TMBWK Start-off Project: Development of Innovative Learning Environments

System Note Q.1. Aims:

What is the learning to be changed?
Who are the learners targeted?
What are the environments and sites to be brought in?
Is there a particular source of inspiration behind the initiative?

Aim of the Project:

The start-off project is aimed at helping to advance Thuringia's education system in a sustainable way by building on innovative development approaches existing at start-off project schools and maturing those schools to become reference schools.

Significance:

The Development of Innovative Learning Environments start-off project launched by the Thuringian Ministry of Education, Science and Culture (TMBWK) forms part of the Education for Sustainable Development initiative, outlined in Chapter 6 of the Thuringian Sustainability Strategy (TNS). The purpose of that initiative is to encourage children, youths and adults to think, learn and act sustainably. They are to be given guidance and support on their personal path to acquire knowledge about global interrelationships and challenges, such as climate change or global justice and their complex economic, ecological and social causes.

Geared to triggering and maintaining sustainable educational processes, the start-off project strives to promote, in a systematic and sustainable way, attitudes, beliefs, self-experience and co-determination experience in learners' personal development.

Understanding Innovative Learning Environments:

Innovative learning environments are characterized by

- conscious appreciation of heterogeneity,
- implementation of goal-oriented educational concepts,
- continuous and reflective professionalization of educators,
- individualizing forms of development, learning and performance documentation,
- specific spatial design,
- use of media and technology capable of supporting development and learning,
- multiple forms of (supra)regional networking.

The idea is to focus on the actual learning environments existing at 33 Thuringian primary and secondary schools, where a wide variety of innovative approaches are practiced, and to develop those environments further, taking into account the objectives specified above and the concrete development needs of the schools concerned.

The initiative to advance schools in Thuringia is based, among other things, on the Thuringian School Act, the Thuringian School Regulations, national education standards, the curricula in force in Thuringia, the Thuringian education plan, as well as the UN Convention on the Rights of Persons with Disabilities and international educational research findings.

The results of the OECD CERI/ILE (Innovative Learning Environments) project will provide crucial guidance as well. Successful case studies were conducted at three selected schools in Thuringia (ImPULS School at Schmiedefeld, Lobdeburg School and Jenaplan School at Jena) under this OECD project.

Q.2. Leadership and partners:

What is its main leadership?

Who are the main partners involved (e.g., education authorities, networks of practitioners, foundations, community bodies, teacher or leadership organisations, business organisations, higher education institutions)?

The Development of Innovative Learning Environments start-off project is carried out under the TMBWK's leadership. The Department of School Pedagogics and Didactics of Friedrich Schiller University at Jena provides scientific support for the project. In addition, ministries, teacher training institutions and education authorities are involved, such as the Advisory Board on Sustainable Development, the Thuringian Ministry for Social Affairs, Families and Public Health (TMSFG), the Thuringian Ministry of Agriculture, Forestry, Environment and Nature (TMLFUN), the Thuringian Institute for Teacher Skills Upgrading, Curriculum Development and the Media (ThILLM) and Thuringia's local state school offices. In close cooperation with the OECD, the start-off project seeks to advance and interlink the innovative approaches pursued in the learning environments at Thuringian schools.

Q.3. Strategies and activities:

What are the specific design, features, and activities of the strategy? What is the main rationale?

How is communication and feedback assured?

The primary objective of the start-off project is to render support to the 33 start-off project schools that applied for participation. In consultation with the project management team, those schools determine their development goals and embark on the road to becoming reference schools for innovative learning environments.

To facilitate the development processes to be encouraged, use is made of the theory underlying the impact analysis concept, i.e., the Impact of Professional Development Model (IPROD Model) (cf. Zehetmeier, 2008), developed as a result of a scientific analysis of teacher skills upgrading approaches. Apart from the various impact levels of teacher skills upgrading (knowledge, mind-sets and practical teaching), the model also encompasses a categorization of characteristic teacher skills upgrading elements (e.g., learners, trainers, programme and context) and the factors promoting or hampering the impact. (See Fig. 1.) (Cf. Zehetmeier, 2008.)

Fig. 1 Simplified IPROD Model

Skills Upgrading Action	Conducive Factors:	
	Fit	Impact
Elements:	Ownership	
Learners	Networking	Levels:
Trainer	Reflexion	Knowledge
Programme	Practical Relevance	Mind-sets
Context	Evaluation	Practical Teaching

The participating schools can take advantage of skills upgrading programmes offered in a community-based network management context and use them for the development of innovative learning environments. (*Cf.* Zehetmeier, 2010 (a), (b)):

- *Fit*: The skills upgrading programmes available are geared to the needs of the learners concerned (teachers, school management teams and other education professionals) and ensure choice and (co-)determination.
- Ownership: Learners are invited to take part in the planning and implementation of the measures to be taken, and they are supported in their roles as multipliers.

- Involving teachers in innovative processes enhances their commitment to those processes over the long run (*empowerment*).
- Networking: Cooperation and exchanges among schools and with the project management team stimulate the formation of groups (learning community or professional community).
- Reflexion encompasses discussion and reflexion among learners, as well as the assessment of products, such as lesson plans, videos to be shown in class or work produced by pupils and students. Written self-observations (diaries or portfolios, cf. Gläser-Zikuda, 2012; Gläser-Zikuda & Hascher, 2007) may be helpful tools too.
- *Practical relevance* is essential for any skills upgrading effort if active learning opportunities are to be opened up.
- Evaluation comprises continuous evaluation and feedback throughout the entire process.

