Terms of reference

Mid-term evaluation of project 6066: *The digital environment GraphoLearn for supporting reading*

1. Introduction

Background on funding partner

Fondation Botnar is a Swiss-based foundation established in 2003 with the purpose to improve the health and wellbeing of children and young people in growing secondary cities around the world. We do this by investing in sustainable solutions, and by connecting and catalysing the work of diverse partners. At Fondation Botnar, we are committed to cultivating and nurturing learning both within and outside of the organization so as to effectively contribute to the change we want to see.

Background on implementing partner ("grantee")

There are two grantees within this project, one in Finland and one in Switzerland. University of Jyväskylä is one of the most successful multidisciplinary research universities in Finland. It is also one the world's leading universities in the fields of learning and teaching. The Finnish part of the project is conducted within The Centre for Applied Language Studies (CALS), which is a national expert unit, specialized in studying the goals, practices and policies of language education in Finland.

University of Zürich is one of the leading research universities in Europe and offers the widest range of study courses in Switzerland. The University of Zurich is Switzerland's largest university. Made up of seven faculties covering some 100 different subject areas, the University offers a wide variety of Bachelor's, Master's and PhD programs. The Swiss part of the project is conducted within the Developmental Neuroimaging Group at the Department of Child and Adolescent Psychiatry and Psychotherapy (CAPS), University Hospital of Psychiatry in Zurich. The research group uses today's most relevant and modern methods such as neuroimaging, neuropsychology, app-based intervention, computational modelling and neurotechnology to identify the causes for impairments in reading and reading development and to develop and evaluate novel supportive approaches.

Project description

The project aims to conduct research and further develop an existing scientifically solid, evidence-based, cost effective, efficient and timely technological solution, GraphoLearn, to support children's reading development from preschool to the third grade in Finland and Switzerland (in Finnish, German and English as a second languages).

Current state of project implementation

In Finland, the project members have designed and developed GraphoLearn, an individually adaptive digital learning environment for Finnish and German speakers (as well as English as a forgeign language learners). In addition, a small-scale study for reading intervention with GraphoLearn (255 participants in Grades 1 & 2) has been conducted. Furthermore, digital game-based assessment (GBA) method to test Finnish primary school children's reading, spelling, and reading related skills has been developed and investigaed in a validation study with the Finnish GraphoLearn (N= 735) in Grades 1 to 4. For the remaining part of the project, another controlled experimental study will be conducted as well as a large-scale data collection including data investigations and communicating our results to different stakeholders.

In Switzerland, the project members have developed a German version (Swiss variety of the standard German) of the GraphoLearn App for first to third graders with or without reading difficulties. The App has been tested and evaluated in two small scale, randomized-controlled cross-over training studies. Firstly, in 80 children enrolled in speech therapy schools in Switzerland and secondly in a neuroimaging study with 50 poor reading children attending grades 1-4. Furthermore, the team developed a German version of the digital game-based assessment (literacy screener) for children in second and third grades to test children's reading, decoding and spelling skills and to compare with standard paper-pencil assessments. They tested 14 classes in the canton of Zurich (city and more rural villages) and were able to include more than 140 datasets per grade. For the remaining part of the project the team a) collect data for a large scale evaluation of the Swiss GraphoLearn App (within the first 6 months more than 10'000 downloads from the webstores), b) conduct analyses and publish the data of the small-scale training studies (including behavioural and neuroimaging data), c) conduct analyses and publish the data of the literacy screener evaluation, d) analyse the data of the large scale evaluation and e) finally communicate results to different stakeholders.

Evaluation objectives and questions

Mid-term evaluations commissioned by Fondation Botnar are meant to support and deepen the grantee's reflection on ways in which their research can, in the medium to long term, contribute to change in the lives of children and young people in low- and middle-income settings. That reflection should flow into the on-going project and its subsequent steps so as to maximise potential impact.

Furthermore, mid-term evaluations serve to document the status of the research carried out in the project in an accessible way.

The scientific quality of the research undertaken by grantees has been reviewed by external experts in the specific field of each project. Therefore, the evaluation is <u>not</u> expected to assess the scientific merit of the project, or to replicate research undertaken by the project.

Evaluation questions

1. What is the place and relevance of the project in the field of educational game development for children?

2. What is the **project status** with respect to answering the research questions?

    - Which successes or promising results have been attained so far? What are the most important insights the project has generated to date, and to what extent can results be generalised?

    - What difference has the grant by Fondation Botnar made or is it likely to make – and what data need to be gathered, how, to determine this difference?

3. How has the COVID-19 pandemic influenced the project in its process and outcomes?

4. How is the project expected to sustainably contribute to supporting children and adolescents who experience learning difficulties, or who live in challenging learning environments, in learning to read?

    - How can the project maximise chances the games (software and process) developed continue to be updated and used beyond the project duration?

    - How can the project broaden its impact, by reaching out to specific groups to facilitate learning with, for instance,
      - children in other countries
      - children with a second/foreign language (e.g. in migration contexts)
      - older children and adolescents

5. How can the project ensure that future developments of the game and its tranfer to new groups of children/adolescents (see above) is continuosly and thoroughly evaluated in order to make sure that the game retains a high quality (evidence-based)?

