



#### Summary

The Innovation Centre of the Finnish National Agency for Education (EDUFI) has developed an approach to public management at national government level which uses learning as the meta-strategy. They redefine the role of the central government as enabling local actors to perform better.

This 'learning as meta-strategy' is enacted through Experimentation Labs in which EDUFI's role is to build the capacity of actors in local and national education systems to learn and improve together

This represents an evolution of traditional Innovation strategy - they do not seek to scale what has been learnt in any place, rather it is the capacity for learning which is taken to scale.

# **Enhancing learning systems through experimentation**

## Insights from the Finnish National Agency for Education Innovation Centre

#### Overview

The Finnish national education system is often referred to as one of the best systems in the world, frequently featuring in the top positions of the OECD PISA rankings (OECD, PISA 2018 Database). Education is free at all levels, focuses significantly on lifelong education and is largely defined at a local level.

Education in Finland is overseen by the Finnish National Agency for Education (EDUFI), which is responsible for:

- early childhood education and care
- pre-primary, basic, general and vocational upper secondary education
- adult education and training.



#### **EDUFI** defines its mission as

"Passion for learning, where [..actors..] create trust through openness, design solutions together, can reinvent [themselves] for the benefit of the learner and walk the talk." [Material 1]

There is significant devolution in the Finnish educational system. Important parts of the educational curriculum are directly defined by the local context - municipal schools and teachers.

Despite excellent results, the education system in Finland has also been facing challenges and new realities that create different pressures. In a complex and uncertain world a new set of capabilities are needed for students to succeed, but also new ways of teaching and learning which is pushing the organization to look out for innovative ways to reinvent itself.

In recent years the Finnish National Agency for Education (EDUFI) has been particularly interested in testing and promoting the development of a new culture of ongoing experimentation and innovation to enhance learning and collaboration among actors of the education system. In 2017, EDUFI established the Innovation Centre as part of a dedicated government policy program tasked with the mission of looking for new ways to improve teaching and education and reshape learning, with a focus on Basic Education, which is the education for children from 7-16 years old. The ultimate goal of this approach was to improve the quality of teaching and learning in Finland - but also understand better what was needed to build a more resilient school system in Finland.

#### The work of the Innovation Centre:

#### Scope:

The purpose of the Experimentation programme was to improve the quality of learning by enabling the adoption of an experimentation culture involving actors from different levels of the education system.

#### Who?

The programme was made of 3 labs, 24 projects and 75 core team members involved in the project teams in over 28 municipalities. Experiments' participants came both from both regional and national levels, including public officials, teachers, parents and young students aged 7-12, to jointly develop, test and implement experiments aimed at testing new learning methods centered on the learner. For instance, in the first Lab, one of the participating municipalities managed to bring around 1700 students aged 7-12 to take part in the multi-perspective evaluation of experimentations.

#### What?

In June 2018, EDUFI offered special funding for innovative experiments and development projects in basic education. Funding was issued to 70 experiments and projects, totalling €5,119,322. The call for applications was in a new format, allowing education organisers to highlight regional and locally identified development needs. Twelve projects that received funding were selected for the Programme.

#### How?

The team supported the development of "Experiments in practice", at local and national levels in the education system, and used collective sense-making or "multi-perspective, humancentered evaluation" as a method of joint learning. The team acknowledges that experimentation is suitable for development projects in which it is not essential to know the end result in advance, and there is freedom to seek new kinds of solutions.

#### **Process**

The Innovation Centre designed and implemented three experimental sub-programmes defined as "Labs". Labs were used as the platform to bring together a specific set of actors to collectively solve a question by applying a co-creation approach.

**Experimentation Lab (1):** year-long, facilitated process, to support teachers, school leaders and local education administrators to create space for experimentation and co-create local solutions to address challenges in education. Actors involved:



students, teachers, principals, student welfare groups, municipal authorities, parents

**Experimentation Lab (2),** to support a top-down steered national funded developmental programme on various themes, topics and challenges. Actors involved: Teachers, local development coordinators, students, principals, municipal authorities, parents, teacher assistants, student welfare groups, parents

**Experimentation Lab (3),** to transform educational governance and to inspire cultural change to better respond to complex challenges in education. Actors involved: experts at the FNAE and Ministry of Education and Culture, teachers, students.

#### Actors in this case study

Several actors were involved in the overall process:

- Finnish National Agency for Education (EDUFI): The Finnish National Agency for Education is the national development agency responsible for early childhood education and care, pre-primary, basic, general and vocational upper secondary education as well as for adult education and training. Higher education is the responsibility of the Ministry of Education and Culture.
- Innovation Centre: EDUFI established the Innovation Centre on March 1, 2017 as a part of government policy program to support a culture of experimentation and innovation in education. The Innovation Centre consisted of a team of six people, who had skills in co-creation and launching of experiments, as well as knowledge of the challenges specific to the field of education in terms of experimental development, which was utilised throughout the programme.
- Pemos Helsinki: An association working in research which carries out research, strategies and experiments for public, private and third-sector organisations. In the Experimentation Programme, their role was focusing on supporting the Innovation Centre's team in designing and building the first programme's development arc and sharing knowledge of the

experimentation theory and practical experiences with the experimenters.

- Partners involved in the development of the multi perspective approach: The multi perspective approach to evaluate the experiments [See below for more information] was developed together with researchers Kirsi Hyytinen from VTT Technical Research Centre of Finland and Eveliina Saari Finnish Institute of Occupational Health, using Inforglobe's digital tools.
- Local participants: local participants from schools and municipalities, but also parents and children who took part in the process.

### Case study purpose

The <u>Centre for Public Impact</u> has partnered with the Innovation Centre to use the Innovation Centre's work as a means to reflect on complexity-informed approaches to public management at a national government level. In particular, this case study seeks to explore and identify how the learning approach pioneered by the Innovation Centre can contribute to the further development of <u>Human Learning Systems</u> as an alternative approach to public management.

#### Materials for this case study:

The case study was draws on the following materials:

- The written contributions of Anneli Rautiainen, Head, Innovation Centre and Paula Tyrväinen, Senior Innovation Adviser, Innovation Centre.
- Evaluation material submitted by the Innovation Centre programme
- Interview with Olli-Pekka Heinonen, Director General at the Finnish National Agency for Education and Former Minister of Education for Finland.



