UPSKILLS IO2: Integrating Research and Research Infrastructures into Teaching

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Zooming into: IO2 – Best practices for research-based teaching

1. Guidelines and best practices for research-based teaching
2. Guidelines for integrating research infrastructures into teaching

What is research-based teaching?

STUDENT AS PARTICIPANT

| Research-tutored | Research-based |

EMPHASIS ON PRODUCTS OF RESEARCH ——— **EMPHASIS ON PROCESS OF RESEARCH**

| Research-led | Research-oriented |

STUDENT AS AUDIENCE
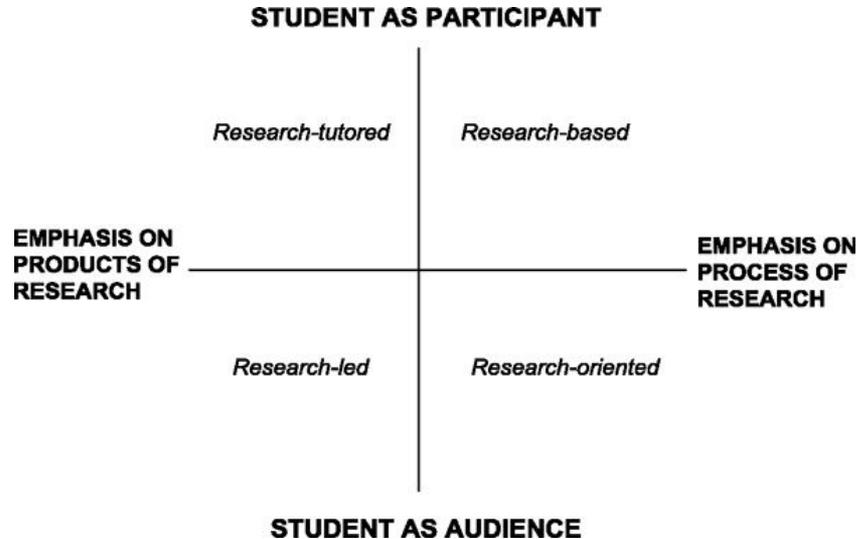
Healey's (2005, Jenkins et. al 2007) adapted model of the research-teaching nexus (from Visser-Wijnveen et al. 2010).

Isn't it what we do all the time? No!

Teaching and **research** are typically planned, performed and evaluated separately.

Visser-Wijnveen (2009: 141): "Academics' conceptions of the research-teaching nexus are related to their conceptions of teaching and **not to their conceptions of research and knowledge**".

Guidelines for integrating research into teaching

- Instructions for choosing/developing a course subject
- List of research-related topics
- List of research-related learning outcomes
- Making instructions for students
- Organising and supervising the work
- Evaluation and grading

16 Course Examples:

- Acquisition of English as a Second Language
- Automatic Speech Recognition/Forced Alignment
- Syntax of the DP
- Multilingualism
- Deverbal nominalisation in West South Slavic

Lessons learned: Features of UPSKILLS RBT Courses

- Focussing on the instructor's ongoing research

- Allowing plenty of time for transferable skills that can easily be overlooked by experienced researchers

- Organising students' work around a real-life-like research report

Guidelines and Best Practices - PDF Format

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SKILLS

Research-Based Teaching: Guidelines and Best Practices

UPSKILLS Intellectual output 2.1

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Research-based Teaching Guidelines

Research-based Teaching Guidelines

Guidelines and Best Practices – Web Page

PART A: Research-based teaching and UPSKILLS ▾

PART B: Guidelines for research-based teaching

0. Overview ▾

1. Course outline

2. Organising the work ▾

3. Supervision, assessment, evaluation ▾

4. Choosing a subject ▾

We open these guidelines with a quick roadmap to making an RBT course outline. In our experience, the best way to use this roadmap is to open a separate document and start taking notes at each step, moving on to the next step only after completing the previous one. Of course, previous steps can be revised based on insights at later steps.

Based on our experiences with RBT courses we also formulated some positive (👍) and/or negative (👎) advice for each step of the trajectory.

Step 1: Having considered the overview in Section 3 and suggestions in Section 4, define a course subject.

👍 Pick a subject that allows spending less than 60% of the time on strictly subject-specific issues.

👍 Pick a subject which is of interest to what you are currently working on.

👍 Pick a subject you would like to do more research on.

Step 2: Having considered the research-report outline (Annex 2), consider what kind of data you would like the

Questions?

