

SCALING DIGITAL DESIGN LITERACY IN EDUCATION THROUGH THE FELLOWSHIP PROGRAM

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IN SERVICE TEACHER TRAINING LOCALLY THROUGH CONTINUED PROFESSIONAL DEVELOPMENT

How to raise teacher **awareness of student learning indicators** when discussing teaching practice?

Challenge: New competence area with none or **limited** developed **evaluation practice**

Teachers that operate as trainers across schools are key to scaling and impact!



Municipal teacher trainer facilitating sharing and preparing digital design literacy practice with teachers across schools

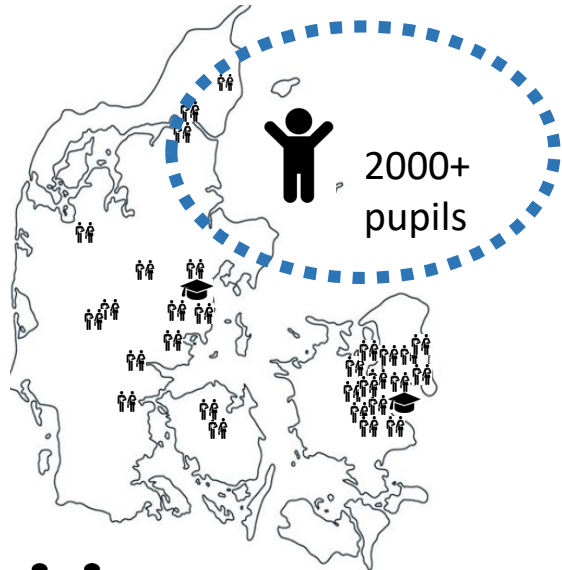
COMPETENCE AREAS WITHIN COMPUTING: -DESIGN LITERACY




The students' ability to appropriately use design and digital competences to create and critically analyze digital artefacts in terms of their value, use and consequences.

Two competence areas of 'digital design' and 'digital empowerment':

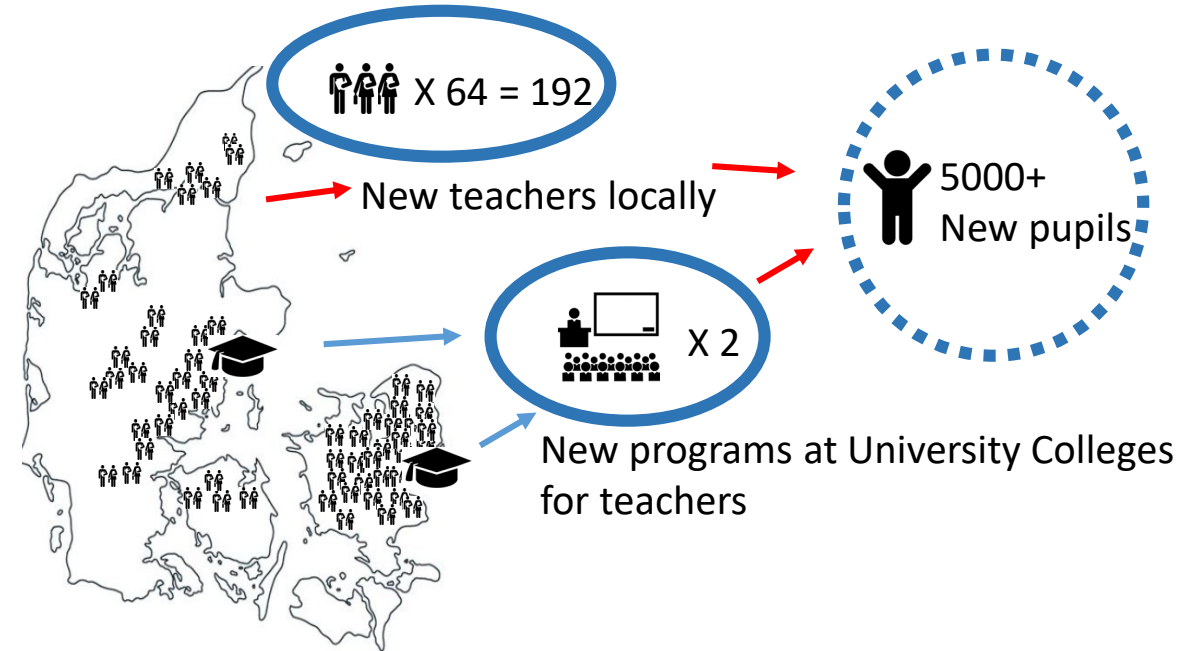
- Digital design focuses on design and construction
- Digital empowerment focuses on analyzing technology in terms of their use, values and impact.