#### **Resources:**

- OECD, PISA 2018 Database
- Material 1: Written contributions of Anneli Rautiainen, Head, Innovation Centre and Paula Tyrväinen, Senior Innovation Adviser, Innovation Centre.
- Material 2: Interview with Olli-Pekka Heinonen, Director General at the Finnish National Agency for Education and Former Minister of Education for Finland.
- Material 3: English translation of presentation on "Finnish National Agency for Education Experimentation programme: A new kind of development journey"
- Material 4: English translation of presentation on "A multi-perspective evaluation model as a support for experiment and development work: Summary of the pilot carried out in 2019-2020"
- Material 5: English translation of presentation on "Wrapping up the Experimentation Programme"
- Material 6: English translation of presentation on "Summing up the #bestschool accelerator"
- Material 7: English translation of presentation on "With which identity should the Finnish National Agency for Education (OPH) implement their task to increase their societal influence?"

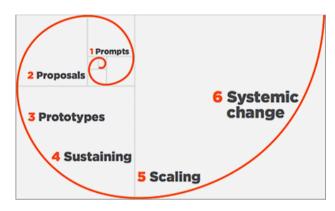
## Summary of learning from the case study:

## Learning as meta strategy for public management

The Innovation Centre sought to develop the capacity for local learning through experimentation as the primary strategy for addressing complex problems:

"Complex problems can't be solved with traditional ways of working top-down. Instead, they need to be experimented in a humancentered way by involving all players in the system to be active co-creators in a joint effort" [Material1]

However, the Innovation Centre's strategic approach evolved beyond standard social innovation strategy. <u>Traditional social innovation</u> <u>strategy</u> views learning and experimentation as a discrete phase in the innovation process:



[Young foundation - life cycle of social innovation, 2014, p. 12]

In this traditional version of innovation strategy, learning and experimentation happens at phases 2 and 3. The idea being that society has a problem (Stage 1: prompt). Innovation practitioners create and test proposals and prototypes to address this problem (Stages 2 and 3). The purpose of this learning and experimentation is to find "what works" to solve the problem. When we have learnt "what works", innovation strategy moves to the next phases - sustaining and scaling.

The Innovation Centre evolved beyond this traditional approach. They realised that complex challenges are context specific - you cannot take a solution developed in one place and time and apply it to another. Consequently, rather than seek to take the content of what is learnt from one place and scale it, the Innovation Centre sought to scale the capacity for learning itself.

In this way, the Innovation Centre developed learning as a meta strategy, not just for innovation



practice, but as an overall public management response to complex environments.

"Our focus has been on designing for people, with the people, applying human-centred design. Our work has been part of a larger movement towards a more nimble and agile governance." [Material 1]

### National Government as Learning Partner

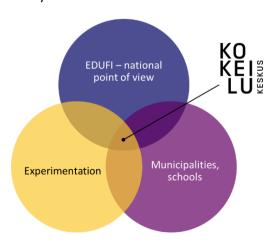
Within this meta strategy for learning, the Innovation Centre developed an alternative role for national government to play to improve public service practice in devolved environments.

Rather than seeking to control the practice and behaviour of actors who are responsible for child welfare and education at a local level, the Innovation Centre acted as a learning partner, putting in place the structure, and helping to create the relationships and capabilities, and culture required for local actors to continuously learn and adapt to solve complex challenges.

This Learning Partner role enabled the Innovation Centre to connect actors across different scales of the Finnish education system:

- EDUFI at a national level
- Municipalities, schools and families at a local level

By taking a co-creation approach to experimentation, they created a learning ecosystem across these different scales:



Concepting the Innovation Centre: working "one foot in, one foot out" approach [Material 1]

### Developing learning systems - spaces and relationships

The Innovation centre played a key capacity building role for local and national actors - developing their skills for learning by experimentation. However, these skills turned out to be only a part of what was required to create effective learning systems. Learning systems involve all sorts of actors - families as well as professionals, national as well as local. For actors in such systems to learn together, learning relationships are needed.

Consequently, the Innovation Centre played a significant role supporting the development of behaviors and attitudes which support learning relationships. The Innovation Centre put emphasis on strengthening ties between participants and cultivating behaviours such as trust, empathy and humility.

## Exploring the practice of the Innovation Centre...

#### ... through a Human Learning Systems Lens

Human Learning Systems (HLS) is an alternative approach to public management, which is being developed by a range of public and voluntary sector leaders across the world, as they seek more effective ways to manage in complex environments. The Centre for Public Impact was curious to explore how the Innovation Centre's work could contribute to knowledge about the practices and ideas which underpin this approach to complexity-informed public management. Consequently, we examined the Innovation Centre's practices through the lens of HLS.



## Taking a human approach:

## putting human relationships at the centre of learning.

There are two aspects to the 'Human' aspect of Human Learning Systems:

- 'Human' refers to the moral purpose underpinning HLS approaches to public management: to enable public service to recognise and respond to the humanity of each and every person within the system of interest the people being served, and all those who work within it.
- HLS also makes a claim about what it means to recognise people's humanity - that human beings are intrinsically connected to others in a complex bio-psycho-social/political system. In other words, to fully see a human being, is to see and understand them as part of all of these contexts.

What is captured below reflects how this moral purpose and understanding of what it means to be human manifests itself in the work of the Innovation Centre.

The approach taken by the Innovation Centre placed significant importance on developing more human to human relationships, as a way to create more effective learning environments. Through their work, the Innovation Centre was able to discover the qualities of effective human relationships which underpin an effective learning environment.

## Recognising diversity - seeing from more than one perspective

One of the key values which the Innovation Centre displayed in its work was the importance of recognising the diversity of different people, and the perspectives they brought to bear. The value of diversity was particularly felt as a way to address the uncertainty inherent in working in complex

environments - diverse perspectives enable a broader understanding of any given problem:

In our complex reality, development work is a reflection of uncertainty. What works in this context? Am I capable of examining this topic from all perspectives? And where do the boundaries of my agency and expertise lie? [Material 3, slide 18]

Alongside recognising the importance of diverse perspectives was a fundamental commitment to the equal value of those different perspectives.

"The epistemological uncertainty, complex choices to be made and the trials of different expert roles lead to a notion of collective knowledge, where no single expert's viewpoint is prioritised. This validates the need for co-creation and experiments leading to rapid learning." [Material 3, slide 18]

This emphasis on equality of participation required a different role from public officials within the experimentation programme.

"Public officials are not anymore the "experts sitting in the room", and their role becomes to encourage people to share, learn and contribute - in a way, they become system experts. There is a need for switching from operator with pre-settled answers to an inspirer engaging in teamwork. They are expected to question their own identity and role within the system." [Material 3, slide 20]

#### **Humility**

In order to enable public officials to adopt these different, non-expert roles, the Innovation Centre's deliberately sought to cultivate humility in the relationships between different actors in the learning systems they created.

