

# Dynamic process model

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# This material is part of the School mentoring model



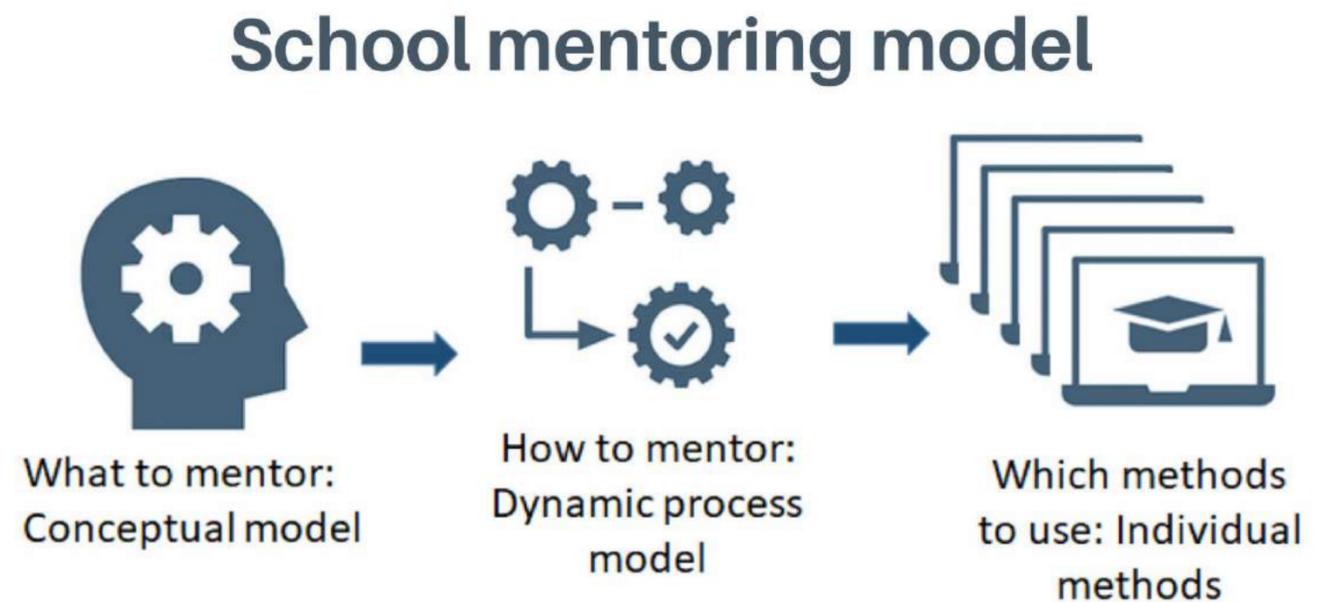
The aim of the model is to foster the adoption of digital innovation at school level.

The focus is on teachers' understanding of digital technology and practices to implement technology in a pedagogically meaningful way.

The model promotes teachers' professional learning with peers and school management to create the culture and practices for evidence-informed implementation of digital innovation.

The model is created in the iHub4Schools project (2021-2023). More information of the model:

<https://www.ihub4schools.eu/mentoring-model/>





# Introduction



## AIMS

To provide school leaders, teachers, mentors and teacher trainers a model of organising a development process in schools. The focus is on implementing and adopting digital innovation.



## DESCRIPTION

The model emphasises co-creation and evidence-based development. The model consists of various activity steps in the process. Each of the numbered steps will be described separately. The idea is that users (schools) choose which of the steps they want to apply; none of the steps are obligatory.

