Protection-Policy-GPS4-v2.4.pdf
- Middlesex University Retention Schedule (January 2019):
https://www.intra.mdx.ac.uk/_media/intranet/document-library/r/retention-schedule.pdf

¹⁷ Middlesex University Research Data web pages: <https://www.mdx.ac.uk/our-research/research-data>

¹⁸ Middlesex University RDM LibGuide: <https://libguides.mdx.ac.uk/research/research-data>

¹⁹ Registry of Research Data Repositories: <https://www.re3data.org/>

²⁰ More information is available via the RDM LibGuide: <https://libguides.mdx.ac.uk/research/research-data>

- Academic Policy Statement APS 26 – Open Access Publications: https://www.mdx.ac.uk/data/assets/pdf_file/0035/169397/Open_Access_Publications_Policy_AP_S_26.pdf
- Intellectual Property Rights and Protection Framework: <https://www.intra.mdx.ac.uk/tools-policies/policies-and-guidance/intellectual-property>
- Freedom of Information: <https://www.mdx.ac.uk/about-us/policies/freedom-of-information>
- Guidelines to Copyright Law and Licensing: <https://www.intra.mdx.ac.uk/tools-policies/policies-and-guidance/copyright>
- IT Security: <https://www.mdx.ac.uk/about-us/policies>

8. Definitions

Research Data can be defined as **any** digital object created during the course of research (which might include documents, still images, video and audio files, spreadsheets, software, computer code, databases or websites) in addition to physical objects such as sketchbooks, diaries, lab notebooks, portfolios, models or other artefacts. It also includes the documentation of Practice-as-Research.²¹

Research Data Management can be described as “[...] an explicit process covering the creation and stewardship of research materials to enable their use for as long as they retain value”²²

Open Data is that which “[...] can be freely used, modified, and shared by anyone for any purpose.”²³

Research Data Lifecycle can include the planning, creating, using, appraising, depositing, publishing and preservation of research data enabling both discovery and re-use.²⁴

Data Access/Availability Statement is a statement appended to, and included within, a publication describing where the underpinning data can be found (e.g. using a Digital Object Identifier (DOI) or URL with the location of the data) and the conditions of access. The UKRI Open Access Policy “requires in-scope research articles to include a Data Access Statement, even where there a no data associated with the article or the data are inaccessible.”²⁵

Shareable Research Data are the subset of data underpinning a research project that can be made available for use and re-use under the appropriate licence, and archived for long-term, as determined by funder and institutional mandates and recommendations. In cases where Middlesex University is partnering with external collaborators, a **data sharing agreement** is strongly recommended.

A **Data Sharing Agreement** is a legally-binding agreement drawn up between research partners, particularly in the case of external collaborators. This agreement should outline the roles and responsibilities of partners around stewardship of the data, including what data will be kept at the completion of the research project, how long the data will be kept following the end of the project, and whether there are any ethical, legal or commercial restrictions that need to be taken into account to ensure that potentially sensitive data is protected.²⁶

²¹ Evans J (2015) Academic Policy Statement APS 27: Research Data Management, Middlesex University: https://www.mdx.ac.uk/data/assets/pdf_file/0037/169399/Research_Data_Management_Policy_APS_27.pdf

²² Rans, J (2015) Research Data Management: Middlesex University. Presentation given on 22 January 2015.

²³ Open Definition V2.1:2015-11 (2015), Open Knowledge Foundation: <http://opendefinition.org/od/2.1/en/>

²⁴ Rans, J (2015) Research Data Management: Middlesex University. Presentation given on 22 January 2015. Adapted from: <http://www.slideshare.net/edinadocumentationofficer/mantra-poster2#>

²⁵ UKRI Open Access Policy (2021): <https://www.ukri.org/publications/ukri-open-access-policy/>

²⁶ More information about Data Sharing Agreements by the Information Commissioner’s Office: <https://ico.org.uk/for-organisations/guide-to-data-protection/ico-codes-of-practice/data-sharing-a-code-of-practice/data-sharing-agreements/>

Restricted/Sensitive research data are data that cannot be made openly available or shared broadly, such as data arising from security sensitive research. This data might have ethical, legal and/or commercial constraints, for example, data which contains personal details that require protection under GDPR, commercial patents and patient data in a medical/health or social context. These constraints to sharing take precedence over mandates to make data openly available.