Participants in the Experimental Labs - and in particular public officials - were encouraged through mentoring sessions to reflect on the limits of their knowledge and expertise boundaries.

These were necessary to make them stop thinking of themselves as experts - but also make sure other participants would stop seeing them as experts and expecting from them to know the truth. These



elements were key to create a psychological safety environment and make participants think of a notion of collective knowledge where the input of each of the participants was important to cocreate and facilitate a learning environment.

#### **Empathy**

Bringing together a range of actors to learn together - many of which would not have previously learnt or even worked together - required the purposeful development of empathy as a way to understand and respond to different actor's life contexts. Sensitivity and empathy were explicitly required for public officials to connect with participants and understand the local context, their needs, and the community.

"In a complex school system, development capabilities and resources in different contexts vary, as a result of which, EDUFI employees connected to their fields in a balanced way must strive to be context sensitive and adjust accordingly. [Material 3, slide 20]

The Innovation Centre's approach deliberately developed practices which were designed to enable all the actors to see one another as fully rounded human beings - people who are experiencing the full range of human drives and emotions. For example, the mentors for the experiments actively worked to:

"rethink the relationships between different actors in the system - each person has their own pressures, fears, perspectives - people were supported to express theirs to others, and to listen to others" [Material 1]

This was part of a broader strategy of bringing the actors in the experiments to learn and reflect together.

However, all participants felt that the most powerful element of the evaluation model was to take the time to concentrate on one thing, listen to other people, to explore school development and everyday life from different perspective and to be heard. We'd like to say we managed to build

empathy between people – although at a small scale at this stage. [Material 1, page 11]

#### **Trust:**

Trust was identified as fundamental for the collective learning from the experiments to take place. Participants must trust each other in order to feel comfortable enough to share and be honest.

"Trust is our strength in Education, between actors and their existing roles." [Report\_Innovation Centre, page 11]

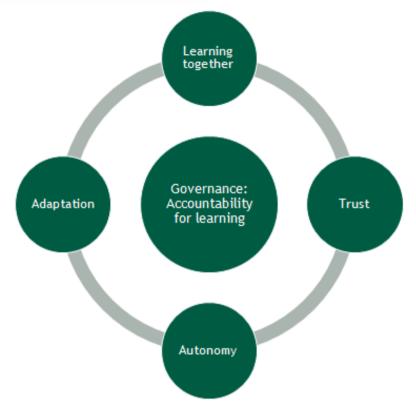
The Innovation Centre therefore purposefully sought to build trust between actors. values mentioned above: A key element used by the Innovation Centre to build trust among the participants were the mentoring sessions. Although the primary objective of these platforms was to enhance the co-creation and experimental skills of participants or encourage them to reflect, they were actually key to build trust and confidence between the Innovation Centre and the teams, but also across and within the teams.

"The Labs were platforms for local players to share thoughts and lessons. Via mentoring we learnt to know the participants and were able to build trust and between us the teams, but also between teams." [Material 1, page 14] "

This is particularly interesting, as it identifies a **virtuous cycle of learning together and trust building**. All the actors on the experimental programme were learning and building their capacity for experimentation together, through the mentoring process. Learning together helped them to build trust in one another, which in turn, created a more effective learning environment.

We have seen a <u>similar virtuous cycle of learning</u> <u>and trust with other case studies</u> for the Living the New World report In those contexts, we have identified four elements of the process, supported by a governance approach focussed on enabling learning.





In EDUFI's work, we see this virtuous cycle operating - with learning as the meta-strategy informing the governance and accountability processes (see below). This case study as an additional element to the cycle - that empathy for others in the system enables autonomy but guided by a sense of the needs of others.

## | Creating a learning environment

In order to respond to complex environments, an HLS approach to public management uses learning as the primary mechanism for public service improvement. This is described "optimising for learning, rather than control".

Creating effective learning systems at local and national levels, and between these levels, was the purpose of the Innovation Centre's work. Crucially, the Innovation Centre used the development of learning systems as both a goal and a method - so that the whole programme was itself an exploration of the way in which a national agency such as EDUFI could support and enable effective

local learning systems. Consequently, their work has generated significant insights into the way in which learning can be placed at the heart of an alternative approach to public management.

## Role of National Agencies to support local learning systems:

The Innovation Centre developed three key roles which enabled it to use learning as a public management response to complexity.

#### Strategic role

Firstly, the Innovation Centre played a strategic role. The Innovation Centre developed its "Experimentation Lab" programmes as a way to test and enact learning as meta-strategy for public management, backed up through its funding and accountability mechanisms.

#### How did they play this role?

The Innovation Centre signalled to local and national actors in the education system that the experimental approach to learning was desirable



and necessary to meet child welfare and education challenges.

Partly, the Innovation Centre team undertook this signalling by walking their own talk. They framed the work of the Innovation Centre as a meta-experiment:

"The work itself is an experiment! Due to the nature of our work (tenure 2017-2020), being an experiment our self, we don't yet have a fixed model to describe the process." [Material 1, page 4]

Furthermore, it backed up this signalling by embedding it in existing national funding mechanisms. In Finland, there is a long history of annual calls for proposals put in place by the national government to stimulate education and training in local networks. The Innovation Centre received direct funding from the national government to run its organization and decided to anchor its programme into the existing national structure by running a separate call for proposal to the participants that had already been assigned national government funding for their projects. In total, 5 million euros were made available by the national government for 70 projects across municipalities. Twelve teams were given the opportunity to take part in the experimentation program based on their curiosity and interest in taking part in an innovative program. As far as reporting is concerned, teams were given the opportunity to choose the traditional reporting structure to the national government or use the multi actor evaluation approach developed specifically for the program, together with DEMOS.

In addition, the evaluation approach to the Experimentation Lab programmes was built on supporting the learning and adaptation of the programme itself.

## Accountability, performance monitoring and evaluation

The Innovation Centre recognised that existing forms of evaluation and performance monitoring - approaches that were designed to "prove Impact" and monitor resource use were not fit for purpose

as accountability mechanisms for the work of the Innovation Centre:

"the [current] reporting model is largely based on ensuring reliability; whether the funding has been used correctly. There is a very limited accumulation of information from the process to the National Agency for Education. Systematic, continuous assessment is missing from the funding of development activity. The administration has no opportunity to participate in local development activity and make fuller use of the learnings. There is insufficient working time to direct development activity and make a synthesis from the learnings in the administration." [Material 4, slide 50]

For the experimentation process to succeed, it was important for the Innovation Centre to understand how this would fit with the reporting/performance management requirements of both the local and national actors involved in the experimentation programmes.