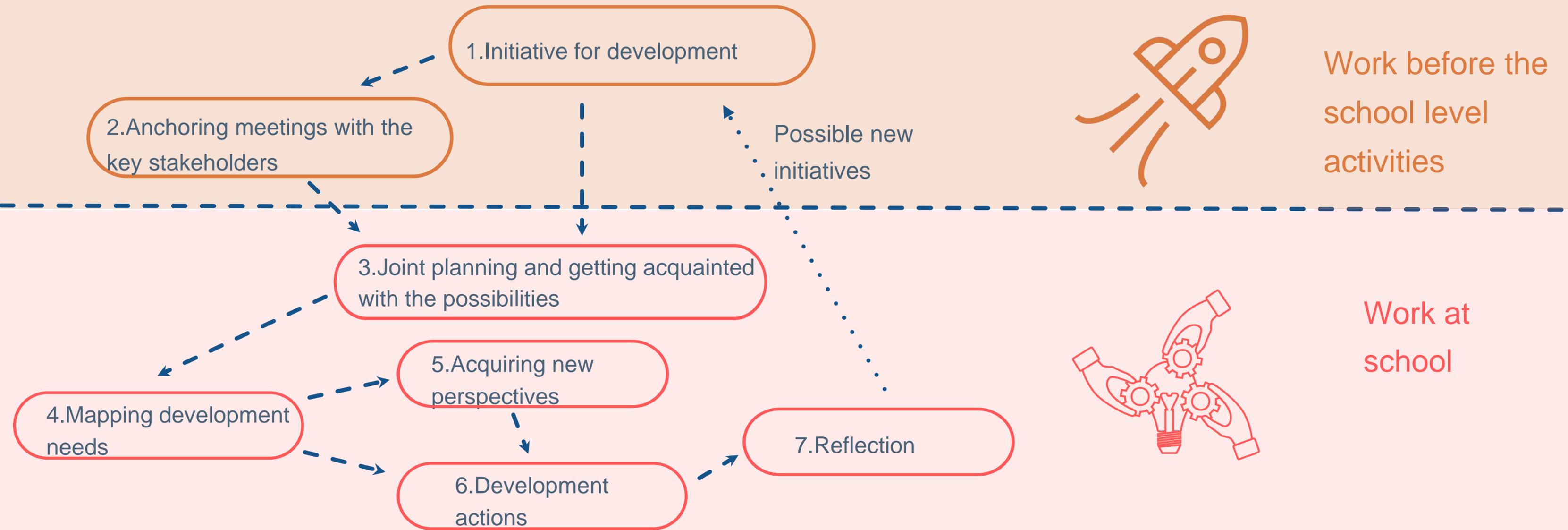


## CONTEXT

Schools that want to start an improvement and development process in the use of digital technology in pedagogical and community practices. National differences, size of the school, level of the school, the school's culture for development and innovations as well as teachers' various competencies affect the implementation of the model.

# Structure

## The process of the development phases



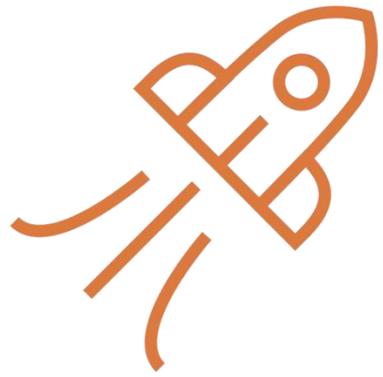
# 1. Initiative for development



Work before the  
school level  
activities

- Initiatives come from different directions: from the school or from some teachers, local administrators, researchers, or other external stakeholders. The reasons for suggesting the development work vary, there might be even contradictory reasons.
- Invitations to schools and selection of schools, e.g., based on applications from the schools.
- It is important to find benefits to school!

# 1. Initiative for development: Examples



Work before the  
school level  
activities

- In Case Porvoo the initiative came from the researchers and the aim was to have collaboration with the school for iHub4Schoolproject. The researchers contacted two principals about the preliminary interest, the principals were willing so the next step was to wait for the project acceptance.
- For UiB the initiative came from the researchers with a suggestion of the participation of one school based on previous collaboration. The researchers contacted a school leader and the school accepted to be part of the project application.

## 2. Anchoring meetings with the key stakeholders

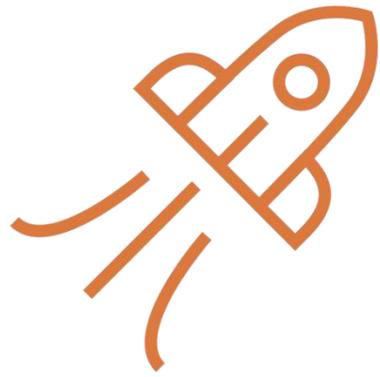


Work before the  
school level  
activities

**Meeting with the relevant school authorities** (principals, vice principals, ICT coordinators etc.) about their needs.

The aim is to get the leaders of the school acquainted with the possible development model(s) and the phases as well as their various possibilities (collaboration activities, tools and instruments for evidence-based development).

## 2. Anchoring meetings with the key stakeholders: Examples



Work before the  
school level  
activities

### 1. Meetings with schools in the Norway case:

- First meeting with school leaders (different selected teachers working on innovation or technology): Presentation of schools, expectations. How will we work: What models will be presented (e.g TISL, practice inquiry method). (2h)
- Second meeting: Needs, and suggested plan from the schools. Time frame. (2h)
- Third meeting: Dates and planed time for autumn 2021 and spring 2022. (2h)

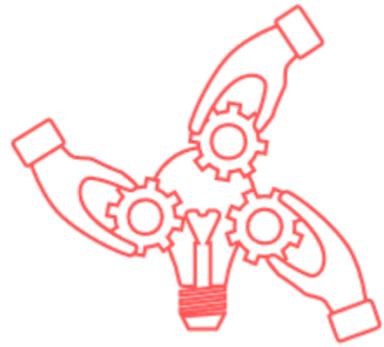
### 2. Meetings with schools in the Finnish case:

- After the iHub4Schools started, researchers organized the first meeting. It was a virtual meeting with principals and 1-2 teachers responsible for the ICT development, mainly discussion of the development possibilities and the acute needs of the schools. (2 h)
- Second meeting: active teachers who were responsible for some activities in May (1 h) -> decision to have short presentations to teachers in May 2021 in order to easier start in autumn.



