Al-powered DMP Assessment

Teachers as game jam organisers - expectations and experiences

Study Design: Pre- and post-event questionnaires Discipline: Educational Technology

Analysis Information

Analysis Date: 2025-06-04

Analysis ID: run_20250604115504_d9811e23

Configuration: dmp_analysis Execution Time: 461.03 seconds Text Length: 9825 characters

Overall Assessment

Poor	Satisfactory	Excellent
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Checklist Information

Name: Finnish DMP Evaluation Guidance

Description: Based on Finnish DMP evaluation guidance + General Finnish DMP guidance. Can be used when evaluating DMP by students, peer reviewing or when evaluation is conducted by a data

steward. Version: 2.0

ID: finnish_dmp_evaluation

About this Report

This report was generated by ReproAl DMP Analyzer, an artificial intelligence tool designed to evaluate Data Management Plans (DMPs) against best practices and compliance requirements. The analysis is based on the content of the DMP and the evaluation criteria defined in the checklist.

Summary of Results

Domain	Result	Evidence	Recommendations
0.1 Project details	Satisfactory	Includes detailed project information • Missing funding instrument details • Incomplete ORCID information for all contributors	Provide complete funding instrument details and ORCID information for all contributors to achieve excellent classification.
1.1 Data Types and Formats	Satisfactory	Data sets/types categorized Partial acknowledgment of data handling needs • Lack of rationale for format choices • No data volume calculation description	Provide a rationale for chosen data formats and a clear description of data volume calculation.
1.2 Data Quality Control	Satisfactory	Outlines data quality control methods • Partial recognition of error sources • Limited description of comprehensive quality control practices	Enhance the description of possible error sources and provide a more comprehensive overview of quality control practices.
2.1 Legal issues in data management	Satisfactory	Addresses GDPR compliance • Describes handling of personal data • Lacks mention of ethical review	Include information on ethical review processes or statements obtained for the project.
2.2 Management of data rights and agreements	Satisfactory	Identifies data owners • Lacks license details • No intellectual property rights management • Does not mention funder's data sharing policy compliance	Detail licenses for data re-use, manage intellectual property rights, and address compliance with the funder's data sharing policy.
3.1 Documentation strategy	Satisfactory	Outlines documentation strategy • Lacks comprehensive metadata standards • No documentation protocol agreement • Lacks detailed data organization strategy	Incorporate comprehensive metadata standards, establish documentation protocol agreements, and detail data organization strategies.
4.1 Data storage and backup strategies	Satisfactory	Specific storage and backup strategies detailed • Lacks comprehensive version management systems • No method for storing physical data • Missing service description links	Describe version management systems, provide methods for storing physical data, and include service description links.
4.2 Access control	Excellent	Clear responsibilities for access control • Secured access control described • Lacks detailed safeguards	

5.1 Data Sharing and Publishing	Satisfactory	Metadata availability described • Lacks comprehensive sharing details • No rationale for repository selection	Provide comprehensive data sharing details and explain the rationale for repository selection.
5.2 Data Archiving	Satisfactory	Clear data archiving plan Lacks detailed data access protocols Does not address legal and institutional demands	Detail data access protocols and address the impact of legal and institutional demands on data preservation.
6.1 Responsibilities for data management	Satisfactory	• Responsibilities for data management designated • Outlines coordination in collaborative projects • Lacks procedure for transferring responsibilities • No post-project data management plan	Establish a procedure for transferring data management responsibilities and detail post-project data management plans.
6.2 Resources required for data management	Satisfactory	Some resources for data management outlined • Lacks detailed financial costs • No estimates of time and money No investment in expertise • Lacks resources for training and education	Detail financial costs, provide estimates of time and money, invest in expertise, and outline resources for training and education.

Detailed Results

0.1 Project details

The manuscript demonstrates substantial compliance with project details, including comprehensive information on project title, funder, principal investigator, and other contributors. However, it lacks complete details on the funding instrument and ORCID information for all contributors.