SCALING THROUGH TRAINING THE TRAINERS



-  64 pioneer teachers (trainers)
-  8 Educators of teachers from two University Colleges
-  44 School leaders

In 22 municipalities out of 92



SCALING DIMENSIONS

THAT INCLUDE 'EVOLUTION' RELEVANT TO DEVELOP NEW SUBJECT

Spread: how teachers could communicate ideas, concepts, artifacts and tools at local team meetings

Depth: Theoretical and didactical knowledge, development and exchange of teaching formats and practices among teachers

Shift in reform **ownership:** Teachers own practice

Sustainability: Trainers, pairs and school management

Evolution: Continuously gather data from teachers' practice and experience and **feed this back into research**

Clarke and Dede, and Coburn

RECRUITING THE TRAINERS : IN SERVICE K9 TEACHERS

To achieve evolution, depth and spread:

- adopting new digital technologies and teaching computing
- functioning as trainer of peers on computing
- contributor to in service teacher community

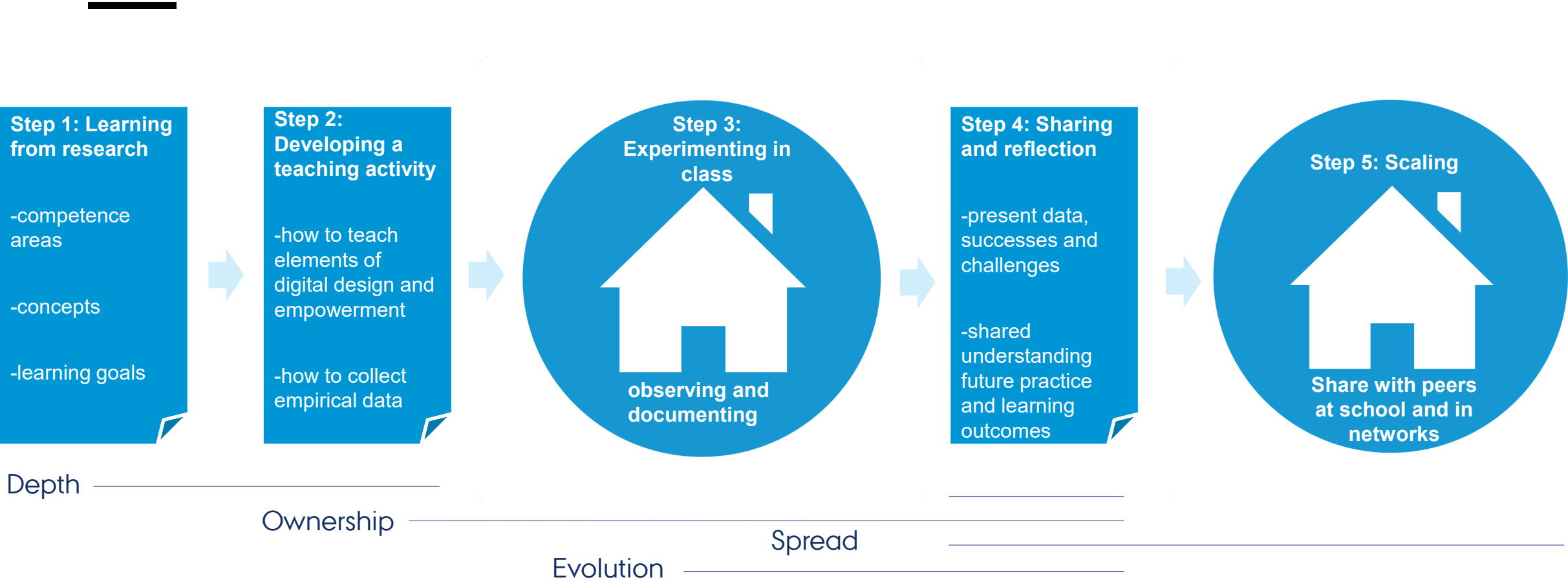
Secondary criteria to assure sustainability

