

# **D1.3 DATA MANAGEMENT PLAN**



This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement N°101079237.

Project: Enhancing Research on the Integration of Formal Educational Programmes and Workplace

Learning

Acronym: FEWL

Title: D1.3 Data management plan Work Package: Project management

Author: Inge Timoštšuk inge.timostsuk@tlu.ee

Reviewers: Merle Pajus (TLU), Xavier Frederic Dubois (TLU), Juuso Marttila (JYU), other partners

Version 1.0

Date: 30.06.2023

Deliverable type: DMP – Data management plan

Dissemination level: Public

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# List of abbreviations and acronyms

DMP – Data management plan

FAIR – Findable, Accessible, Interoperable, Reusable

FEWL - Enhancing Research on the Integration of Formal Educational Programmes and Workplace Learning

EC – European commission

EU – European Union

JYU – University of Jyväskylä

SES – School of Educational Sciences

TLU – Tallinn University

UPB - Paderborn University

WP - Work package

WPL - workplace learning

### 1. Executive summary

This data management plan describes the data collecting, sharing, storing, secondary use, analyzing processes and ethics issues within the FEWL project. The DMP is a living document and will be updated when relevant changes occur. The aim of the DMP is also to increase the impact and value of the data and to make the data management processes more efficient and safe. The document is in line with the Grant Agreement, Consortium Agreement and EU and EC guidelines on FAIR data management and Open Access. Horizon Europe template: Data Management Plan (Version 1.0 05 May 2021) has been used as the basis for the FEWL DMP.

#### 1.1. Types of data

In order to meet the project's objective, the following three broad types of data are collected:

- research data
- data needed for / accruing from research development and capacity-building activities
- basic personal data

Research data is collected by individual researchers and consists of empirical and secondary data. Empirical data includes open and semi-structured interview notes, recordings and transcriptions; written (field) diaries; online and hard copy text documents; survey sheets and responses; copies of photographs of documents and other material obtained during fieldwork; questionnaire answer sheets. Secondary data is gathered from legal and policy analyses and statistical offices at provincial, regional, national and EU levels. It can also include existing online databases (e.g. websites), archival data and their digitized forms, various reports, and online and old digitized newspapers. The empirical and secondary data are analyzed and synthesized for scientific publications.

Data needed for / accruing from research development activities include various outputs and know-how of different capacity-building workshops, regular team meetings, methodologies

and experience shared by partners (many in the form of the minutes of meetings), working project documents, guidelines to various activities, and policy recommendations.

Basic personal data includes lists of researchers, institutions, networks, and stakeholders, with potential contact lists.

The main file formats will be docx, odt, pfd text files; csv, xls for data sheets and databases (if any); tif (uncompressed) or jpg for photographs. Interview data will also be in audio files in MPEG-3 (mp3) format and video files in MPEG-4 (mp4) format but partially transcribed into text files (in docx).

Each researcher is responsible for his/her own research data and will follow the data management procedures of his/her home university. The coordinating partner is responsible for having an overview of data management. The long-term preservation of different kinds of data will be decided by Consortium partners during the project.

#### 1.2 Data utility

FEWL consortium members with practitioners will create new knowledge, experience and practices useful to a wide range of groups and institutions. The primary beneficiaries are other scholars but also a wide range of project stakeholders as identified in the grant agreement (academic community, practitioners, policy-makers and the wider public). One of the project objectives is to reach out to the stakeholders beyond academia. Thus, efforts will be made to co-design and co-create data and share data with such parties. For wider utility, relevant publicly available resources and open-access publications are listed, with active links, on the project's website. Additionally, the sharing of selected data with supervised graduate students or in-class teaching, or other institutions interested in capacity building is foreseen and made possible upon request.

The data will also be re-used in new project applications.

#### 2. FAIR data

FEWL consortium commits to make research data 'FAIR'—that is, findable, accessible, interoperable and reusable.

#### 2.1 Making data findable

FEWL project makes data findable both internally and externally.

Internally, the project adopts the platform Google Drive storage service as a collaborative space among partners. The platform will be used as a space for internal communication, organized in thematic channels and for collaborative work on non-confidential documents related to milestones, deliverables and other project-related tasks.

Google Drive allows data access, data exchange and reuse between researchers, institutions and organizations across countries. It further enables users to work collaboratively on one shared document at the same time. It allows continuous updates of documents in folders.

All partners can access Google Drive via the web client version, i.e., it can be used without a local installation on the laptop/desktop.

Confidential data that cannot be shared through Google Drive will be stored on each partner's institutional servers under strict security protocols in order to guarantee the protection of sensitive and/or personal data.

Externally, all public deliverables and project results will be made available to the public at the Participant Portal of the European Commission. To improve findability, the public deliverables will also be made available through the DataDOI, a safe repository provided by Tallinn University. Information on new publications will be announced on the project's website (https://www.tlu.ee/en/hti/research/enhancing-research-integration-formal-educational-programmes-and-workplace-learning/). DataDOI will identify the project's data with a persistent identifier.

#### 2.2 Making data accessible

All non-confidential results (e.g. papers and reports) generated by FEWL project will be made publicly available on the dedicated and trusted repository DataDOI (http://datadoi.ee/, providing a digital object identifier) and the project website, while each partner may further disseminate project data by depositing it in their own institutional data repositories. All data sharing and publication will respect international, EU, and national privacy laws as well as

data licenses and the commercial interests and Intellectual Property Rights (IPR) of project partners.

DataDOI guarantees long-term depository access, allowing data to remain available and findable after the end of the project.

In case of a request by interested researchers to validate or replicate research results, or to validate scientific publications, any extra data that does not have open access will be shared on a case-by-case basis, upon an explanation for interest and provision of a basic CV. Sensitive and closed data will be shared by agreeing on the conditions allowing its re-use and potential limitations.

