

# #CoCreatingGFI: How co-creation changes learning

Bringing together students, teachers and staff of the Geophysical Institute, inside and outside of the classroom, to create motivating and engaging learning opportunities for all of us

## ABSTRACT

The project CoCreatingGFI changes how students and staff collaborate to create a better education at the Geophysical Institute, UiB. We invite students to take on responsibility for their learning, both inside and outside of the classroom, support them in developing critical and ethical thinking, and prepare them for a diverse range of work and lifelong learning. We have 4 work packages:

**WP1** explores opportunities to co-create learning outcomes and assessments beyond traditional bounds, and pilots various learning activities promoting active learning and co-creation opportunities. This has resulted in substantial changes or redesigning of 4 courses.

Co-created pilot introductory course with experiments



Re-designed course in numerical modelling – from lecture-based to activity-based

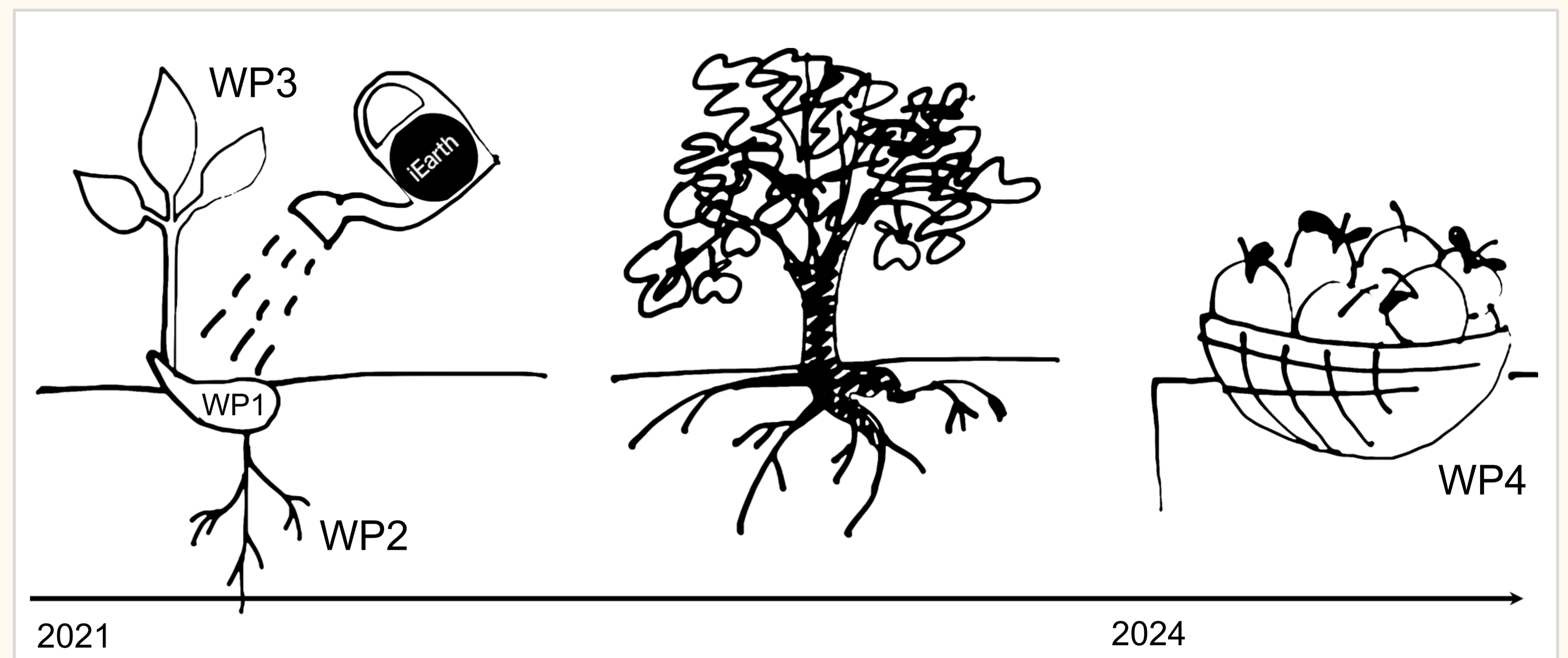


**WP2** creates supportive conditions at GFI by looking at how the organization is structured, whether there are places where student voices could be elevated, and whether the administrative framework could better support co-creation at an institutional level. We have co-created an educational part of GFI's strategy document, which has been approved by a general staff meeting.