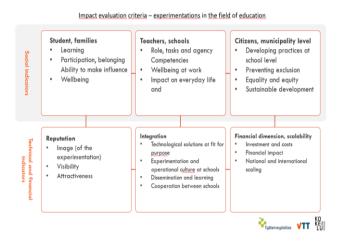
To do so, the Innovation Centre developed specific evaluation methods and tools to understand and be able to tell the value of the program. Key to a different approach to evaluation was that the evaluation process should be <u>developmental</u> - it should support the adaptation and evolution of the programme itself. The evaluation approach involved:

- Continuous assessment of the participants' experience: Surveys were prepared to evaluate the experience of the experiment's participants but also to collect additional insights on the local context, including potential larger social impacts. The surveys included both multiple-choice and open-ended questions, and the metrics used included both metrics defined by the Innovation Centre but also by the schools themselves. The electronic survey was targeted at people who took part in the experiment: students, guardians, teachers and school staff, as well as the management of the school and the decision-makers of the municipality. [Material 4, slide 23]
- Development of a new evaluation method and criteria for evaluating experimentations in the field of education. A multiperspective, human-



centred approach to evaluate the experiments was developed in one of the first pilot projects with the participation of all participants. It was applying both new forms of multi-party dialogue methods and software tools to facilitate participatory evaluation. The evaluation model was developed as a joint effort between the team and the researchers from VTT Technical Research Centre of Finland and Finnish Institute of Occupational Health, using Inforglobe's digital tools.

### The dimensions of evaluation of experiments in education are listed below.



Source: [Material 1, page 10]

Crucially, the Innovation Centre developed alternative methods by which to be accountable. Rather than use traditional reporting mechanisms, the team organised "a multi-stakeholder dialogue" in which participants in the programme, plus colleagues from across the education system, reflected together on the performance of the programme. One of the results of this dialogue was a consensus that

"the traditional model of reporting and measuring outcomes (top-down monitoring) belongs to the past. There is a need for reforming evaluation practices and accountability processes." [Material 4, slide 45]

Again, the Innovation Centre was able to take the learning as meta-strategy approach and apply it to its own work.

### Learning Partner role

The Innovation Centre did not just instigate an experimental programme, they played an active role within it. The Innovation Centre staff, supported by Demos Helsinki during the first Lab, acted as Learning Partners to both local and national actors.

#### How did they play this role?

#### Convening and co-creating learning spaces:

"One of the key learnings of the projects is that collective learning does not happen by accident, you need tools and methods to facilitate it. The Experimentation Labs were the first national scale attempt in Finland to apply adaptive innovation in the rapidly changing operating environment of the education sector. It brings together stakeholders from all levels of the system to learn by doing and focus on what is important." [Material 1, page 8]

The Innovation Centre convened participants in the programmes to co-design the way they would work and learn together, the problem they would try to solve and corresponding solutions, and also the way they would evaluate their own experiments.

"The whole processes of the three Labs were based on codesign.... We had three different processes, Labs to develop collective actions. It seems obvious, that you cannot increase the comprehension of doing things differently by telling what you have done. Instead one needs to experience and live the process through as an active co-creator." [Material 1, page 19]

Throughout the programmes, the Innovation Centre created shared **reflection spaces**. These spaces were designed to encourage participants to undertake shared sense making, leaving behind previous preconceptions and to work with an open mind. These reflective spaces used a variety of tools and methods, including:

 Fishbowl: Interactive discussion groups used to generate ideas, evaluate experiments or share feedback and personal reflections, held both



throughout the experiment and between two experiments. The size of the fishbowl varies depending on the need - while a smaller group of participants would be preferred for reflection spaces, a larger group can be helpful for larger multi-perspective experiment evaluation events. The fishbowl were made of inner and outer circles, encouraged to listen or contribute depending on the purpose of the Fishbowl [Material 4, slide 25]

- Weekly spaces to enable the different teams to share their learnings: Interactive reflection groups were hosted on a weekly basis to encourage the different teams from the regions to facilitate peer-learning. "We had good interaction and reflection weekly with our team, took new direction if needed and also mentored the experiment teams. Mentoring seemed to be very successful and peer learning during the joint working days. In fact, many teams indicated that they would have liked to have more of the joint learning and sharing with their colleagues from different parts of the country." [Material 1]
- Assessment dialogues: Assessment dialogues provided a space to share the end of experiment learnings, co-create the conclusions of the experiment and receive feedback from all the experiment's participants in particular from specific stakeholders such as the parents. The assessment dialogues play also an important role in replacing a more traditional way of updating or reporting a group of stakeholders. Here, progress is shared in the format of a dialogue aimed at exchanging learnings, but also test the conclusions with the local participants (i.e, participants) giving importance to the local context.
- Clinic days a space for participants to share learnings, get expert advice, and engage in dialogue around important themes that affect all teams.

#### Capacity building for learning

The Innovation Centre, supported by Demos Helsinki in the first Lab, supported the participants in the programmes to develop and use the right tools and methods to enable them to experiment, share and learn. This capacity building approach gradually reduced its involvement along the way as the programme progressed and participants began to build their skills. Methods for this work included:

 Mentoring sessions, mentioned above, provided a valuable way for the Innovation Centre to also encourage public officials to reflect on their learnings but also - and most importantly - on the changing role of expertise and their subsequent role in the system

"The focus of the third Experimentation Lab was on mentoring, coaching, peer learning and on the changing role of expertise. Making space for learning, creating psychological security for experimenting and failing, and taking an appreciative enquiry approach has made a difference: the public servants have started to reflect on the purpose of their work and ways of working. [Material 1, page 9]

#### **Cultivating learning attitudes and behaviours**

One of the key aspects of the Learning Partner role was to support actors to develop attitudes and behaviours that enable them to learn effectively - to create an experimental and learning culture:

A positive error culture - daring to fail, feeling comfortable with making errors, mistakes and feeling empowered to take risk(s) is fundamental for participants to feel comfortable with experiencing and testing and fully emerge in the experiment. This attitude is also important to ensure participants feel comfortable sharing their mistakes, learnings and create a truly inclusive peer-learning environment. To achieve this, the Innovation Centre worked specifically with participants during the mentoring sessions, highlighting the importance of time and patience - teams were given the necessary time to try things, feel comfortable and be courageous, so as not to risk too much.