Result: Satisfactory

Item	Result	Question	Explanation
0.1.1 Project Title	Yes	Is the project title included?	The project title is clearly included in the Plan Overview section.
0.1.2 Funder Information	Yes	Is the funder information included, if applicable?	Funder information is included, specifying the Research Council of Finland as the funder.
0.1.3 Funder Name	Yes	Is the name of the funder included, if applicable?	The name of the funder, The Research Council of Finland, is included in the Plan Overview.
0.1.4 Grant Number	Yes	Is the grant number included, if applicable?	The grant number is included in the Plan Overview section.
0.1.5 Funding Instrument	No	Is the funding instrument included, if applicable?	The manuscript does not provide information about the funding instrument.
0.1.6 Principal Investigator	Yes	Is the principal investigator's information included?	The principal investigator's information, including name and role, is included in the Plan Overview.
0.1.7 Organization Information	Yes	Is the organization's information included?	The organization's information, Tampere University, is included in the Plan Overview section.
0.1.8 Contributors	Yes	Are other contributors listed?	Other contributors, specifically Annakaisa Kultima, are listed in the Plan Overview section.
0.1.9 ORCIDs of Contributors	Partial	Are the ORCIDs of all contributors included?	The ORCID of the creator, Riikka Aurava, is included, but there is no information about the ORCIDs of other contributors such as Annakaisa Kultima.
0.1.10 Date of Updates	Yes	Is the date of updates included?	The date of the last modification is included in the Plan Overview section.
0.1.11 Project Abstract	Yes	Is the abstract of the project included?	The abstract of the project is included in the Plan Overview section.

1.1 Data Types and Formats

The manuscript partially meets the requirements for data types and formats, with clear categorization and acknowledgment of data handling needs but lacks rationale for format choices and a description of data volume calculation.

Item	Result	Question	Explanation
1.1.1 Data sets/types categorization	Yes	Are the data sets/types clearly listed in categories that align with the research plan and the rest of the DMP?	The data sets/types are clearly listed in categories that align with the research plan and the rest of the DMP in the General description of data section.
1.1.2 Acknowl edgement of data handling needs	Partial	Does the categorization acknowledge different data handling needs, such as for sensitive or confidential data?	The manuscript mentions the handling of sensitive information by stating that the PI will delete all sensitive information before the data set is used by other researchers. However, it does not explicitly acknowledge different data handling needs for sensitive or confidential data beyond this process.
1.1.3 Data types and formats specification	Yes	Are data types and formats clearly outlined in a table or a list with bullet points?	Data types and formats are clearly outlined in the text, mentioning online questionnaire data, background demographics, and open-ended questions, as well as the file formats being collected with LimeSurvey and likely under 100 GB in size.
1.1.4 Rationale for format choices	No	Is there an explanation for why certain formats have been chosen, including whether they are open and standard formats or if a proprietary format is used, why?	The manuscript does not provide an explanation for why certain formats have been chosen, including whether they are open and standard formats or if a proprietary format is used, and why.
1.1.5 Special or uncommon software requirements	Partial	Is it explained if any special or uncommon software is needed to view or use the data?	The manuscript mentions the use of specific software (LimeSurvey, Excel, Atlas.ti) for data collection and analysis, which could be considered special or uncommon software. However, it does not explicitly explain if any special or uncommon software is needed to view or use the data beyond the context of data collection and analysis.
1.1.6 Data volume calculation description	No	Is there a clear description of how data volume or its accumulation has been calculated?	There is no clear description of how data volume or its accumulation has been calculated in the manuscript.

1.2 Data Quality Control

The manuscript outlines data quality control methods but does not fully recognize possible error sources or describe comprehensive quality control practices.