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### 3. Joint planning and getting acquainted with the possibilities



Work at school

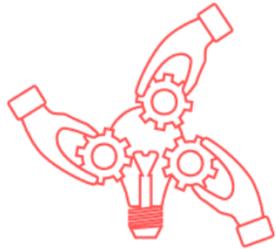
- The joint meeting with the staff, school teams (responsible for the development activities) or all relevant persons who will participate in the development process.
- If possible, the staff should reflect the current status of the school and based on this, create ideas about how to continue the work.
- Schools have various needs and these individual needs are answered with different steps, models and tools and for this reason the various individual methods or digital tools will be applied in many ways.



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# 4. Mapping development needs

Work at school



Questions that help to choose method(s):

1. What is the problem of our school with digital technology in teaching and learning?
2. What are the concrete development needs of our school and individual teachers?
3. What are our development goals?

Possible methods to use:

## Frameworks for mapping development needs

Innovative Digital School model

DigCompEdu

Digital Mirror Framework

## Practical methods for mapping development needs

Digipeda workshop

Future School: Evidence-informed school improvement

Inquiry Practice Method

## Digital tools and instruments for mapping development needs

SELFIE for schools

TET-SAT tool (MenTep)

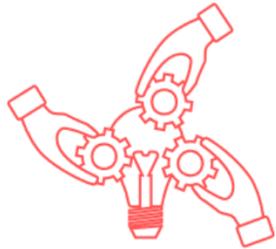
School's own instruments

SELFIE for teachers

National instruments:  
**Finland: e.g. OPEKA**  
Estonia: Digital Mirror

## 5. Acquiring new perspectives

### Work at school



The aim of this phase is that teachers search for new information, experiences and inspiration for their development work with the help of chosen method(s).

Possible methods to use:

### Practical methods for acquiring new perspectives

#### Whole school

School-level peer-review (P2P)

#### Teacher teams

Peer-observation of lessons

Teacher collaboration / teacher peers

Teacher training

Participation in competitions, seminars, conferences

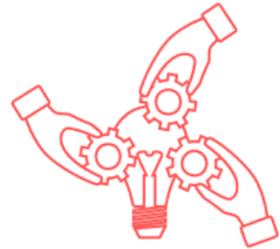
### Frameworks for acquiring new perspectives

Frameworks can be used to help benchmarking: e.g., Innovative Digital School model to structure School-level peer-reviews, Pedagogical Infrastructure Framework to structure Peer-observation of lessons.



## 6. Development actions

### Work at school



In this phase, schools and teachers need to decide what are the decisions for development actions, what is the practical implementation plan, and how to organise the development work.

Possible methods to use:

### Practical methods for development actions

#### Whole school

School—industry  
collaboration

#### Teacher teams

Collegial tutoring

Teacher inquiry into  
student learning

Development  
projects

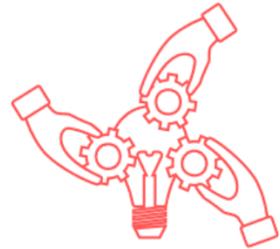
Lesson study

Teacher's innovation  
laboratory

In-service teacher  
training: various ways  
for organising

## 7. Reflection

### Work at school



For assessing the development work conducted, in this phase the participants should answer the following questions using the chosen method(s):

- How did we succeed in achieving the development goals and implement the development efforts?
- How do we know that: what evidence do we have or need to collect about the success?
- What next: How to proceed with continuous development?

Possible methods to use:

For reflection and evaluation, the same digital tools, frameworks, and practical models can be used as in the mapping phase 4, e.g. Innovative Digital School model or Digital Mirror.

# Example of applying the dynamic process model in case Norway

## 1. Initiation phase

1. Municipality, school office, **initiate (1)\*** the University for collaboration on a specific topic: to increase school and teacher awareness on the national framework on professional digital competens
2. Meetings with the municipality, school office to make plans on how to invite schools for the project
3. Invitations text.
4. Schools sent in applications for participation

## 2. Anchoring phase

1. First meeting with school leaders (rector, team leaders or different selected teachers working on innovation or technology): Presentation of schools, expectations. How will we work: What models will be presented .
  2. Second meeting: Needs, and suggested plan from the schools. Time frame.
  3. Third meeting: Dates and planed time for autumn 2021 and spring 2022.
- All the meeting are part of an **anchoring (2)** phase

## 3. Best practice Inquiry phase

1. School office invite teachers to participate in workshops to share professional practice.
  2. Teachers share stories of professional practice.
  3. Teachers participate in 2 workshops on professional practice.
  4. Teachers develop overview of professional practice steps in 3. Scenarios: Planning, teaching, and office work
- This phase will be used by schools to gain new **perspectives (5a)**.

## 4. Whole school Inquiry phase

1. Researchers bring professional practice scenarios to new schools.
2. Leaders and teacher teams: map **development needs(4)**
3. **Develop actions**. Inquire scenarios for **new perspectives (5b)** and make inquiry questions and LD to implement LD and inquire own practice and framework on professional digital competence
3. Researchers meet with schools once a month for **reflections (6)**. Teachers share practice (LD) and develop new inquiry questions.





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