"This part was challenging. However, through theory and mentoring we supported the idea of "dare to fail". We discovered that it takes time to build trust and talk about failures and



mistakes. All teams needed time to try out things, one step at the time, and to discover the limits for experimenting in order not to risk too much. [Material 1, page 11]

In addition to this, feedback loops were also created to collectively define what was accepted as risk(s) by the groups, both internally and externally, so as to create a "culture of positive error".

Learning to cope with uncertainty: Taking an experimentation approach requires participants to feel comfortable with uncertainty because the objective and outcomes of the experiment are complex and most importantly dynamic. Indeed, throughout the experiment, objectives and outcomes keep on constantly changing as teams reflect and progress on the co-design process. While uncertainty can be destabilizing, it also plays a key role in removing authority, power and existing structures among the participants. This in turns allows everyone to be placed on the same level, remove any expert in the room and most importantly encourage people to take an active role in the process.

The Story of the of Oulu Municipality (Experimentation Lab 1) provides a good example:

One of the teams taking part in the first Experimentation Lab came from a municipality/region with heavy strategic steering (top-down=. In the beginning they had difficulties in "letting go" of the readymade solutions and creating space for codevelopment. Success in development work was about meeting targets and set aims. By mentoring the team, we managed slowly to convince the local coordinators to try out, one step at the time, experimenting and learning. It took them more than a year to move from measuring to learning. In the end, in their final reflection summary they pointed out that the Experimentation Lab was a challenging learning journey for them all, but in the end is was worth it and that they managed to bring about change in an unexpected way. Diversity

was valued, and deeper understanding on change processes took place in the community. [Material 1, page 11]

#### **Cultivating learning relationships**

Enabling an experiment culture implies that public officials and other stakeholders, such as school employees, teachers or parents, relate to each other in a different way to what they were used to. For this to happen, the Innovation Centre had to work on changing the way people related to each other and cultivate **learning relationships** instead.

An important element for this to happen was to change the perception that public officials and managers had of their roles, but also how other participants perceived them. All participants are encouraged to actively participate, and decide what will be the next steps and conclusion of the experience together, with all voices having equal weight in the discussion. For this to happen in practice, it was necessary to make managers and public officials accept their boundaries and recognize that they're not expected to be the experts in the discussion, or know the right answer. Equally important, other participants had to learn that they shouldn't expect public officials or managers to know the "right" answer. Relationships have to become learning relationships where no one holds authority and everyone's voice is equal.

"The representatives of the management and decision-makers were nervous about taking part in the fishbowl. "How can I participate in a discussion about a subject that I don't know well?". We went through calling the participants of the outer circle, and this relaxed them and gave a direction to the mutual discussion. Making use of the results of the fishbowl in management would be one area of development. It would be important to tie evaluation as a part of the decision-making structures of the school and municipality. The presence of the management in the fishbowl was important, as otherwise responsibility is easily 'outsourced' in the discussion and blaming the managers begins. [Material 4, slide 37]"



Certain values were particularly important to allow an experimental culture and to move to learning relationships, such as sensitivity, courage, honesty and patience. These allow participants to speak up, but also listen and empathize with the other participants. In this context, we can see the connection between the "human" and "learning" elements of this alternative public management practice - when people see one another as human beings learning together (rather than as the holders of positions or particular pieces of knowledge) they create a more effective learning system.

"Experimental development reduces risks as it helps those involved identify the weaknesses of a potential solution at an early stage and develop the solution based on observations. It also makes it possible to halt particular development paths and shift to a new direction. For this reason, experimentation requires sensitivity, courage, and honesty from those involved. [Material 3, slide 7]

#### Providing challenge through coaching

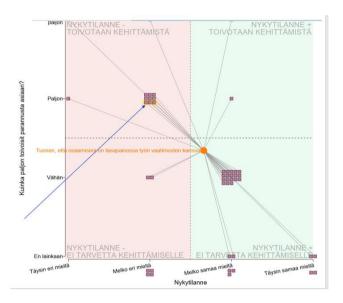
In order to develop a robust experimental culture the Innovation Centre team helped to challenge those undertaking experiments. They describe this role as "sparring" - a role that takes elements of coaching practice (asking good questions) whilst challenging the experimenters to ensure that their methods and analysis were appropriate, inclusive and robust.

#### Use of data for learning

One of the key areas in which the Innovation Centre provided Learning Partner support was with data visualization as a learning tool. For example, they were able to help experiments reflect on survey and evaluation results in workshops to highlight the differences of perceptions and foster a discussion among participants. These visual perceptions also helped promote diversity of thoughts and build empathy between participants.

"During the pilot out team analysed data from 10 experimentation programmes and facilitated evaluation workshops with the aim of supporting joint reflection, mutual learning and integration of experimentations into everyday life at schools. The

software tool used in data collected supported a multipersective way to reflect and recognize the potential positive, negative or neutral impact of experiments. "[Material 1, page 11]



**Picture 1:** This is an example of the data visualisation used in evaluation workshops. This visualisation highlights how differently participants, e.g. students, teachers, heads of schools, decision makers observe a particular dimension or element related to the experimentation.

## Being a connector between local and national elements of the education system

The Innovation Centre had a deliberately unusual position in the education system. It was designed to have a "one foot in, one foot out" position - close enough to the different actors in the system to understand and empathise with their roles and drivers, but independent of each.

#### How did they play this role?

#### Building "intimacy" between the national and local

One of the key problems which EDUFI previously encountered was low levels of trust and understanding of practice between national nad local actors in the education system. The Innovation Centre therefore purposefully set out to build (in their words) "intimacy" between national and local actors.



The organisation played this role by connecting the several local and national key players and involving them in the one another's experiments. While it focused on working with municipalities in the first two Labs to understand better the reality of teaching and learning in local contexts, it did involve colleagues from the national government in Lab 3 to foster the adoption of new ways of working.

#### Agent for ambition role

In addition to the above, the Innovation Centre set the ambition for the national government to adopt an experimental approach as a way of enabling a learning environment. By serving as the platform for testing such an innovative approach, it helped to, in a way, reassure the National Government of the benefits and necessity of taking such an approach. This also helped the Innovation Centre involve directly colleagues from the National Government in a practical application of a bottomup approach and help grow the demand for such an approach on a broader scale.

"As our task as government experts is to develop education nationally, we considered it important to change the way we work at the government level to achieve less top-down approaches and to strive for more bottom-up approaches. This taught us to be closer to our clients and to learn with them, to encourage and enable their work and evaluate it together. It really is necessary to change the way we work to co-develop, co-design, co-create and co-evaluate. In the system everyone needs to have agency in the work which they are part of."

