The assessment committee wishes you every success with your application!

Application and assessment form Grassroots and -shoots projects FSW

For the guide accompanying this application form, see the second half of the document.

Note: the worked example of Ben Solo's application is fictitious and based on previous innovations.

	Assessment criterion	Description
Applicant	1. Personalia: indicate who is submitting the application, the role in which the applicant is doing so, the course(s) for which an application is being submitted, and the individuals who have a role in the project.	*The applicant is the primary implementer of the project. The applicant must have an assignment at Leiden University for the entire duration of the project.* *Any colleagues involved may be listed separately. Make sure the roles are clearly indicated for each person or group.* *For example:* The applicant is Ben Solo, Assistant Professor and course coordinator for the course *Governance reform within democratic systems.*
Educational Issue	2. Chosen innovation: describe the proposed innovation and describe where the innovation connects to a challenge, opportunity, or problem in education.	*Examples of chosen innovations include new use of ICT applications for practising skills, developing an (more) active working form, using interactive video when practising skills, using peer feedback in combination with feedback from the target group to verbalise student-produced knowledge clips.* *Examples of teaching problem: too low exam marks, too many resits, insufficient evidence of understanding of the material, little knowledge of the professional field, too few practice moments, too little (variety in the) subject matter, availability of course material, awkward timetable, starting studying on time, availability guest lecturers, contact with students 'in the field', too little feedback.* *For example:* Within the course on *Governance reform within democratic systems*, we find students come to the working groups unprepared, so they do not actively participate during the meeting. Often these are students who do not attend the lecture but do not watch its recording before coming to the working group. Recordings for lectures are generally only viewed in the week before the exam, statistics show. The innovation we want to apply in the course is to create

		knowledge clips combined with an activating quiz to be taken at the start of the seminar. This allows us to go deeper into ambiguities in the material.
	3. Argumentation: explain why this innovation is the best fit for your education, i.e. make the theory of change explicit (why and in what way will this innovation contribute to your education?).	*For all applications, the choice of this innovation is supported by evidence. For* ***Grassroots****, it is sufficient to offer experiential knowledge, preferably supplemented by school, organisational and system data as evidence.* *For* ***Grass Shoots****, literature must be provided as evidence in addition to experiential knowledge and school, organisational and system data.* *Include the student perspective in the evidence. What is the added value of the project for students and what is the possible impact is on their motivation, learning experience, study load or other relevant factors.* *Example of a change theory: I notice that students are not all present during lectures and only watch the recordings of lectures about 1 week before the exam. Partly as a result, they do not actively participate in the tutorials. As a result, I assume that retention of the material lags behind. Offering short knowledge clips (about 15 min) every week, combined with activating quizzes prior to the regular lectures, will lead to more active participation during the study groups and more retention of knowledge.* *For example:* The theory of change is as follows: I find that students do not all attend during lectures and do not watch the recordings of lectures until about 1 week before the exam. Partly because of this, they do not actively participate in the seminars. As a result, I assume that retention of the material lags. Offering short knowledge clips (about 15 min) every week in combination with activating quizzes prior to regular classes will lead to more active participation during work groups and more retention of knowledge. For students, this intervention means that they spend more time per week on coursework because they must watch the videos. Simultaneously, it means that by processing the material in a more active and staggered way, they achieve better retention of the material, which in turn should reduce the time they need when learning for exams (Dunlosky et al., 2013). In addition, experience shows that students who actively participate in working groups ultimately achieve not only better results but also a higher degree of satisfaction with their education.

Context	4. Policy: Describe how the project fits within the faculty's educational innovation policy.	*Examples: describe how the project can contribute to the implementation of the faculty vision on blended education: what questions, results or insights are useful in this regard?* *For example:* This project can contribute to the implementation of blended education, as it can provide insight into how we can ensure that students actually watch the videos used in a flipped classroom format prior to the meeting.
Project development	5. Planning: Briefly outline the planned course of the project, including preparation and evaluation.	*Example: preferably present the planning schematically in calendar weeks with concrete activities* *Week 1: start project* *Week 2: develop new learning activities* *Milestone week 4: Set up new learning activities ready* *Week 4-10: Develop new learning activities in Brightspace* *Week 11-12: holiday* *Milestone week 13: start course* *... etc.* *For example:* Week 1: project start Milestone week 3: completed scripts knowledge clips Week 3-6: recording knowledge clips Week 7-8: Creating questions quizzes Week 9-10: Preparing quizzes in Brightspace Milestone week 11: Quizzes finished and knowledge clips posted in Brightspace. Week 12: Break Milestone week 13: Start course Week 13-20: Course completion time Week 21: Exam Week 23: Completion of project.

