# FWO DMP Template - Flemish Standard Data Management Plan

### **Version KU Leuven**

Project supervisors (from application round 2018 onwards) and fellows (from application round 2020 onwards) will, upon being awarded their project or fellowship, be invited to develop their answers to the data management related questions into a DMP. The FWO expects a **completed DMP no later than 6 months after the official start date** of the project or fellowship. The DMP should not be submitted to FWO but to the research co-ordination office of the host institute; FWO may request the DMP in a random check.

At the end of the project, the **final version of the DMP** has to be added to the final report of the project; this should be submitted to FWO by the supervisor-spokesperson through FWO's e-portal. This DMP may of course have been updated since its first version. The DMP is an element in the final evaluation of the project by the relevant expert panel. Both the DMP submitted within the first 6 months after the start date and the final DMP may use this template.

The DMP template used by the Research Foundation Flanders (FWO) corresponds with the Flemish Standard Data Management Plan. This Flemish Standard DMP was developed by the Flemish Research Data Network (FRDN) Task Force DMP which comprises representatives of all Flemish funders and research institutions. This is a standardized DMP template based on the previous FWO template that contains the core requirements for data management planning. To increase understanding and facilitate completion of the DMP, a standardized **glossary** of definitions and abbreviations is available via the following link.

	1. General Project Information		
Name Grant Holder & ORCID	Joris Vlieghe 000-0001-6307-3221		
Contributor name(s) (+ ORCID) & roles	Katrien Kolenberg 0000-0001-5181-5072 -cosupervisor Nancy Vansieleghem 0000-0002-8805-54572 -cosupervisor		
Project number <sup>1</sup> & title	3H230318: Towards an Education of the Senses (EoS): An alternative pragmatic view on STEAM		
Funder(s) GrantID <sup>2</sup>	Bijzonder Onderzoeksfonds KU Leuven		
Affiliation(s)	□ <mark>KU Leuven</mark>		
	☐ Universiteit Antwerpen		
	☐ Universiteit Gent		
	☐ Universiteit Hasselt		
	□ Vrije Universiteit Brussel		
	□ Other:		
	ROR identifier KU Leuven: 05f950310		

<sup>&</sup>lt;sup>1</sup> "Project number" refers to the institutional project number. This question is optional. Applicants can only provide one project number.

<sup>&</sup>lt;sup>2</sup> Funder(s) GrantID refers to the number of the DMP at the funder(s), here one can specify multiple GrantIDs if multiple funding sources were used.

#### Please provide a short project description

This research explores the STEAM initiative as a possible pedagogical response to the social and ecological issues that are becoming increasingly pressing in society. Although education, and art education in special, does tend to be harnessed for this purpose, it is hindered from doing so by its distinctly instrumental nature (e.g. in function of the demands of the labour market). As an alternative, this research aims to move beyond these trends, which are also strongly embedded in the current STEAM movement, by conceptualising with STEAM a new fundamental framework based on insights from prominent thinkers such as William James, Isabelle Stengers, Donna Haraway and Bruno Latour. In integrating the arts with STEM fields, we want to develop a design for an 'education of the senses' (EoS), where immediate learning outcomes and competition give way to an intergenerational caring for the world we share. A world that sorely needs this care today.

#### 2. Research Data Summary

List and describe all datasets or research materials that you plan to generate/collect or reuse during your research project. For each dataset or data type (observational, experimental etc.), provide a short name & description (sufficient for yourself to know what data it is about), indicate whether the data are newly generated/collected or reused, digital or physical, also indicate the type of the data (the kind of content), its technical format (file extension), and an estimate of the upper limit of the volume of the data <sup>3</sup>.