#### **Challenger role**

In this new way of working together and revised relationships, the relationship between the National government and the other participants changes. The Innovation Centre focused on creating spaces for equal encounters, where they could attract colleagues from the national government to engage in a dialogue with the local context. The role of the national government becomes the one of "challenger", where EDUFI officials are expected to challenge the local experiments by offering

external perspectives during the dialogue assessments. This is not a process of local actors 'reporting; to national officials. Instead, national officials are involved in the learning process and invited to take part in the reflection sessions with all participants to encourage a joint learning process.

#### Systems

The 'systems' element of the Human Learning Systems approach to public management starts with a recognition that the outcomes which we want from our public services - for example, safe, happy and educated children - are not delivered by particular organisations. Rather, they are the emergent properties of whole systems of actors and factors interacting in an emergent way.

Once this is recognised, the public management task of helping to create positive outcomes in people's lives can be seen in a very different light. Rather than managing services to deliver outcomes, the work at a systems level is to create "healthy systems" - systems in which the different actors see themselves as part of the complex systems which produce outcomes, and to enable actors in these systems to collaborate and learn together. The HLS approach describes work at this systems level - work which enables different actors to collaborate and learn together - as "Systems Stewardship".

#### A healthy system is a learning system

Seen through this lens, we can explore the role of the Innovation Centre in terms of Systems
Stewardship. The first element of System
Stewardship practice which we can notice in this context is to understand what "a healthy system" means to the Innovation Centre. It seems to mean: a system in which the different actors can experiment and learn together

## System scales and the positioning of the Innovation Centre

Secondly we can notice that the Innovation Centre saw the education system operating at different



geographical scales - at the local scale and the national scale. They sought to help create learning systems at both of these scales, and between these two scales.

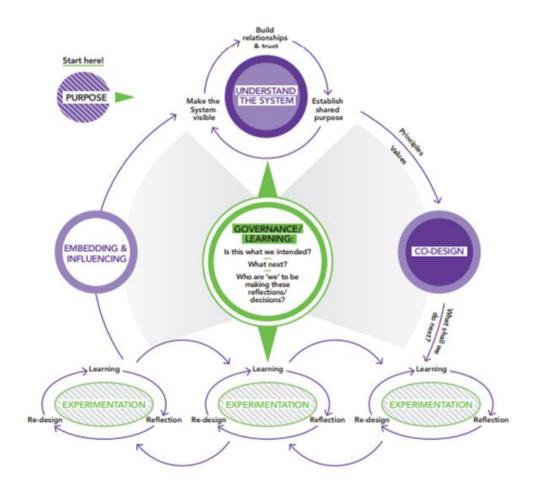
Thus they undertook their System Stewardship role in two ways:

- Acting as a learning partner to local systems to support their capacity for learning and experimentation
- Acting as a learning partner for the governance system that connects education at national and local levels

## Mapping the Innovation Centre's System Stewardship role

The Innovation Centre's System Stewardship role can be mapped against the learning system life cycle identified in <u>previous work on Human Learning Systems</u>:

By mapping Innovation Centre's actions using this life cycle, we can get a sense of the different ways in which different types of action contribute to the development and evolution of a learning system.





### Understand the system

#### 1. Making the system visible

A system can only be a learning system if the actors involved know that they are part of a system - that they have interdependent relationships with others. The Innovation Centre purposefully brought actors together - at both national and local levels, to enable them to see themselves as a connected whole.

"We worked with local authorities, individual schools and government levels. Depending of the problem, that was taken in to be defined, those people, who came together to solve it find new ways of co-creatively find the solution by experimenting actually defined their own situation and space/place in the system. Some problems were school-based, some local, some national. But while talking about eco-system, we described the system as a whole and their work's influence in it wither as one actor in the system or as a whole. Defining the condition of the system was a collaborative approach, always. In the experiment processes one of the goals was to change the working culture, the way of working to become human-centered, and consequently new actors were taken with to work together." [Material 1, page 19]

## Building relationships within the system

As mentioned above, the development of human and learning relationships between actors at local level and between national and local levels was key to enable a learning environment. This, in turn, also enabled and strengthened the creation of a system as it connected the different elements together.

As explained above, the Innovation Centre managed to build trust between all actors by allowing sufficient time to do so, **through mentoring sessions and reflection groups** between actors, including parents and families. These moments helped support the development of

conscious, reflective systems of interest at a local level which were co-created by dialogue.

The use of **feedback loops** with public officials from the National Ministry of Education allowed the Innovation Centre to involve the national level officials, giving visibility to both the experiment programme and the value of experimentation. They helped to attract national attention but were also a useful way to cope with skepticism on experimentation experienced by many public officials.

#### **Creating shared purpose**

To be a learning system that achieves a goal, the actors involved need not just to have effective relationships, but to share a sense of purpose what is their system seeking to achieve? The creation of a shared purpose between all participants enabled the Innovation Centre to bring together all participants around the same objective but also make every participant feel connected and attached to the problem and the experiment. Just as any other criteria in the system, the problem of every experiment was defined jointly by every experiment's participants. While these problems differed based on the local context needs, all experiments had the same overall objective - and beneficiary - at its core: improving children's education, but also developing a learning culture and practices at all levels.

"A shared purpose was co created by dialogue within the actors of the experimentation. We spent a lot of time defining the problem. There was a lot of sharing in our joint working days and mentoring sessions, where we also invited actors from all different levels of the system and stakeholders. Our task was really to bring people together around the same table to learn from each other and to cocreate solutions by experimenting. Building trust and relationships was a key factor of succeeding. Also building trust and relationships to parents in school, which seemed to be difficult." [Material 1, page 19]



#### Co-design methods

The Innovation Centre's approach was built around the co-design of experiments. Co-design methods were used to jointly define the way participants were going to work, identify the problem to solve but also design the potential solutions to test (i.e, experiments), taking a *by and for the people approach*. This approach requires therefore all voices to be heard and involved at all stages, which allows all participants to jointly understand and build the system. The team describes this as a bottom-up approach:

"Working this way has enabled us to learn about system change in education. It has shown the hierarchical system, that supports, but also hinders a bottom-up approach initiative to enter the system in a way that actions would be taken. We have been able to inflintrade in different actors and groups to test this way of working and evaluate what works and what doesn't work. I think we have been somewhat difficult to understand, but also pioneers showing the way. [Material 1, page 22]

The use of co-creation methods also helped to create psychological safety by creating space to fail and helping participants understand no one held the "right answer" to the solution. Lastly, participants were also asked to take part in the co-creation of learning spaces with local partners and national public officials, which helped all participants realize that the creating a learning environment was of the principal objectives of the system.