	6. Teaching practice: Describe whether the project is feasible for faculty in terms of hourly load and embedding in existing work.	*Examples: the one-off extra project effort is paid for from the project, extra time is available from the institute, little extra time is deemed necessary.* *Note: this includes the consent of the relevant education director.* *For example:* The one-off project costs related to recording the knowledge clips will be funded out of the project. Additional hours will be made available by the institute for the lecturer to create the scripts and questions.
	7. Budget: Describe how the budget will be spent.	*Examples: for each cost item, describe all amounts for material costs (software, hardware, equipment) and personnel costs (coordination, lecturer hours and student-assistant hours).* *Tip: Per hour, a student-assistant costs about €25 (current rates can be requested from Jobmotion) and a junior lecturer €30 to €35. Note that overtime is only billable up to scale 10.* *Tip 2: Don't forget to include your own hours in the budget as well.* *For example:* Student-assistant for making videos 30 hours: €750,- Student-assistant for setting up quizzes and videos in Brightspace 20 hours: €500,- Support by SOLO/LLInC for evaluation of project: €500
Wrap-up	8. Continuity: Describe how the continuity of the innovation will be ensured after the project is completed.	*Examples: The senior lecturers are involved in the project and will use it again next year if successful, the results are transferred to the course coordinator, the results are stored on the department's network drive, the project gives rise to a follow-up project.* *Tip: be sure to convince the committee that the project results will remain in use after the project funding ends.* *For example:* If the project is successful, this approach will continue to be used. It is a long-running course, for which the applicant is the course coordinator and will be for the next few years. In addition, the results will be turned into a teacher's guide to the course so that it can be handed over smoothly if necessary.

	9. Evaluation: Describe how the project will be evaluated based on your theory of change. In doing so, make explicit what your expected outcomes are and how you will establish that they have been met. Describe which indicators you will use and when and how you will carry out the measurement.	*Example:* The theory of change is: I notice that during lectures, not all students are present, and they only watch the recordings of lectures about 1 week before the exam. Partly because of this, they do not actively participate in the seminars. As a result, I assume that retention of the material lags. Offering short knowledge clips (about 15 min) every week in combination with activating quizzes prior to the regular classes will lead to more active participation during the working groups and more retention of knowledge. I will evaluate the following: Teacher activities - Offer weekly knowledge clip - weekly activating quiz - discuss answers to quiz during workshops + (qualitative) response to quiz. Activities student - watch weekly knowledge clip instead of recorded lectures in the last week of the course - weekly activating quiz - more active participation during the seminars Results - possibly higher score on exam (more short-term retention of knowledge)

Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving students' learning with effective learning techniques: promising directions from cognitive and educational psychology. *Psychological Science in the Public Interest*, *14*(1), 4-58. https://doi.org/10.1177/1529100612453266

Application form Grassroots or Grass Shoots

Why a guide to the application form?

Before you start filling out the application form, we would like to give you more information on how to approach the application. We define a number of issues and explain some elements of the application to increase the chances of a successful application.

What is (educational) innovation? (pertaining to point 2)

First, a clear definition of what the assessment committee considers to be educational innovation. Innovation is a sustainable change that solves a problem or improves an existing situation by implementing new ideas. They can be large or small, but in all cases, innovations deviate from standing practice: it is something new in the context of the course(s) in question or it is something that everyone is already doing or should be doing in a new way deployed in education, for example the use of Brightspace or the use of a syllabus. They can involve both the use of ICT applications and the implementation of a new didactic concept. More innovative applications will be more likely succesful than those that focus on things already in wider use, such as knowledge clips or the concept of flipped classroom more broadly. Examples of successful proposals include interactive videos, use of formative testing, use of podcasts as instructional materials and video assignments for students.

Note: Educational innovation is not the same as keeping existing courses up to date. It should differ explicitly from regular course updates. As an example, developing and/or experimenting with a new (blended) working format is innovative, replacing an article within an existing course for more recent examples is not.