General Data Protection Regulation (UK GDPR)²⁷ is a legal framework which strengthens and protects the rights for data subjects (research participants). It requires those gathering data to be clear about why and how personal data is to be gathered, stored and used. It also documents consent given by those from whom data is collected. Consent for data collections and use must be collected, documented and retained at all stages of the research lifecycle, allowing participants to consent - or not - to each use. Data must be managed, stored and archived in a manner that protects personal data.

Data Citation is the use of metadata to ensure that any data are referenced in a way that provides credit and impact to the original producers of the data. It is particularly crucial in the case of re-use of data the provenance of the data and any conditions, such as licences, associated with use, re-use and sharing is understood. Data should ideally be cited with a persistent Uniform Resource Identifier (URI) such as a **Digital Object Identifier (DOI)**.²⁸

Digital Object Identifier (DOI) A unique reference that enables permanent identification and location of digital objects, such as datasets, journal articles or book chapters. DOIs can be used to cite datasets, in addition to versioning datasets and digital objects. The Middlesex University Repositories can provide DOIs for digital object and data deposits in the Repository which have not hitherto been provided with DOIs by publishers or distributors.

Data Management Plan (DMP) is the document created at the beginning of a research project and often submitted with the funding application. Sometimes it is also called a Data Sharing Plan. It typically states what data will be created and how, as well as outlining the plans for protecting data against loss, ethical and legal aspects of data safeguarding, sharing and preservation. In doing this, it also notes what is appropriate given the nature of the data and any restrictions that may need to be applied. The data management plan should be maintained as a 'living document' throughout the course of the research project and should be updated as the project evolves.

FAIR research data is defined as research data that is "Findable, Accessible, Interoperable and Re-Useable" in accordance with best practice guidelines.²⁹

Findable research data – Metadata about the data or digital object should be both human- and machine-readable in order to facilitate automatic discovery. Depositing data in an institutional or discipline-specific repository will enable the data to be more readily discovered online. Research data should ideally have a Digital Object Identifier (DOI) to ensure that they can be found and correctly cited, to ensure credit and increase impact.

Accessible research data – Publications should include a data access/availability statement in order to ensure that the conditions of access and re-use of the data are clearly stated. This is a requirement for UKRI-funded publications, regardless of whether data are present or otherwise restricted or embargoed.

Interoperable research data – Use of machine-readable metadata is recommended in order to ensure that data can be discovered online. Data should include clear annotations describing how the data was created and how it can be used to ensure long-term preservation. Standard formats should be used where possible to ensure that datasets can be integrated as needed. Use of persistent identifiers such as

²⁷ UK GDPR (2018): <https://www.legislation.gov.uk/ukpga/2018/12/contents/enacted>

²⁸ More information about data citation including examples by DataCite: <https://datacite.org/cite-your-data.html>

²⁹ FAIR Guiding Principles for scientific data management and stewardship: <https://www.go-fair.org/fair-principles/>

DOIs and ORCiDs will enable datasets to be electronically joined with associated scholarly research outputs (publications such as journal articles and monographs), authors and collaborators and research institutions.

Reusable research data – It must be ensured that data have appropriate licenses and data access/availability statements applied so that the conditions regarding use and re-use of the data are clearly noted. Where possible, data management plans or a ‘read-me’ annotation should be utilised to ensure that the data is understood within its disciplinary context; this will clarify how the data can be re-used.

9. Policy Implementation & Review

This policy builds on the Research Data Management policy published in June 2015, authored by Jenny Evans (Alumni), Research Data Manager. This policy should be reviewed within the next 12 months to ensure that it is current.

Author(s)	Dr Brigitte Joerg, Research Information Manager Sarah Stewart (Alumni), Research Information Manager
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Suggested review by	One year after effective date

10. Version history

#	Date effective	Author(s)	Approved by	Change details	Suggested Review Date
2	2024-11-06	B. Joerg, S. Stewart	Academic Board	Reflects changes of funder research data policies, refers to our LibGuide, expands on definitions, highlights related policy references.	November 2025
1	2015-06-25	Jenny Evans	Academic Board		June 2019