				ONLY FOR DIGITAL DATA	ONLY FOR DIGITAL DATA	ONLY FOR DIGITAL DATA	ONLY FOR PHYSICAL DATA
Dataset	Description	New or Reused	Digital or	Digital Data Type	Digital Data	Digital Data	Physical Volume
Name			Physical		Format	Volume (MB, GB,	
						TB)	
(1) Lab and	Ethnographic	☐ Generate new	☐ <mark>Digital</mark>	☐ Audiovisual	Mp3 (audio),	□ < 1 GB	Observations of 3
Studio	fieldwork:	<mark>data</mark>	☐ <mark>Physical</mark>	☐ <mark>Images</mark>	jpeg	□ <mark>&lt; 100 GB</mark>	lab practices and 3
practices	observations	☐ Reuse existing		□ <mark>Sound</mark>	(photographs),	□ < 1 TB	studio practices will
	and interviews	data		☐ Numerical	Word documents	□ < 5 TB	be noted down in 6
				☐ <mark>Textual</mark>	(transcripts of	□ > 5 TB	hardbound
				☐ Model	interviews)	□NA	notebooks of 150
				☐ Software			pages
				☐ Other:			
(2) EoS	Practitioner	☐ Generate new	☐ <mark>Digital</mark>	☐ Audiovisual	Mp3 (audio),	□ < 1 GB	Observation of
practices is	research in	<mark>data</mark>	☐ <mark>Physical</mark>	☐ <mark>Images</mark>	jpeg	□ <mark>&lt; 100 GB</mark>	classroom practices
schools	schools with	☐ Reuse existing		□ <mark>Sound</mark>	(photographs),	□ < 1 TB	(including taking of
	teachers and	data		☐ Numerical	Word documents	□ < 5 TB	photographs) with
	pupils:			☐ <mark>Textual</mark>	(transcripts of	□ > 5 TB	a maximum of four
	implementation			☐ Model	focus groups)	□NA	150 pages
	, observation			☐ Software			hardbound
	and focus group			☐ Other:			notebooks per
	interviews						researcher, i.e.
							maximum 8
(3) Desk-	Literature	NO DATA					
based	review study,						
research	conceptual						
	study and						

<sup>&</sup>lt;sup>3</sup> Add rows for each dataset you want to describe.

	curriculum							
	development							
ranging from raw valuable, difficult	data to processed ar to replace and/or eth cumentation is an int	nd analysed data hical issues are a	including ssociated.	analysis script Materials that	s and code. Physical da	ita are all materials tha ta in an RDM context ii	sical data and encompas at need proper managen nclude your own manus	· ·
source, preferab	ting data, please sp ly by using a persis OI, Handle, URL etc type.	tent	he N/A					
creation and/or (e.g. experiment use)? If so, refer types when approximately the control of the	hical issues concernuse of the data is on humans or and to specific datasets opriate and providapproval number.	imals, dual s or data	☐ Yes, a ☐ Yes, d ☐ No	nimal data; p dual use; prov al informatio	provide ECD reference ride approval number	r:	ber: <b>G-2023-7507</b> ary school pupils. Ethic	cal approval is still
refer to specific appropriate and	s personal data <sup>4</sup> ? datasets or data provide the KU L egister number (G	types when Leuven or UZ	□ <mark>No</mark>	orovide PRET al informatio	G-number or EC S-ทเ ท:	ımber below)		

<sup>&</sup>lt;sup>4</sup> See Glossary Flemish Standard Data Management Plan

Does your work have potential for commercial	☐ Yes
valorization (e.g. tech transfer, for example spin-	│
offs, commercial exploitation,)?	If yes, please comment:
If so, please comment per dataset or data type	
where appropriate.	
Do existing 3rd party agreements restrict	□ Yes
exploitation or dissemination of the data you	│
(re)use (e.g. Material/Data transfer agreements,	If yes, please explain:
research collaboration agreements)?	
If so, please explain to what data they relate and	
what restrictions are in place.	
Are there any other legal issues, such as	☐ Yes
intellectual property rights and ownership, to be	│
managed related to the data you (re)use?	If yes, please explain:
If so, please explain to what data they relate and	
which restrictions will be asserted.	