Evidence-informed innovation (pertaining to point 3)

Within the FSW, we want to innovate in an evidence-informed way to enable knowledge sharing and possibly upscaling of the innovations. A publication of one of the zones for Versnellingsplan Onderwijsinnovatie met ICT[1] uses the following definition: "Evidence-informed innovation is defined as innovation grounded by a combination of experiential knowledge, school, organisational and system data and research knowledge (2022, p.12)." **Experiential knowledge** is defined as the assumptions, knowledge and competences a teacher possesses based on their own practical experience. **School, organisational and system data** can include anything from examination results, to teaching evaluations or lesson observations, as long as the data is collected systematically. **Research knowledge** is any knowledge resulting from formal research. It can be collected, for example, through a literature review. Not all types of evidence are necessary for developing an evidence-informed innovation project, but the more different types of evidence provided, the stronger the foundation.

For the underpinning of **Grassroots** applications, the provision of experiential knowledge, preferably supplemented by school, organisational and system data is sufficient as evidence.

[1] Specifcally: Zone Evidence-informed onderwijsinnovatie met ICT & werkgroep Digitale praktijkvaardigheden

For **Grass Shoots** grant applications, all three types of evidence are expected in the underpinning.

Theory of Change as a basis (pertaining to point 3 and point 10)

We recommend approaching the underpinning of the innovation and its evaluation based on a Theory of Change. A theory of change makes explicit how and why the planned interventions will lead to the desired change and on what basis you can measure the change (change in behaviour, outcome, etc.) (Reinholz & Andrews, 2020). This theory of change can help at the front end of a project with planning and implementation and at the back end with evaluating the result, the latter by also focusing on the activities and intermediate results (and not – only – on the end result).

While standard student evaluations can be a part of evaluation, they can never be the only source of evaluation data. See this Radboud University publication for examples of other forms of evaluation with students. Additionally, consider using study results and other more quantitative data.

In a theoretical evaluation, it is recommended to include **monitoring data**: evaluating the activities and outputs that should lead to the desired outcome (see also Gugerty & Karlan, 2018). These data can contain meaningful information about the implementation of an intervention, e.g. if weekly viewing of knowledge clips should lead to better retention of the material, then it is useful to evaluate whether students actually watch the knowledge clips on a weekly basis (**learning analytics**).

It is not always possible to measure the effectiveness or impact of a project, especially if a design is not experimental. However, it is always possible to evaluate one's own theory of change in (e.g.) the form of teacher activities, student activities and final outcome.

NB: this is explicitly not intended to create more work for applicants, but rather as a tool to identify the relevant data for evaluation of the project. There is obviously no need to provide more data than is useful in assessing the implementation of the project.

When preparing an evaluation plan, also consider the AVG: is student privacy adequately safeguarded? For advice, contact the privacy officer (privacy@fsw.leidenuniv.nl).

Ethics, privacy, data management (pertaining to point 6 and point 10)

The standard procedures for ethics, privacy and data management apply within Grassroots and Grass Shoots.

Please observe the following rules:

- Does your research or results contain (new) personal data?
- Will your project process more or more sensitive personal data than usual?
- Do you want to publish the results of your project including personal data outside the university (e.g. at a conference)?
- Do you want to use new software to store or process personal data?

In the above cases, contact the privacy officer (privacy@fsw.leidenuniv.nl).

Your innovation project may touch on ethical aspects beyond this. If you are unsure whether an ethics application should be submitted, contact your institute's ethics committee. Contact the relevant ethics committee, see this page.

Note: It may take some time to address issues related to ethics or privacy. If you expect to need discussions with the privacy officer or ethics committee, please schedule enough time.

References

Crossan, M. M., Lane, H. W., & White, R. E. (1999). An organizational learning framework: From intuition to institution. *Academy of management review*, *24*(3), 522-537.

Fishbein, M., & Ajzen, I. (2011). *Predicting and changing behavior: The reasoned action approach*. Taylor & Francis.

Gugerty, M. K., & Karlan, D. (2018). Ten reasons not to measure impact–and what to do instead. *Stanford Social Innovation Review*, *16*(3), 41-47.

Reinholz, D.L., & Andrews, T.C. (2020). Change theory and theory of change: what's the difference anyway? *International Journal of STEM Education, 7*(2). https://doi.org/10.1186/s40594-020-0202-3

Zone Evidence-informed onderwijsinnovatie met ICT & werkgroep Digitale praktijkvaardigheden (2022). *Werkpakket proeftuinen Evidence-informed innoveren van onderwijs & Effectiviteit van onderwijsinnovaties.* Dl. 2. Versnellingsplan Onderwijsinnovatie met ICT. https://www.versnellingsplan.nl/Kennisbank/proeftuinen-evidence-informed-effectiviteit-onderwijsinnovaties/