Result: Satisfactory

Item	Result	Question	Explanation
1.2.1 Recognition of possible error sources	Partial	Are possible error sources during the data lifecycle clearly recognized to ensure the quality of data?	While the manuscript outlines measures to control the quality and consistency of data, such as deleting sensitive information and using nicknames for participants, it does not explicitly recognize possible error sources during the data lifecycle to ensure the quality of data.
1.2.2 Quality control practices	Partial	Are appropriate practices for data capture, validation/monitoring, versioning, logs, etc., described for each task of the data handling to ensure high quality of data?	The manuscript describes some practices for data handling, such as the use of nicknames to protect participant identity and the deletion of sensitive information before analysis. However, it does not comprehensively describe practices for data capture, validation/monitoring, versioning, logs, etc., to ensure high quality of data.
1.2.3 Data quality control approach	Partial	Is the approach taken to ensure data quality control during the data lifecycle described?	The manuscript mentions the deletion of sensitive information and the use of nicknames as measures to ensure data quality and participant anonymity. However, it does not provide a detailed approach to data quality control throughout the data lifecycle.

2.1 Legal issues in data management

The manuscript addresses most legal issues related to data management, including GDPR compliance and handling of personal data, but lacks mention of an ethical review.

Item	Result	Question	Explanation
2.1.1 Identification of personal and sensitive data	Yes	Does the project clearly indicate if personal, sensitive, or other legally restricted data will be processed?	The manuscript clearly indicates that personal data as defined by GDPR will be collected, acknowledging the processing of personal, sensitive, or other legally restricted data.

2.1.2 Legal requirements and ethical practices	Yes	Are the legal requirements and ethical practices that apply to the data processing identified?	The manuscript identifies the legal requirements and ethical practices that apply to the data processing, specifically mentioning GDPR and the Data Protection Act.
2.1.3 Compliance with legislation	Yes	If applicable, is there an explanation on how compliance with legislation will be ensured during the project?	The manuscript explains how compliance with legislation, particularly GDPR, will be ensured during the project, including the deletion of direct identifiers and the use of consent for processing personal data.
2.1.4 Ethical issues management	Yes	If applicable, are details provided on how ethical issues affecting data management will be addressed?	The manuscript provides details on how ethical issues affecting data management will be addressed, such as through the protection of participant privacy and the handling of sensitive information.
2.1.5 Ethical review reference	No	If applicable, is there a mention of an ethical review or reference to an obtained ethical statement?	The manuscript does not mention an ethical review or reference to an obtained ethical statement.

2.2 Management of data rights and agreements

The manuscript partially addresses the management of data rights and agreements, with clear identification of data owners but lacks details on licenses, intellectual property rights, and compliance with the funder's data sharing policy.

Item	Result	Question	Explanation
2.2.1 Identification of data owners and rights holders	Yes	Are the owner or rights holder of the data and the rationale concerning data ownership identified?	The manuscript identifies the owners of the data as the participants who have given their consent for the use of their answers in scientific research and academic publishing. It also provides a rationale concerning data ownership based on consent under GDPR and the Data Protection Act.
2.2.2 Licenses and terms for data re-use	No	Are the licenses or terms and conditions for data re-use identified or described?	The manuscript does not identify or describe licenses or terms and conditions for data re-use.
2.2.3 Management of intellectual property rights	No	If applicable, is there an explanation on how intellectual property rights will be managed?	There is no explanation on how intellectual property rights will be managed.

2.2.4 Roles and responsib ilities in multi-partner projects	Partial	In multi-partner projects, are the roles and responsibilities regarding data addressed in the consortium agreement?	While the manuscript mentions that the research project is classified as contract research and involves authors affiliated with different universities, it does not explicitly address how roles and responsibilities regarding data are managed in this multi-partner context.
2.2.5 Data protection and confidentiality	Yes	Is there an explanation on how data confidentiality and non-disclosure will be ensured?	The manuscript explains that data confidentiality and non-disclosure will be ensured by not making the data available for wider reuse due to it containing identifiable personal information, and by protecting the data with personal usernames and passwords.
2.2.6 Compliance with funder's data sharing policy	No	Is there a mention of compliance with the funder's data sharing policy, and if not, is an explanation provided?	The manuscript does not mention compliance with the funder's data sharing policy, nor does it provide an explanation for its absence.

3.1 Documentation strategy

The manuscript outlines a documentation strategy but lacks comprehensive metadata standards, documentation protocol agreements, and detailed data organization strategies.