**WP3** strengthens and supports a growing community of practice in teaching and learning among teachers at GFI, for example through regular "teachers' breakfasts" and through inviting teachers into Scholarship of Teaching and Learning (SoTL) projects.



Teachers' breakfast



**WP4** shares results and outcomes with a wider community, supported by experts and peers in iEarth, Center of Excellent Education. We share our lessons learned through publications, postcards, book chapters, conference presentations, and workshops.

Please help yourself to a postcard!

Also available for download: <https://cocreatinggfi.w.uib.no>



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Someone else was faster than me... I wasn't sure if it was relevant... I didn't dare to speak up... I'm just too polite to jump into wild discussions... I didn't want to take up too much time... I would rather say this anonymously... I wanted to stick to the main topic...

It doesn't matter why you didn't say it before. I'm curious about what you have on your mind!

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What could the teacher... What could you yourself... ...to increase your and your peers' learning?

STOP (red circle), CONTINUE (yellow circle), START (green circle)

Teaching Analysis Poll: formative evaluation

I wanted feedback that I could work with, which standardized evaluations don't always give.

IAP improved teaching design.

Strengthened teacher-student relationship.

It was motivating to hear that my commitment to teaching is seen positively.

It really helped to, as a student group, come up with ideas on how to learn better.

Great opportunity for me to gradually improve the teaching & learning quality.

It was reassuring to hear that what I think hinders my learning resonated with the others.

A jigsaw approach to field learning

- 1. Planning**: Home groups prepare fieldwork, e.g. Research question, Instrumentation needed, Measuring protocol, Who takes which fieldwork day. The size of the home group is scalable.
- 2. Fieldwork**: In the field, members from different groups support and learn from each other. Between field days, home groups reflect, add more theory, and refine planning.
- 3. Processing**: Home groups process data and write a field report. They compare data from different days in the field, evaluate which data best suit their purpose and reflect on their learning.

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Designing a bingo card for learning

|   |                         |  |  |
|---|-------------------------|--|--|
| Intended learning outcomes              | Scaffolding             | Include a free choice field                | Relationship   |
| Context                                 | Wellbeing               | Make the "hidden curriculum" visible       | 1. Consider the intended learning outcomes! Identify important disciplinary tasks and other useful skills.   |
| Strategic placement of activity prompts | Useful practical skills | Autonomy                                   | 2. Consider what fits with your context! Do students know each other? Providing opportunities to get to know each other might be very useful. Do your students like competitions, or should they also reflectively?  |
| Competence                              | Care for your peers     | Place important tasks in their own squares | 3.A Give students autonomy! Give students the opportunity to choose between tasks, and to decide when to do them, and with whom.   |
|   |                         |  | 3.B Let students experience competence! Adjust the level of difficulty so it is possible for students to stretch themselves and reach a goal! Include easy wins to get them going and consider how to scaffold/support the students by breaking down activities. |
|   |                         |  | 3.C Let students experience relatedness! Provide opportunities for low-threshold interaction with peers, teachers, and other staff, as well as encourage inclusion.  |
|   |                         |  | 4. Encourage students to take care of their own wellbeing! Studying can be exhausting, and sometimes students need to take a break from cognitive or social load.  |

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Student-staff partnership: Discuss curriculum, Students plan courses.

Co-creation: Students choose assessment format, Negotiate rubrics, Student representatives.

Active learning: Think-pair-share, Collaborative learning, Multiple-choice questions.

Student engagement: Real-life relevance.



## CONTRIBUTORS

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