



#### Teams: GDD, TALN, DRUID, DUKe, LACODAM

#### Abstract

PARTAGE is a CominLabs innovation action aiming to provide teachers with integrated tools to publish, find, access, and remix Open Educational Resources (OER). This project is a follow-up of CLARA<sup>1</sup> and Florilège<sup>2</sup> projects.

Through Semantic Web technologies and Al-enhanced metadata, PARTAGE implements FAIR principles (Findable, Accessible, Interoperable, Reusable) over educational resources. In doing so, PARTAGE contributes to the global vision of open education, where knowledge is freely shared and learning opportunities are available to everyone.

://project.inria.fr/clara/

#### Making OER Findable

OERs are often scattered, making it difficult for educators to find relevant resources. PARTAGE tackles this challenge by:

- Allowing educators to ingest new OERs into the platform, providing and promoting the use of web identifiers such as URIs (Uniform Resource Identifier), or IRIs (International Resource Identifier). This will also allow OERs be indexed by external search engines.
- Enriching OERs with metadata generated through AI techniques or provided by human annotations.
- Providing a dedicated search engine and API that leverages this metadata for precise OER discovery.

### Accessibility and Interoperability

- The CLARA REST API enhances access to and interoperability of RELs and their metadata, enabling applications like the CLARA search engine and Pinfig to interact with it seamlessly.
- Clear licensing linked to each OER clarifies access permissions, making it easy for educators to confidently use, adapt, and share resources.
- Standard metadata schemas (Dublin Core, LRMI, LOM, CCSO, etc.) ensure OERs and their metadata are interoperable, facilitating integration across various platforms and systems.



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Commons for Education



#### Goals

16 month project: September 2024 to December 2025.

The tasks to be undertaken include:

Task 1: To conduct a user study with teachers and future users to evaluate the need for OER tools

Task 2: To develop a reusable OER pipeline integrating CLARA research outcomes and Florilège annotation tools to support new OERs.

Task 3: To adapt and improve existing tools based on user study findings.

Task 4: To deliver the PARTAGE platform to the French Ministry of Education through the Digital Direction for Education (DNE).

# **FAIR** Principles\*

Plateform for Access and Reuse of Digital

- · Findable: OERs must be easy to locate by both humans and machines.
- Accessible: FAIR data does not necessarily mean open data. Access should be done via standard communication protocols under known conditions, supported by transparent licensing.
- Interoperable: Leverage standard formats and ontologies to ensure OERs can be integrated across different systems.
- Reusable: OERs should be reusable under clear licensing, allowing for adaptation, remixing, and redistribution.

\*Mark Wilkinson, et al. The FAIR Guiding Principles for scientific data management and stewardship. Scientific Data, 2006 Vol 3, no 1.

## **Proposed platform**



### Supporting legal OER Reuse

Reusing and remixing OERs can be complex due to licensing issues. PARTAGE aims to simplify OER reuse:

- Educators can bookmark OERs during their search, saving them as a curated playlist or set.
- Providing a license compatibility graph for each set, shows which subset of OERs have compatible licenses. This helps educators understand which resources can be legally combined and highlights any conflicts.
- Supporting clear license compatibility, allow users to share OER confidently, promoting responsible reuse.

PARTAGE pipeline for FAIR OER

# Current actions

In collaboration with Fabrique REL, DRANE, Rectorate of Nantes, Library of Nantes Université:

- 12th September 2024, Workshop RELIA: Exploring the 'why' and 'how' of searching Open Educational Resources (OERs). The program includes presentations on participants current projects and an interactive role-play on OER discovery ..
- 14th November 2024. Workshop PARTAGE: Introducing the CLARA pipeline's core principles. Session includes presentations on metadata management and license compatibility, followed by an interactive role-play exercise on ontology identification for annotations.

- A new OER is ingested and assigned a unique, permanent URI/IRI.
- Content is extracted using tools like speech-to-text, optical character recognition (OCR), and web parsers.
- Automated and human-based annotations are integrated, following ontology rules to enrich the OER.
- The Knowledge Graph (KG) is updated. with the OER accessible via a SPARQL endpoint, API, and search engine.