### 3. Documentation and Metadata

Clearly describe what approach will be followed This is a small scale research project with limited qualitative data. Documentation is rather small to capture the accompanying information and straightforward. This documentation which will be stored together with the collected necessary to keep data understandable and data (see below for storage location). This documentation consists of the SMEC application, usable, for yourself and others, now and in the including the informed consent process. It consists furthermore of the observation protocols, interview/focus group guidelines, and the recruitment procedures. A logbook will be kept per future (e.g. in terms of documentation levels and types required, procedures used, Electronic Lab researcher (n=2) to document the process and to manage pseudonymisation (linking transcripts to Notebooks, README.txt files, Codebook.tsv etc. identifiable persons). For the analysis of the observations and focus groups a codebook will be where this information is recorded). kept. RDM guidance on documentation and metadata. Will a metadata standard be used to make it ☐ Yes □ No easier to find and reuse the data? If yes, please specify (where appropriate per dataset or data type) which metadata standard will be used: If so, please specify which metadata standard will be used. If not, please specify which metadata will be created to make the data If no, please specify (where appropriate per dataset or data type) which metadata will be created: This is a small scale research project with limited qualitative data. There will be no metadata sets. easier to find and reuse. REPOSITORIES COULD ASK TO DELIVER METADATA IN A CERTAIN FORMAT, WITH SPECIFIED ONTOLOGIES AND VOCABULARIES, I.E. STANDARD LISTS WITH UNIQUE IDENTIFIERS.

## 4. Data Storage & Back-up during the Research Project

Where will the data be stored?  Consult the interactive KU Leuven storage guide to find the most suitable storage solution for your data.	□ Shared network drive (J-drive) □ Personal network drive (I-drive) □ OneDrive (KU Leuven) □ Sharepoint online □ Sharepoint on-premis □ Large Volume Storage □ Digital Vault □ Other: Paper data (informed consents; fieldnotes) will be archived in a locked closet in the office of the researchers at their KU Leuven offices
How will the data be backed up?  What storage and backup procedures will be in place to prevent data loss?	<ul> <li>□ Standard back-up provided by KU Leuven ICTS for my storage solution</li> <li>□ Personal back-ups I make (specify)</li> <li>□ Other (specify)</li> </ul>
Is there currently sufficient storage & backup capacity during the project? If yes, specify concisely. If no or insufficient storage or backup capacities are available, then explain how this will be taken care of.	<ul> <li>☐ Yes. As this is a small scale qualitative study, as indicated, the amount of data is rather limited and will by no means exceed the available space on the shared network drive</li> <li>☐ No</li> <li>If no, please specify:</li> </ul>
How will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?	Pseudonymized electronic data will be stored on the network drive for active use during the project. The data are password -protected and all researchers will be using multifactor authentication with the KU Leuven Authenticator app.
CLEARLY DESCRIBE THE MEASURES (IN TERMS OF PHYSICAL SECURITY, NETWORK SECURITY, AND SECURITY OF COMPUTER SYSTEMS AND FILES) THAT WILL BE TAKEN TO ENSURE THAT STORED AND TRANSFERRED DATA ARE SAFE.  Guidance on security for research data	

What are the expected costs for data storage	N/A
and backup during the research project? How	
will these costs be covered?	

	5. Data Preservation after the end of the Research Project
Which data will be retained for at least five years (or longer, in agreement with other retention policies that are applicable) after the end of the project? In case some data cannot be preserved, clearly state the reasons for this (e.g. legal or contractual restrictions, storage/budget issues, institutional policies).  Guidance on data preservation	☐ All data will be preserved for 10 years according to KU Leuven RDM policy. Irrelevant personal data such as the audiofiles of the focus groups will not be kept after finalising the respective studies. ☐ All data will be preserved for 25 years according to CTC recommendations for clinical trials with medicinal products for human use and for clinical experiments on humans ☐ Certain data cannot be kept for 10 years (explain)
Where will these data be archived (stored and curated for the long-term)?  Dedicated data repositories are often the best place to preserve your data. Data not suitable for preservation in a repository can be stored using a KU Leuven storage solution, consult the interactive KU Leuven storage quide.	<ul> <li>□ KU Leuven RDR</li> <li>□ Large Volume Storage (longterm for large volumes)</li> <li>□ Shared network drive (J-drive)</li> <li>□ Other (specifiy):</li> </ul>
What are the expected costs for data preservation during the expected retention period? How will these costs be covered?	N/A