Item	Result	Question	Explanation
3.1.1 Docume ntation outline	Partial	Is the documentation clearly outlined to enable data verification and re-use?	The manuscript outlines the types of data collected and the software used for analysis, but it does not provide detailed documentation to enable data verification and re-use.
3.1.2 Metadata standards	No	Are the metadata standards used for each data type listed?	The manuscript does not list metadata standards used for each data type.
3.1.3 Docume ntation protocol agreement	No	Is the documentation protocol agreement described if no standard is available for a data type?	There is no mention of a documentation protocol agreement for data types without available standards.
3.1.4 Repository do cumentation requirements	Partial	Are the documentation requirements of the planned data repositories or archives referred to?	The manuscript refers to the planned data repositories for archiving the data but does not detail the documentation requirements of these repositories.
3.1.5 Docume ntation responsibility	Yes	Is the party responsible for documentation during the data lifecycle outlined?	The manuscript outlines Riikka Aurava as the party responsible for documentation during the data lifecycle.

3.1.6 Data organisation strategy	No	Is the strategy for data organisation during the project indicated, including naming conventions, version control, and folder structures?	The manuscript does not provide any information regarding the strategy for data organisation during the project, including naming conventions, version control, and folder structures.
3.1.7 Common doc umentation elements	Partial	Are common data documentation elements such as 'readme' files, file headers, code books, and lab notebooks mentioned?	The manuscript mentions the use of software for data analysis (atlas.ti) and the process of editing data to remove sensitive information, which implies some level of data documentation. However, it does not specifically mention 'readme' files, file headers, code books, or lab notebooks.

4.1 Data storage and backup strategies

The manuscript details specific storage and backup strategies but lacks comprehensive version management systems, methods for storing physical data, and service description links.

Item	Result	Question	Explanation
4.1.1 Choice of storage solution and backup strategy	Yes	Is the choice of storage solution and backup strategy clearly described, including reasons for not using the home institution's storage if applicable?	The manuscript clearly describes the choice of storage solution (LimeSurvey, Excel, Atlas.ti) and backup strategy (external hard drive stored in a locked room in a locked cupboard), including reasons for the choices made.
4.1.2 Details of storage and backup policies	Partial	Are the details of storage places and backup policies, including version management systems for each data type, described clearly in terms of security, privacy, performance, capacity, usability, and sustainability?	While the manuscript describes the storage places and mentions the backup policy, it lacks detailed descriptions of version management systems for each data type in terms of security, privacy, performance, capacity, usability, and sustainability.
4.1.3 Storage of physical data	No	Is the method for storing physical data clearly described?	The manuscript does not describe any method for storing physical data, focusing instead on digital data storage and backup.
4.1.4 Backup frequency and methods if not using home institution's or CSC's services	N/A	If not using home institution's or CSC's storing services, is the backup frequency and method clearly described?	The manuscript does not provide information relevant to the use of storage services other than those provided by the home institution or CSC, making this item not applicable.

4.1.5 Link to	,	The manuscript does not provide a
service	service description provided?	link to the storage and backup
description		service description.

4.2 Access control

The manuscript describes compliant access control measures with clear responsibilities and secured access control, but lacks detailed safeguards beyond usernames and passwords.

Result: Excellent

Item	Result	Question	Explanation
4.2.1 Responsibility for access control	Yes	Is the party responsible for controlling access to the data platforms clearly identified?	The manuscript clearly identifies Riikka Aurava as the party responsible for controlling access to the data platforms.
4.2.2 Methods for controlling access	Yes	Is the method for controlling access to the data platforms clearly described?	The manuscript describes the method for controlling access to the data platforms through the use of usernames and passwords.
4.2.3 Use of safeguards for access control	Partial	Are the safeguards used for access control, such as log file systems, clearly described?	While the manuscript mentions the use of usernames and passwords as safeguards for access control, it does not detail any log file systems or other specific safeguards used.
4.2.4 Access control of physical locations	Yes	Is the access control for physical locations where data is stored clearly described, if applicable?	The manuscript describes the access control for physical locations where data is stored, mentioning a locked room and a locked cupboard.