#### Experimentation

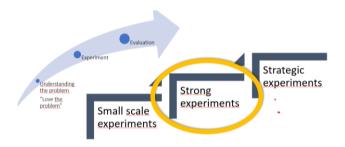
The focus of the Innovation Centre's programme was enabling experimentation. In this case study, experimentation methods are used as a response to the complexity inherent to the purpose of the system. Children education involves a wide variety of actors, needs to be extremely well adapted to the local context and is constantly changing.

"Experimentation is suitable for development projects in which it is not essential to know the end

### result in advance, and there is freedom to seek new kinds of solutions." [Material 1, page 11]

The overall experiment program was made of little, independent experiments taken at local levels. The entire program and work itself was perceived as an experiment, made of small-scale experiments, which, as described by the Innovation Centre were not intended to be strategic "Most experiments were small and strong, not reaching to the strategic experiments. However, strategic experiments can be seen as top-down approaches, national pilots, which was not our mission" [Material 1, page 20]. Overall, every small experiment contributed to facilitating the creation of an experiment culture within local actors, but also with the national public officials.

Importantly, experiments were perceived as negotiation of "no mans land" between old and new operating systems, where actors were implicitly testing the boundaries. Every little experiment, and the experiment program, served as <a href="Trojan mice">Trojan mice</a> to introduce the value and culture of experimentation into the education system at local and national levels.



Source: Material 1, page 20

In order to facilitate a common understanding between participants, these were invited to jointly identify what constitutes an experiment:

#### An experiment is:

- I am purposefully and curiously gathering feedback on whether my idea is good or not
- If successful, my experiment will further my broader goal



- I am not sure what the outcome of my experiment will be
- My experiment is testing on a small scale before I expand
- My experiment has a clear beginning and ending
- the success or failure of my experiment can be clearly ascertained through evaluation

#### Isn't:

- I will start calling my idea an experiment after it fails
- My experiment is so innovative that it is separate from other reality and goals
- I know for sure what will happen in the experiment, and I already presented the results in the project plan
- I'm experimenting at the same time in the entire country, or just for the sake of it for all users at once
- My activity is forever
- If my plans do not get realised, I will end up in trouble. This is why I hide my failures from others, often to be sure of myself.

#### **Embedding and influencing:**

Embedding learnings played an important role in the experiment program to both help define the system but also to influence participants within the system, in particular national officials. Throughout the program, the fishbowl mechanisms were key to encourage participants to reflect, but also understand the value of structured-reflection methods. Participants were also constantly encouraged to share their learnings externally through blog pieces as part of the communication plan scheduled for the program. These methods were a way to encourage participants to reflect on their learnings, encourage them to share but also, as explained below, be transparent about the progress of the program and influence other stakeholders.

"We were sharing the stories and discoveries on blogs, videos, training, fairs and on various occasions. More or less we were invited rather than were actively taking our own initiative to offer these presentations to stakeholders or actors." [Report\_Innovation Centre, page 19,20]

#### Barriers and tensions

Throughout the experiment program, several barriers and tensions arising from the application of the experimental approach were identified by the Innovation Centre.

 This approach to public management is in tension with the broader public management approach. For example, the current evaluation approach in place at the national government does not facilitate the implementation of an experimentation approach.

"Service development is prevented by administrative contracts and silos. Experimentation was made harder by lack of joint work with National level" (Material 7, slide 13]

In addition to problems caused by fragmentation, EDUFI officials have found that the results-based management practices undermine effective learning cultures [Material 2].

We have seen this in similar cases, for example in the UK Government Foreign and Commonwealth Development office, where their use of adaptive management processes were hampered by seeking to operate them within a New Public Management framework.

2. Mindsets & resistance to change. Public officials' current mindsets, their resistance to change and fear of taking risk was a significant barrier to taking an experimental approach and required much effort and patience from the Innovation Centre. "it took more than a year to move from measuring to learning" [Material 1, page 11]



- 3. Limited knowledge on experimentation benefits. There is, in general, very little knowledge on the benefits linked to taking an experimentation method and the value linked to a learning by doing approach. "The value of tacit knowledge gained through learning by doing remains trivial and secondary to research knowledge" [Material 1, page 12]
- 4. The role of the Innovation Centre as part of the official decision-making structure was unclear. "We didn't have enough support or strategic steering in the beginning of our journey. However, towards the end of our tenure the situation changes: unlike other innovation units in our sister organisations, our team/function was made as a permanent structure in EDUFI." [Material 1, page 20]
- 5. Managing expectations of all actors. The Experiment brought together stakeholders from many different backgrounds, and with very different perspectives. As the Innovation Centre and the experimental approach were new, there was not necessarily alignment nor clarity on what the mission and objective of the program would be. "Every stakeholder had a different view on what our mission should be. Being a new player in the systems it was difficult to communicate our mission and concept to all. However, this changed after 2018 once we made a strategic communication plan and started implementing it more systematically." [Material 1, page 20]
- 6. Lack of time and space for creativity. The involvement of national public officials was challenging to combine with the need to allow sufficient space to experiment's actors to experiment and be creative. "We would have wanted to engage our colleagues into Experimentation Labs but due to lack to time we managed to so during 2019 as part of our thirds Lab. Experimentations also need creativity and ideation this is challenging to do with heavy workload and other priorities. We however discovered how we can make time by systematic scheduling the joint working sessions and inbetween mentoring.!" [Material 1, page 20]

#### **|** Enablers

The key enablers of working this way were:

1. Autonomy-a protected space from New Public Management: the Innovation Centre had dedicated resources and had no specific outcomes to deliver. Consequently, it had all the elements required to create a safe, risk-free and trusting environment, enabling all participants to freely experiment.

The Innovation Centre's leaders therefore had the freedom to experiment. The Innovation Centre received the necessary funds, but also the official permission to experiment and take risks form the National Government. The absence of formal reporting and total liberty to develop the program, tools and processes as considered appropriate encouraged participants to take risks, be creative and share learnings in an authentic way.

Purpose of the Innovation Centre's work: The initial purpose of the Innovation Centre was to create more effective local learning systems.
 This objective directed the whole program and work and helped to emphasize the new role of public managers: creating enabling learning environments, prepared for optimising for learning rather than control.