- diversity
- pairs
- school leader authorization and two-hour-participation

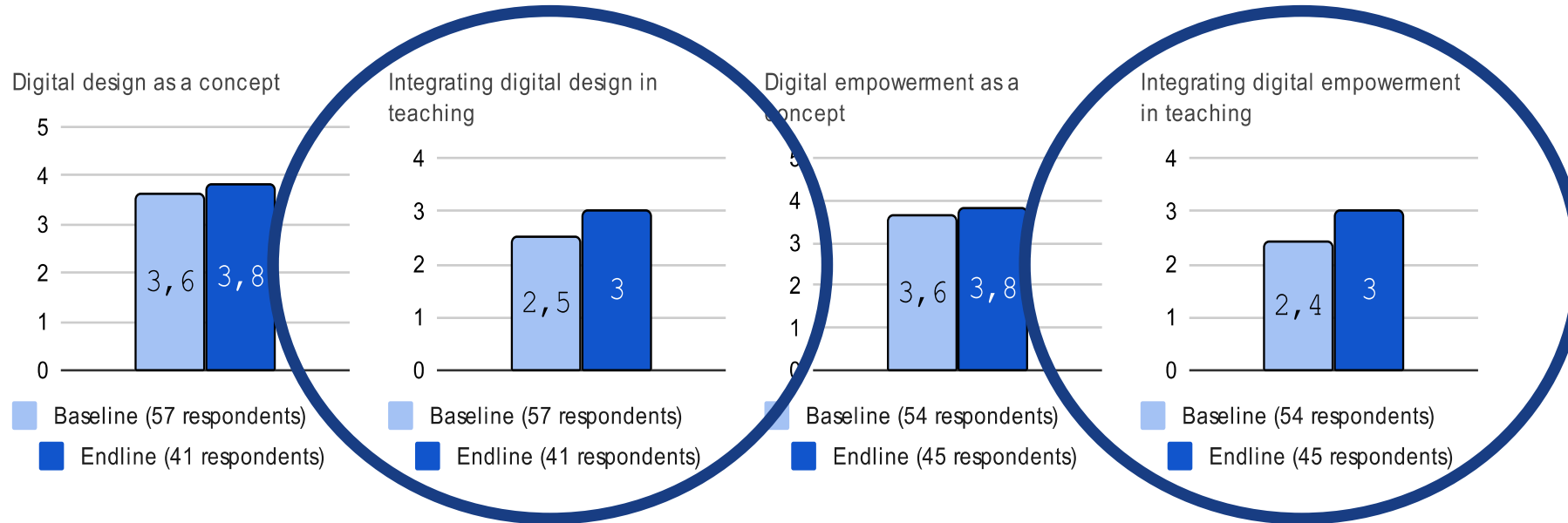


PROGRAM DESIGN FOR SCALING

FEEDBACK LOOP BETWEEN RESEARCH AND EDUCATION PRACTICE



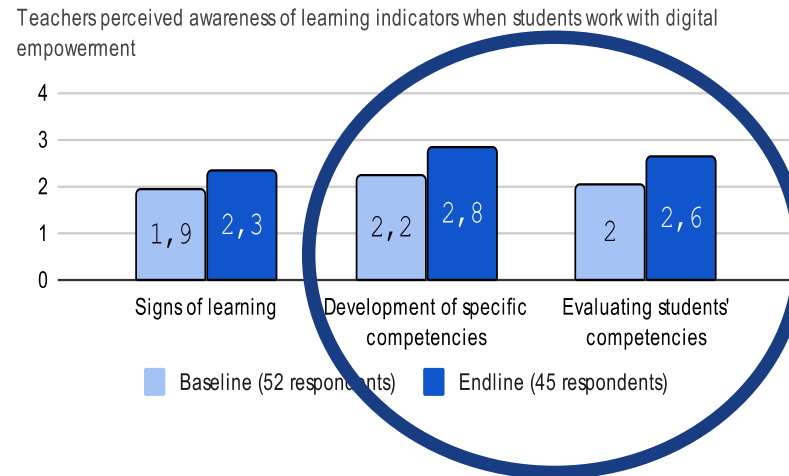
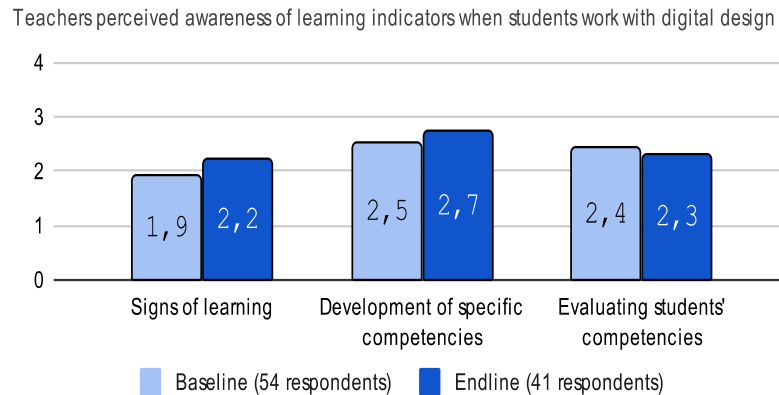
DID THE PROGRAMME GAIN DEPTH? CONFIDENCE IN INTEGRATING IN TEACHING



Perceived level of understanding (rating from 1 - 5, 1 = novice (completely insecure) and 5 = expert (completely secure))

Confidence and ability to integrate in teaching (rating from 1 - 4, 1 = to a small degree and 4 = to a large extent)

RAISED AWARENESS OF EVALUATING STUDENT COMPETENCIES?



Teachers rated from 1 - 4, 1 = to a small degree and 4 = to a large extent.

DEPTH AND OWNERSHIP? NETWORK AND EXAMPLES FROM PRACTICE

- **new ‘mindset’** for grasping digital technology
- new **awareness of the different roles** of the teachers and the role of students
- insights into **new teaching formats** and how to develop and conduct these new teaching formats
- extended **network**
- **reflection and dialogue** during sharing and discussions of **practice experiences** in group work
- **perspective** - general understanding of the value and potential of digital design literacy in teaching
- **motivation** to continue work onwards

FOLLOW-UP

- **Sustainability and spread study**

if and what, how with whom teachers share locally from the fellow ship

- Publication on digital empowerment based on teacher reflections on learning indicators and framework
- Co-create new modules on emerging technologies

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