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https://upskillsproject.eu/

Integrating Research Infrastructures into Teaching

By Iulianna van der Lek and Darja Fišer,
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Malta Multiplier Event, 30 November 2023

Why UPSKILLS and CLARIN Need Each Other

- Skills and knowledge about **linguistic research data repositories and related standards** were **not explicitly mentioned** in the learning outcomes of the analysed European language and linguistics degrees

- The data and services offered by **research infrastructures** (e.g. CLARIN) are **seldom** used in teaching of language-related disciplines

  Survey of lecturers in language-related programmes (May-July 2021)

Why UPSKILLS and CLARIN Need Each Other

Challenges

- Technical challenges, limited space, little IT support
- Administrative load and costs
- Issues with IPR, students need **help with the interpretations of the legal requirements**
- Protection of **data privacy** in the case of spoken language and multilingual recordings
- Students' **low level of digital literacy**

Why Use Research Infrastructures into Your Teaching?

Students learn:

- About the latest research in the field
- (Re) use published language data and digital resources to answer new research questions
- Use tools and services to process and analyse digital text collections
- Identify ethical and legal issues in language data collection and sharing
- Develop a Research Data Management (RDM) plan
- Apply the FAIR and CARE Data Principles during language data collection, management, sharing and archiving
- The added value of Open Science

Why?

These skills may lead to new career paths, e.g. language data manager, language data steward

Language data analyst

Language data collection, annotation, analysis

Read more
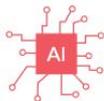
Language data scientist

Language data and processes research

Read more

Language data manager

Language data cleaning, curation, management

Read more

Language project manager

Language project and workflow coordination

Read more

Source: UniBo UPSKILLS Website
(to be published soon)

How?

- Identify research data infrastructures & repositories for language resources and technologies relevant for your course
- Familiarize yourself with their data, services, tools, level of support they provide to researchers, students and teachers
- Design and integrate specific learning outcomes into your existing course
- Develop assignments that require students to use language data from the repositories
- Encourage students to use the repositories for their own research
- …

To Help You…

1. Examples of RI-related **learning outcomes** in the **RBT guide**
2. **Quick guide** to CLARIN and how to use the main services and find relevant information
3. **Accompanying learning content:** *Introduction to Language Data: Standards and Repositories*
4. In close collaboration with UniBo:
   a. Example of student projects using repositories to collect, process, analyse and archive corpora
   b. Student internships

The RI Guide

CLARIN in the CLASSROOM

A Guide for Teachers and Students


**1** Find and (re)use published language resources
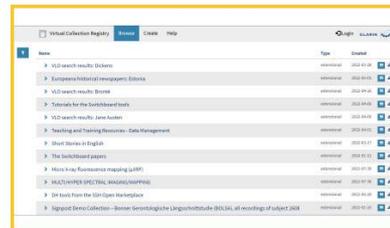
2 Collect, cite and share collections of virtual resources


3 Find and query high-quality corpora
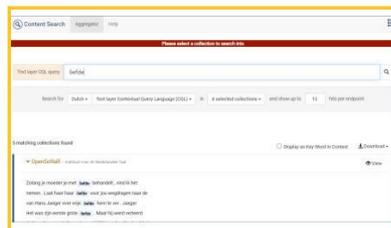
4 Search for specific patterns collections of resources
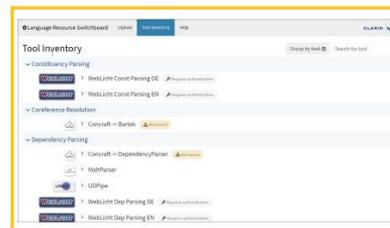
5 Find a matching tool to process your text file (s)
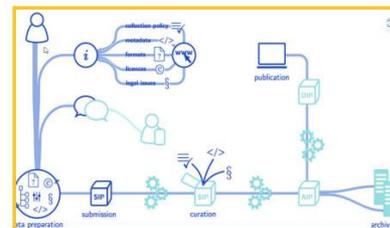
6 Archive and share your language resources

Created by I. van der Lek | 26 August 2022

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Learning content: Standards & Repositories (6 ECTS)

Learning outcomes

By the end of this unit block, students will be able to:

- Explain the main concepts related to research data repositories and the role they play in the linguistic research data lifecycle in the context of Open Science and FAIR data principles
- Find and use certified research data repositories to discover, share, publish, and archive language and linguistic resources and datasets
- Find and use integrated repository services and tools to process, annotate, and analyse different types of corpora according to standards and formats used by the community
- Identify potential legal and ethical issues when collecting, sharing and reusing language data and resources

Learning content: Standards & Repositories (6 ECTS)

Very modular, pick and combine, interactive presentations, examples of activities and assignments, use case, and glossary

1. Introduction to the Language Resource Lifecycle and Management

2. How Research Data Repositories Help Make Language Data FAIR

3. Finding and (Re)Using Language Resources in CLARIN Repositories

4. Citing Language and Linguistic Data

5. Legal and Ethical Issues in Language Data Collection, Sharing and ...

6. Student Project

7. Unit Glossary

Would You Like to Learn More?

We can share a draft of the RI guide with you

Pick and choose from the the learning content block & use it in the classroom

Contribute to the guide with examples of new learning activities

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