5.1 Data Sharing and Publishing

The manuscript partially complies with data sharing and publishing requirements by making metadata available but lacks comprehensive sharing details and rationale for repository selection.

Item	Result	Question	Explanation
5.1.1 Data Dis coverability and Sharing	Partial	Is it clearly described how the data, metadata, or software will be made discoverable and shared?	The manuscript states that only metadata will be made available for analysis after processing, which provides some information on discoverability and sharing, but it does not fully describe how the data, metadata, or software will be shared beyond the participating researchers.

5.1.2 Data Sharing Timeline and License	Partial	Is the timeline and license under which data will be shared specified?	The manuscript specifies that the data will be archived for 10 years, indicating the duration of data archiving. However, it does not specify the timeline under which the data will be shared or the license under which it will be shared.
5.1.3 Repository Details	Yes	Are the repository, data catalogue, or registry where data will or could be shared named?	The manuscript names Etsin Research Data Finder and Fairdata IDA as the repositories where metadata and data will be archived, respectively.
5.1.4 Data Repository Selection Rationale	No	Is the rationale for the chosen data repository or archive's suitability for the data type explained?	The manuscript does not provide a rationale for the suitability of the chosen data repository (Etsin Research Data Finder and Fairdata IDA) for the data type.
5.1.5 Data Sharing Limitations	Yes	Is it clearly explained why data sharing may be limited or not possible, and who can access the data under which conditions?	The manuscript explains that data sharing may be limited to protect the privacy of informants, indicating why data sharing is limited and who can access the data (only the participating researchers).
5.1.6 Tools or Software for Data Access	No	Is it clearly indicated which specific tools or software are needed to access, interpret, and (re-)use the data?	The manuscript does not indicate which specific tools or software are needed to access, interpret, and (re-)use the data, beyond mentioning the use of Atlas.ti for data analysis.

5.2 Data Archiving

The manuscript specifies a clear plan for data archiving in Fairdata IDA but lacks detailed protocols for data access and does not address the impact of legal and institutional demands on data preservation.

Item	Result	Question	Explanation
5.2.1 Long-term Data Archiving Locations and Duration	Partial	Is it described what part of the data will be archived, and the location and duration of this archiving?	The manuscript states that the data will be archived for 10 years in Fairdata IDA, which addresses the duration and location of archiving. However, it does not fully describe what part of the data will be archived beyond stating that only metadata will be made available.
5.2.2 Different Preservation Periods for Datasets	Yes	Are datasets categorized by their required lengths of preservation specified?	The manuscript specifies that the data will be archived for 10 years, clearly indicating the required length of preservation.

5.2.3 Protocol for Data Access	Partial	Is information provided on any protocol needed to access the data, if relevant?	The manuscript mentions that only metadata will be made available after processing, but does not provide detailed information on the protocol needed to access the data, only mentioning the platform (Etsin Research Data Finder).
5.2.4 Impact of Legal and Institutional Demands on Data Preservation	No	Is the impact of legal, ownership, agreements, funders', publishers', and institutions' demands on data preservation acknowledged?	The manuscript does not acknowledge the impact of legal, ownership, agreements, funders', publishers', and institutions' demands on data preservation.

6.1 Responsibilities for data management

The manuscript designates responsibilities for data management and outlines coordination in collaborative projects but lacks a procedure for transferring responsibilities and post-project data management.

Item	Result	Question	Explanation
6.1.1 Roles and responsib ilities outlined	Yes	Are all the roles and responsibilities for data management clearly outlined and named in the DMP?	The manuscript clearly outlines the roles and responsibilities for data management, naming Riikka Aurava and Annakaisa Kultima as responsible for different phases of the research project.
6.1.2 Responsibility post-project	Partial	Is it clearly stated who will be responsible for the data after the project has ended?	While the manuscript mentions Riikka Aurava will be responsible for data management throughout the research project, it does not explicitly state who will be responsible for the data after the project has ended.
6.1.3 Procedure for transferring re sponsibilities	No	Is there a clear procedure for transferring data management responsibilities if necessary?	The manuscript does not provide any information on a procedure for transferring data management responsibilities if necessary.
6.1.4 Coordination in collaborative projects	Yes	Is the coordination of data management responsibilities in collaborative projects explained?	The manuscript explains that Riikka Aurava will be responsible for data management throughout the project, and Annakaisa Kultima will be co-responsible during the analysis and publishing phases, indicating a clear coordination of data management responsibilities in this collaborative project.

