Knowledge hub
-
Collection of best practices

Summary of the best practice

1. Title of the best practice (e.g. name of policy, programme, project, etc.) *

Herby.digital: bridging the digital gap through accessible technology

2. Country or countries where the practice is implemented *

Brazil

3. Please select the **most relevant** Action Track(s) the best practice applies to *

- [x] Action Track 1. Inclusive, equitable, safe, and healthy schools
- [x] Action Track 2. Learning and skills for life, work, and sustainable development
- [x] Action Track 3. Teachers, teaching and the teaching profession
- [x] Action Track 4. Digital learning and transformation
- [ ] Action Track 5. Financing of education

4. Implementation lead/partner organization(s) *

Lemann Foundation (Brazil), Associação Bem Comum (Fortaleza, Brazil), Secretary of Education of Sobral - CE (Brazil), Secretary of Education of Vargem Grande - MA (Brazil)

5. Key words (5-15 words): Please add key descriptive words around aims, modalities, target groups etc. *

Digitization, data driven decision making, learning assessments, digital correction of handwritten exercise sheets on paper

6. What makes it a best practice? *

Digitization for inclusion, user-friendly, scalable, reaching schools without IT infrastructure and facilitating data driven decision making enabling time and costs savings

Description of the best practice

7. Introduction (350-400 words)
This section should ideally provide the context of, and justification for, the practice and address the following issues:
i) Which population was affected?
ii) What was the problem that needed to be addressed?
iii) Which approach was taken and what objectives were achieved? *

i) 40.000 public school students in Northeastern of Brazil

ii) Brazilian public schools were closed over a year during the COVID-19 pandemic, once they started reopening, learning assessments were necessary to verify students' needs. The conventional process usually took approx. 2 months from applying the tests, correction and analytics

iii) With HERBY.digital, the learning assessment processing time was reduced from 2 months to 2 days. Each child has an individual QR code, the educators just scan it with a mobile phone or a tablet to access our platform via browser, take a picture of the test sheet. The results appear on the picture and are gathered in our platform for the analytics, generating dashboards.

8. Implementation (350-450 words)
   Please describe the implementation modalities or processes, where possible in relation to:
   i) What are the main activities carried out?
   ii) When and where the activities were carried out (including the start date and whether it is ongoing)?
   iii) Who were the key implementation actors and collaborators? (civil society organizations, private sector, foundations, coalitions, networks etc.)?
   iv) What were the resources needed (budget and sources) for the implementation?
   *

   i) Digital correction of exercises on paper by cellphone photo, informing teachers where to support students individually, enabling data based policy decisions for education secretaries

   ii) May 2021 - present (on going), Maceió (AL), Alagoinhas, Camaçari, Mata de São João, Vitória da Conquista (BA), Paço do Lumiar, Vargem Grande (MA), Conde, Mamanguape, Monteiro, Princesa Isabel, Sousa (PB) e Olinda(PE)

   iii) Lemann Foundation (São Paulo - SP), Associação Bem Comum (Fortaleza - CE), Lyceum Consultoria Educacional Ltda (Sobral - CE)

   iv) USD 2.00 / student, i.e. USD 80.000,00

9. Results – outputs and outcomes (250-350 words)
   To the extent possible, please reply to the questions below:
   i) How was the practice identified as transformative? (e.g., impact on policies, impact on management processes, impact on delivery arrangements or education monitoring, impact on teachers, learners and beneficiary communities etc.);
   ii) What were the concrete results achieved with regard to outputs and outcomes?
   iii) Has an assessment of the practice been carried out? If yes, what were the results? *

   i) Impact on learning assessment processes (time reduction from 2 months to 2 days. The technology developed by Herby enables public schools to easily collect and digitize results from paper-based test assessments by using smartphones to perform scanning and data processing. Herby's technology reduces time and operational costs for test assessments by digitizing them in real-time. This allows for teachers and school management to access the results quickly and plan their pedagogical interventions accordingly.

   ii) Time and cost savings, time reduced by factor 20, costs reduced by factor 5, development of technological solutions for public schools with low IT infrastructure. Dashboards for several stakeholders: school, municipality, county, state, financiers, NGOs

   iii) In 2020, Herby entered the Beta Program at the Lemann Foundations' Innovation team. The initiative was focused on helping lead entrepreneurs through a methodology of experimentation, field validation of ideas (primarily early-stage), and support to help them find the right product-market fit to scale Herby successfully transitioned through all the stages of the program, starting with a set of hypotheses. In late 2020, the hypotheses were validated with seven teachers in the field and then expanded to a more significant experiment reaching 2,000 students in early 2021 in an effort to ultimately gauge if and how the solution can scale to ultimately reach millions of students. To date, more than 40,000 children have participated in Learning Assessment with Herby technology in North Brazil.

10. Lessons learnt (300 words)
    To the extent possible, please reply to the following questions:
    i) What were the key triggers for transformation?
    ii) What worked really well – what facilitated this?
    iii) What did not work – why did it not work? *

    i) high workload for correction processes led to long and expensive decision making cycle (usually 2 months, with Herby reduced to 2 days)

    ii) easy and fast scalability, facilitated by low entry barriers (only one cellphone connected to internet per school needed)

    iii) less interest from municipalities in which schools have computer labs and tablets individually available

11. Conclusions (250 words)
    Please describe why may this intervention be considered a “best practice”. What recommendations can be made for those intending to adopt the documented “best practice” or how can it help people working on the same issue(s)? *

    Herby technology eased a tremendous pain point in Brazilian public education and has enormous potential to impact at scale, bridging the digital gap through accessible technology, providing immediate feedback to learning progress, support in areas where less teachers are available, e.g. rural areas, refugee camps

12. Further reading
    Please provide a list and URLs of key reference documents for additional information on the “best practice” for those who may be interested in knowing how the results benefited the beneficiary group/s. *

    Swiss Youth and Future Prize 2022: https://www.youtube.com/watch?v=z1WQ1dZw80M

    Municipality of Vargem Grande, Brazil: https://www.youtube.com/watch?v=CxR3EGR1S8c

    Municipality of Vargem Grande, Brazil: https://youtu.be/TgILiRxdOjQ?t=1696