	6. Data Sharing and Reuse
Will the data (or part of the data) be made available for reuse after/during the project? Please explain per dataset or data type which data will be made available.  Note that 'Available' does not necessarily mean that the data set becomes openly available, conditions for access and use may apply. Availability in this question thus entails both open & restricted access. For more information: https://wiki.surfnet.nl/display/standards/info-eu-repo/#infoeurepo-AccessRights	<ul> <li>Yes, as open data</li> <li>Yes, as embargoed data (temporary restriction)</li> <li>Yes, as restricted data (upon approval, or institutional access only)</li> <li>No (closed access)</li> <li>Other, please specify:</li> </ul>
If access is restricted, please specify who will be able to access the data and under what conditions.	The data will only be accessible for the PhD-researchers on this project and the supervisors.
Are there any factors that restrict or prevent the sharing of (some of) the data (e.g. as defined in an agreement with a 3rd party, legal restrictions)? Please explain per dataset or data type where appropriate.	<ul> <li>Yes, privacy aspects: The raw qualitative data (i.e. transcripts) cannot be shared, because the data are only pseudonymized and participants did not give their informed consent to share these data. Participants only consent to using excerpts of the focus groups and exemplary parts of the observations for scientific publication.</li> <li>Yes, intellectual property rights</li> <li>Yes, ethical aspects</li> <li>Yes, aspects of dual use</li> <li>Yes, other</li> <li>No</li> <li>If yes, please specify:</li> </ul>

Where will the data be made available? If already known, please provide a repository per dataset or data type.	<ul> <li>□ KU Leuven RDR</li> <li>□ Other data repository (specify)</li> <li>□ Other (specify): Documentation, transcripts, codebooks, etc. can be made available upon motivated email request and transferred via secured email connection. The paperbased data can be consulted in the PI's office upon request.</li> </ul>
When will the data be made available?	<ul> <li>□ Upon publication of research results</li> <li>□ Specific date (specify)</li> <li>□ Other (specify)</li> </ul>
Which data usage licenses are you going to	☐ CC-BY 4.0 (data)
provide? If none, please explain why.	☐ Data Transfer Agreement (restricted data)
, promote in the control of the cont	☐ MIT licence (code)
A DATA USAGE LICENSE INDICATES WHETHER THE DATA CAN BE REUSED OR NOT AND UNDER WHAT CONDITIONS. IF NO LICENCE IS GRANTED, THE DATA ARE IN A GREY ZONE AND CANNOT BE LEGALLY REUSED. DO NOTE THAT YOU MAY ONLY RELEASE DATA UNDER A LICENCE CHOSEN BY YOURSELF IF IT DOES NOT ALREADY FALL UNDER ANOTHER LICENCE THAT MIGHT PROHIBIT THAT.  Check the RDR quidance on licences for data and software sources code or consult the License selector tool to help you choose.	☐ GNU GPL-3.0 (code) ☐ Other (specify): given the nature of this research, there are no datasets to be shared and reused.
Do you intend to add a PID/DOI/accession	$\square$ Yes, a PID will be added upon deposit in a data repository
number to your dataset(s)? If already available,	☐ My dataset already has a PID
please provide it here.	□ <mark>No</mark>
INDICATE WHETHER YOU INTEND TO ADD A PERSISTENT AND UNIQUE IDENTIFIER IN ORDER TO IDENTIFY AND RETRIEVE THE DATA.	

What are the expected costs for data sharing?	None
How will these costs be covered?	

	7. Responsibilities
Who will manage data documentation and metadata during the research project?	The PhD researchers (Charlotte Sermeus and Paul Nieboer) under the supervision of the PI (Joris Vlieghe)
Who will manage data storage and backup during the research project?	The PhD researchers (Charlotte Sermeus and Paul Nieboer) under the supervision of the PI (Joris Vlieghe)
Who will manage data preservation and sharing?	The PhD researchers (Charlotte Sermeus and Paul Nieboer) under the supervision of the PI (Joris Vlieghe)
Who will update and implement this DMP?	The PI (Joris Vlieghe)