ı	6.1.5 Impleme ntation and update of the DMP		3 , ,	The manuscript indicates that Riikka Aurava is responsible for implementing and updating the DMP during the project, with Annakaisa Kultima co-responsible during certain phases.	
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6.2 Resources required for data management

The manuscript outlines some resources for data management according to FAIR principles but lacks detailed financial costs, estimates of time and money, investment in expertise, and resources for training and education.

Item	Result	Question	Explanation
6.2.1 Listing of required resources	Partial	Are all required resources and facilities for data management listed, including financial costs as per the budget?	The manuscript lists some resources and facilities for data management, such as personal online storage, laptops, and software for data processing provided by the institutions. However, it does not explicitly mention financial costs as per the budget, making the compliance partial.
6.2.2 Estimates of time and money	No	Are estimates of time and money needed for data preparation for sharing, publishing, and preservation provided?	The manuscript does not provide estimates of time and money needed for data preparation for sharing, publishing, and preservation.
6.2.3 Investment in expertise	No	Is the investment in expertise for data management, such as legal, IT, or transcription services, described?	The manuscript does not describe any investment in expertise for data management, such as legal, IT, or transcription services.
6.2.4 Resources for training and education	No	Are the resources needed for training and education to enhance data management skills outlined?	The manuscript does not outline resources needed for training and education to enhance data management skills.

Feedback for Author

Dear Author,

Thank you for submitting your Data Management Plan (DMP) for review. After a thorough evaluation based on the Finnish DMP Evaluation Guidance, I have identified several strengths and areas for improvement across various domains of your plan. Below is a summary of the feedback, which aims to guide you towards enhancing the quality and compliance of your DMP.

Strengths:

- **Project Details:** Your DMP provides a detailed overview of the project, including the title, funder, principal investigator, and other contributors, which is commendable.
- **Data Quality Control:** You have outlined methods for data quality control, demonstrating an awareness of the importance of maintaining high data quality.
- Access Control: The clear responsibilities and secured access control measures described in your plan are exemplary, ensuring that data access is well-managed and secure.

Areas for Improvement:

- **Project Details:** To reach an excellent classification, it is recommended to provide complete details on the funding instrument and ORCID information for all contributors.
- **Data Types and Formats:** Including a rationale for chosen data formats and a clear description of data volume calculation will strengthen this section.
- **Legal and Ethical Compliance:** Incorporating information on ethical review processes or statements obtained for the project will address the current gap in this area.
- Management of Data Rights and Agreements: Detailing licenses for data re-use, managing intellectual property rights, and addressing compliance with the funder's data sharing policy are crucial steps to improve compliance.
- **Documentation and Metadata:** Incorporating comprehensive metadata standards, establishing documentation protocol agreements, and detailing data organization strategies are recommended to enhance the findability and reusability of your data.
- **Storage and Backup:** Describing version management systems, providing methods for storing physical data, and including service description links will ensure that your data storage and backup strategies are robust and comprehensive.
- **Data Sharing and Publishing:** Providing comprehensive data sharing details and explaining the rationale for repository selection are essential for improving this domain.
- **Data Archiving:** Detailing data access protocols and addressing the impact of legal and institutional demands on data preservation will enhance the long-term value of your data.
- Data Management Responsibilities and Resources: Establishing a procedure for transferring data management responsibilities and detailing post-project data management plans are recommended to ensure continuity and sustainability of data management practices.

Overall, your DMP demonstrates a solid foundation in several key areas, with particular strengths in access control measures. By addressing the areas for improvement outlined above, you can enhance the effectiveness of your data management practices and ensure compliance with relevant standards and guidelines. Should you have any questions or require further clarification on any of the feedback provided, please do not hesitate to reach out.

Best regards,

[Your Name] [Your Position]