6. How can the project support future distribution and use of the game to children in public (and private) schools of different countries (including Switzerland)?

During the inception phase, the evaluation team can review and develop additional questions as necessary, in consultation with Fondation Botnar and the implementing partner.

2. Methodology

Approach

Fondation Botnar is open to a wide range of evaluation approaches and methods. Regardless of the approach chosen by the evaluation team, the evaluators are expected to foster participation at key moments of the evaluation, seeking the grantee's advice and support (i) during the inception phase, when crafting the evaluation instruments, (ii) during the data analysis phase, and (iii) in developing recommendations.

More specifically, the external evaluator or evaluation team is expected to work in partnership with the grantee and the project lead at Fondation Botnar so as to maximise the transparency and utility of the evaluation process and products. The contracting evaluator is expected to collaborate closely with the grantee to:

- In the inception phase, reach a shared understanding of the evaluation objectives and questions with Fondation Botnar and project leadership, and develop the evaluation methodology accordingly

- unpack or develop the theory of change that is expected to lead from the project to future ('downstream') impact

- consult with the project team to boost both the validity of findings and the relevance of results and recommendations, taking into account the grantee's communication needs

- facilitate a validation workshop or consultation (online) so as to discuss initial findings and recommendations with the project team and Fondation Botnar.

As a rule, methods and perspectives should be triangulated in all evaluations. The evaluator or evaluation team is required to document the evaluation process and – if applicable – provide lessons learnt and recommendations for final evaluations of Fondation Botnar projects.

3. Evaluation logistics

Scope and field visits

The evaluation is expected to take place between 6 September and 17 December 2021. Its overall budget should not exceed CHF 40,000.

Ideally, face-to-face contact with the project team should be part of the evaluation process. However, if restrictions and risks linked to the COVID-19 pandemic preclude travelling, the evaluation team can work via the phone and online platforms, such as videoconference and visual collaboration tools.

Ethical considerations

The evaluator is expected to comply with evaluation standards, including ethics, throughout the evaluation process, as set out in the OECD/DAC Quality Standards for Development Evaluation (http://www.oecd.org/dac/evaluation/qualitystandards.pdf)

Proposed timeline

Evaluation activities will start upon execution of the consultancy contract and conclude no later than 13 December 2021. The Final Report including the respective slide deck should be submitted no later than 6 December 2021.

Work packages/action	Responsible	Time/deadline
Selection of evaluator	Fondation Botnar/Grantee	Early July 2021
Kick-off/inception meeting	Evaluator	Late September 2021
Submission of inception report	Evaluator	1 October 2021
Evaluation research and analysis, including validation workshop	Evaluator/Grantee	October- 2021
Submission of draft evaluation report	Evaluator	3 December 2021
Feedback on draft evaluation report	Fondation Botnar/Grantee	17 December 2021
Closing workshop	Evaluator	January 2022
Submission of Final Report	Evaluator	28 Janaury 2022

Deliverables

The deliverables expected from the evaluation are as follows:

- Inception meeting or workshop (on-line or hybrid format) with representatives of Fondation Botnar and of the project team

- Inception report of 5-15 pages summarising the (i) understanding of the evaluation purpose and scope (ii) any proposed adjustments to evaluation objectives and questions, (iii) data collection and analysis plan(s) including draft instruments, (iv) tentative work-plan and schedule for the overall evaluation process, specifying involved stakeholders' roles and moments for communication between the specific stakeholders, (iv) preliminary proposal for the dissemination of findings

- Draft evaluation report of up to 30 pages including a 3-page executive summary and methods documentation package (data collection and analysis instruments as used in the evaluation, and discussion of the evaluation process)

- Presentation and discussion of findings and recommendations in a debriefing workshop

- Final evaluation report accompanied by a brief slide deck summarising the conclusions and recommendations

4. Evaluator requirements

The evaluation or evaluation team is expected to meet the following requirements:

- At least five years of experience in evaluation

- Demonstrated experience in theory-based evaluation or theory of change development

- Excellent written and spoken English

- Experience in conducting interviews, group discussions and workshops via online platforms

- Knowledge and experience in educational game development

- Knowledge and experience in social impact-driven marketing of apps

- Knowledge on development of reading skills

References

Applicants are requested to include hyperlinks to examples of evaluations that are broadly representative of the evaluator's or the evaluation team's capability vis-à-vis this call.

5. Expression of interest and deadline

Expression of Interest

The expression of interest should be no longer than **2 pages** consisting of:

- Introduction of the evaluator or evaluation team including relevant experience and skills
- Short proposal of the methodological approach
- Rough day-rate and anticipated overall evaluation budget

An annex can include further documentation such as CVs, reports and publications or other relevant documentation. The 2-pager, however, will be the main basis for decision-making.

Deadline

Interested experts are requested to send their expression of interest by 14 June 2021 at 11 am Central European Standard Time. Applications in pdf format can be electronically submitted to m.raab@posteo.de cc. dsuhr@fondationbotnar.org and grants@fondationbotnar.org