"We brought representatives from the Ministry and from EDUFI to observe and take part in the second lab with good results. They felt good about being able to join local level activities and being able to guide and share their expertise to help the teams grow solutions. Feed-back loop from the experiments back to the Ministry and EDUFI was weak. Evidence was not used in next funding rounds, or in any other processes."
[Material 1, page 16]

 Positioning: From the beginning, the Innovation Centre was created as an entity that was both within and without EDUFI. This gave the Centre the space to freely define its mission and ways of working, but also to involve EDUFI



officials in experimentation and sharing learning.

- 4. Strong in-house capacities. The Innovation Centre consisted of a team 5 people, with the required strength and competences to enable a learning environment and foster the development of an experimental culture, such as:
  - a. experience and knowledge of education;
     learning, teaching, pedagogy, actors
  - b. understanding of system change
  - c. willingness to learn more also outside of own comfort zone
  - self-driven teamwork, distributed
     leadership to all members of the team
  - e. communication and interactive skills
  - f. willingness to do things differently, attitude
  - g. capability to use different tools such as dialogue, service design, human-centered assessment, etc.
  - h. willingness to learn more by research, (anticipation) and experiment processes
  - i. human-centered approach
- Support for communication and sharing of results. A strong emphasis was put on building communication capabilities of participants. They specifically received support on communicating about the strengths of their own experiments and sharing their results.

6. Guidance and support from external experts.

A steering group helped to both provide feedback and guide the work of the Innovation Centre. Their aim was to share ideas and knowledge and inspire new thinking from the perspective of national and local administration in the spirit of system change. They also serve as a strong ally to advocate for the value of the role of the Innovation Centre. The steering group consisted of director general of EDUFI Olli-Pekka Heinonen, professor Jari Stenvall from University of Tampere and Director of

Education (local authority) Tiina Hirvonen.

#### 7. The Finnish context

The decentralised education system in place in Finland, and the culture of autonomy that has built up around this local, facilitated the adoption of an experimental approach at a national level. Barriers to participation from hierarchy are low (although still present), and there is a strong level of trust between partners and the government. A wide range of stakeholders are used to being involved in educational matters.

In addition, only a limited part of the education curriculum is designed at national level, leaving considerable freedom for local education authorities to organise teaching that is best suited to local context. In addition, standardised testing is also broadly absent, as assessment is directly done by schools. Lastly, there is a strong emphasis on lifelong learning and the development of **capabilities** as opposed to knowledge, where an experimental approach could be perceived as more suitable.

#### Successes

- Change of mindsets in public officials enabling a paradigm shift. The Innovation Centre managed to make public officials reflect on their role, the values that are needed to conduct well their mission but also how to relate with the local context, highlighting the importance of collaboration, empathy and trust.
- Demonstration of the value of experimentation and taking a learning approach.
- Participant satisfaction Participants, including anyone from parents to ministry officials, were overall highly satisfied with the work, and considered it valuable, defining it as "a successful learning journey". In some municipalities the participants mentioned that the sessions were the first time they could stop for a moment, reflect and really listen to teachers and students in order to empathize with current challenges and developments.



- Achieving the commitment of school principals and other decision makers, as well as end-users (children, families) since the very beginning to experimenting, learning and evaluating. This is what creates value for sustainable change and development at school level.
- Creation of trust & learning community, where all actors are encouraged to rethink the relationships of the system.
- The development of a multi-perspective evaluation approach, which made the team realize that evaluation practices should be embedded in leadership structures - at school and municipality level.
- Beginning system change in education. "It has shown the hierarchical system, that supports, but also hinders a bottom-up approach initiatives to enter the system in a way that actions would be taken. We have been able to [work with] different actors and groups to test this way of working and evaluate what works and what doesn't work. I think we have been somewhat difficult to understand, but also pioneers showing the way." (Material 1, page 22)

## Implications for public management practice:

- Learning as meta-strategy for public management in complex environments: learning is the appropriate strategic response to complexity. There is also a synergy between learning and uncertainty. Learning is a necessary response to uncertainty, and uncertainty can be a useful learning resource as a way of encouraging people to adopt a curious mindset, being humble with their own knowledge.
- 2) Focusing on learning, as a means to achieve outcomes. Participants had to learn that, in this experimentation approach, were weren't looking for specific outcomes. Outcomes, and objectives, were dynamic and kept on evolving

- as participants were taking part of the process. The overall focus of the programme was to create a learning community. This required participants to change the way in which they are evaluate, operate and think. Mentoring was used to enable this change of mindset moving from measuring for accountability to experimentation for learning.
- 3) There are alternatives to the currently dominant form of accountability as reporting against targets and other performance metrics. The Innovation Centre had a responsibility to share progress and learning with the national government, who funded the overall program. They developed nontraditional approaches to enact accountability for this as a learning programme:
  - Putting in place a multi stakeholder dialogue. Several workshops were organized with members of the Ministry of Education to share progress and learnings acquired, offering a much more interactive and human way of sharing which replaces the traditional written reporting approach. "The first cohort replaced the "reporting" to EDUFI by organizing a multistakeholder dialogue. Most participants felt that the traditional model of reporting and measuring outcomes (top-down monitoring) belongs to the past. There is a need for reforming evaluation practices and accountability processes." [Material 4, slide 45]. This new approach helped all participants to learn together, and actors did highlight that they found it "liberating" to work in such a way.
  - Participatory evaluation workshops. The programme made good use of the principle: don't report to people, involve them. The evaluation workshops brought together stakeholders and different actors throughout the system.



While the Innovation Centre finished its work at the end of 2020, its work will continue once placed under the FINEDU Director General. The target of the future work is to continue supporting, guiding and enabling the system change in education. The main aim for the entity during year 2021 is to embed these learnings and findings in the work of our agency, supporting the changing of the mind-set and learning from the new processes, where staff members are involved. This cannot be done inside the organization, but requires development and experimentation processes, which involve actors from different levels of the system; municipalities and schools. "It feels like we are not finishing the work, but continuing it, yet focusing more on the government role in system change. We are developing the concept together with colleagues in charge of internal development to assure a smooth transition, integration and transparency of our work." [Material 1, page 20]

As the Innovation Centre prepares to embark on this new mission and define its new role, the team is creating the space to reflect on the learnings, challenges and opportunities that arose from their experience in implementing the Experimentation programme in Finland.

The resources of this future work are still to be defined, but the Innovation Centre will continue to build the new phase. While there many roles the Innovation Centre could play, two seem to stand out: 1. Orchestrator of the ecosystem, acting as the enabler and guardian of learning environments within the education system in Finland, and 2. Promoter of transparency, encouraging participants of future experiment programmes to share and embed learning within the system.



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