#### Scientific Publications

Providing open access to peer-reviewed scientific publications can be ensured either by publishing in green or gold open-access journals with or without author processing fees—to be followed by FEWL project activities as much as possible. Nevertheless, the journal's visibility and prestige (translated in the Impact Factor), together with the speed of publication, will be considered when choosing a journal for publication. Scientific publications will also be announced on the project website and the Participant Portal (https://ec.europa.eu/research/participants). All researchers are encouraged to individually take steps to make their publications available through various websites, open repositories and social networking sites for researchers to share papers.

#### 2.3 Making data interoperable

In order to allow data exchange and reuse between researchers, institutions, organizations and countries, the FEWL project team uses open software applications whenever possible. It is an interdisciplinary project where scientists and other scholars work together with professionals and members of the wider public in the field.

In order to harmonize the standards used by all research partners, and facilitate interoperability, including interdisciplinary, the project leader will ensure the use of general and accepted vocabularies in each relevant field of Science.

#### 2.4 Increase data re-use

FEWL consortium is committed to the widest re-use of data that is possible by third parties, including after the end of the project. The data will be made available as early as possible. The process regarding sensitive and closed data is detailed in "2.2 Making data accessible"

Creative Commons licenses will be used for data and for Scientific Publications, in line with the obligations set out in the Grant Agreement.

The reusability of data will be ensured also by adopting interoperable vocabularies.

ReadMe files with information on the methodology as well as how to find data, and any necessary information to re-use it, will be made available on DataDOI. The ReadMe files will be updated throughout the project as necessary.

# 3. Other research outputs

There are no other research outputs

#### 4. Allocation of resources

The resources allocated in the budget for making data FAIR are the labor costs of the project coordinator, project manager and communication manager and funds for Open Access publication of key research. The project coordinator is responsible for having an overview of data management in the project, while each researcher is responsible for his/her own research data. Partners' costs for data preparation are included in their project costs. DataDOI and Owncloud are free of charge for the project team, provided by Tallinn University.

For the long-term preservation of data published on DataDOI, the repository's general policies guarantee that items will be retained for the lifetime of the repository. In case of closing the repository, all efforts will be done to find a replacement institution and/or repository. DataDOI provides the longevity of its collections in any circumstance and does

everything possible to retain its content. Dataset replicas are stored in the University of Tartu servers and are backed up on a nightly basis.

# 5. Data security

This section details provisions for secure storage and transfer of data, including personal and sensitive data. The existing open standards and data preservation policy at TLU and Estonia will be followed, commensurate with the EU regulations. All partners have backup systems and security measures for their organizational data. All final outputs (datasets, databases, reports) will be stored on:

· high-performance personal laptops

Every member of the FEWL project has individual access to a fast research laptop, with the operating system of their choice, used to perform research. All project members have access to their own laptop only, and further use back-up electronic memory devices.

 $\cdot$  secured data storage options such as servers, databanks and archival facilities, provided by each university and the personal laptops

Tallinn University provides a secure server ownCloud (<a href="https://doc.owncloud.com/webui/next/">https://doc.owncloud.com/webui/next/</a>).

Recordings and transcripts of interviews, photos, videos, and fieldwork diaries will be used for the specifically stated research purposes and within the research team. The project team will not keep any files containing personal or un-anonymized sensitive data on their laptops. Sensitive data will be anonymized following the standard norms and ethics.

#### 6. Ethics

FEWL will follow the ethical principles of research activities stated by the Ethics Committee of Tallinn University. The Committee acts following the Personal Data Protection Act and other relevant legal acts, good scientific practice of Estonia, European Code of Conduct for

Research Integrity (ALLEA), other domain-specific codes of ethics and the Agreement of Quality Good Custom of Estonian Universities.

The main ethical issue is related to the personal data. There are only minor foreseeable risks related to the inconvenience and discomfort resulting from this study. In all the tasks the research methodology prioritizes the dignity and well-being of participants over research directed activities. The only ethical considerations that may arise are related to the collection and use of personal data from respondents. All activities involving personal data will meet national (at the country where the tasks will be performed) legal and ethical requirements. Data collection and processing will not result in any high-risk potential impact. No environmental damage, stigmatization of social groups, political or financial adverse consequences is expected. Potential participants will receive information about the study and the participant information sheet as part of the general recruitment call related to the task. They will be asked to contact the research team directly to indicate their interest to participate. Prior to data collection the participants will be explained that their participation is entirely voluntary and they can withdraw from the study at any moment without any repercussions.

Since the study involves besides adults also data collection from minors, special care is taken to ensure that nobody is harmed in any way and that the minor's participation is fully voluntary and approved by their parents. Written consent forms where participants are informed about the purpose and procedure of the study are sent to both minors and their parents. Where interviews are used, consent forms have to be signed by the parents of the minors. All data is processed anonymously.

All personal data will be dealt with utmost confidentiality following the data protection rules and based on best practices of Research Integrity. All personal data will be stored separately from the data that could be used to identify participants. This includes the written consent forms.

If needed, permission from the university ethics committee will be asked for processing necessary data or developing data analytics tools for wider use.

The partners respect fundamental ethics principles and follow researcher ethics rules as laid down in the Charter of Fundamental Rights of the European Union, as well as The European Charter for Researchers.

The project team will ensure that all the data and project outcomes are non-discriminatory and meet the EU and national requirements for accessibility; ensure that the working (incl research) environment is supportive for career-life balance and there will be no gender discrimination; actively monitor and evaluate project outcomes and impact.

# 7. Other issues

FEWL project will not make use of other national/funder/sectorial/departmental procedures for data management.