The main focus of the Thuringian sustainability strategy of innovative learning environments is taken into account in the development and application of implementation measures.

Cooperation between two schools under the guidance of the school development counsellor is a major element of the start-off project. Such cooperation is to ensure sustained discussion of and reflexion on the main development goals at the schools involved. The entire process will be documented and evaluated. What is more, it will result in new approaches and educational materials to be utilized not only in schools, but also in teacher training. In order to achieve synergy effects, there are plans in place to link existing Thuringian initiatives, projects and development fields together in networks, for instance:

- nelecom (new culture of learning on the local level),
- SINUS (programme for enhancing the teaching of mathematics and natural sciences),
- V.i.L. (comprehension-intensive learning)
- DenkBunt Landesprogramm (programme for the promotion of democracy, tolerance and open-mindedness to the world, conducted by the State of Thuringia),
- ProLesen (project to promote reading skills),
- Demokratisch Handeln (Acting Democratically a competition open to primary and secondary schools),
- buddY Project (Motto: Let us take care of one another Let us be there for each other - Let us learn together),
- Umweltschule in Europa (Environmental School of Europe: Students and teachers actively engage in environmental and sustainability projects at their schools or localities) and
- SefU (students serving as experts in class a programme that is to be expanded further).

Q.4. Context:

What are the particular contextual, local or political factors that have been influential in explaining why this initiative has emerged and/or has been sustained?

Education for Sustainable Development (BNE) is a major component of the Thuringian Sustainability Strategy (TSN). The strategy was adopted and rolled out in 2011 by the Thuringia state government. The adoption of the strategy was preceded by a years-long process, in which multiple sustainability players were involved. Since 2009, a total of 14 individuals from different social, political and economic backgrounds have been appointed to the Advisory Council on Sustainable Development (BNE). This council manages cooperation among the sectors involved and assists and/or advises the state government on the sustainability goals pursued. Simultaneously, a task force working for the state secretary informs the Thuringian government's internal decision-making process. Acting together with

the TMBWK, the TMLFUN coordinates Thuringia's efforts under the UN Decade of Education for Sustainable Development.

The Sustainability Centre of Thuringia serves to implement the local agenda and to ensure local education for sustainable development. A BNE Thuringia state coordinator for schools, assisted by three teachers acting as specially trained BNE multipliers, has been working at the TMBWK since 2008.

For the purpose of translating the Thuringian sustainability strategy into practice, six start-off projects from different departments have been launched:

- (a) Opportunity-oriented demography management services of general interest, trained and qualified personnel, active citizenship (TMBLV),
- (b) Sustainable land-use policies (TMLFUN),
- (c) Sustainable power supply through renewable energy (TMWAT),
- (d) Development of innovative learning environments (TMBWK),
- (e) Promotion of energy efficiency measures in SMEs (TMWAT), and
- (f) Alliance for sustainable medical care (TMSFG).

On 15 November 2011, the Cabinet approved the Thuringian sustainability strategy and the start-off projects associated with it. On 14 February 2012 and 5 February 2013, it asked the state secretary's task force and the Advisory Council on Sustainable Development to coordinate and assist the implementation of the start-off projects. Ever since its start-off project was launched, the TMBWK has presented regular status reports on the progress achieved in the start-off project.

Q.5. Resources:

What levels of financial resourcing are involved and where do these come from? What supplementary resources, if any, are involved: e.g., facilities and buildings, technological resources, additional or specialist staffing?

The TMBWK provides financial support for the Development of Innovative Learning Environments start-off project within the framework of Thuringia's education policy. An amount of € 130,000 has been made available to cover personnel and material expenses that Friedrich Schiller University at Jena (School Pedagogics and Didactics Department) incurs as a result of its scientific support. Also, the schools taking part in the project are supported in that they are allocated two additional teacher hours per week and reimbursed for material and travel expenses, speaker's fees, etc. Furthermore, a total of 100 teacher hours per week have been allotted to the start-off project from the school development counsellor support pool.

Q.6. Development over time:

How long has this initiative been going and how long did it take to get it started? Has it changed since it began and how much has it grown or spread since then?

Start-off Project Schedule:

Project Phase / Project Step	Targeted Duration
Phase 1	
Define quality criteria for innovative learning environments.	Mid 2013 to end 2014
Define criteria for the selection of schools participating in the	
start-off project.	
 Assess the initial situation obtaining at start-off project schools / reference schools. 	
Agree implementation measures with start-off project schools /	
reference schools, including counselling sessions.	
Phase 2	Mid 2013 to end 2015
Define counselling and skills upgrading concepts for start-off	
project schools / reference schools.	
Hold network meetings to be attended by start-off project schools	
/ reference schools and organise sessions or skills upgrading	
fora with extended participation.	
Phase 3	
Carry out evaluations and impact measurements at start-off	By end 2016
project schools / reference schools.	

Q. 7. Evidence of effectiveness and efficiency:

Is there evidence relating to success in terms of the aims referred in Questions 1 (a) the learning to be changed; (b) the learners targeted; (c) the environments and sites to be brought in? Is there evidence relating to the more efficient use of educational resources?

For in-depth scientific counselling and support to be possible, implementation measures need to be precisely defined on the basis of an analysis of the schools' initial situation. In order to define the initial situation, several players (school management team, teachers, educators, students and parents) and a number of areas and/or target criteria (school organisation, quality of learning environments, measurement of skills, willingness and need for innovation from the perspective of the parties concerned) must be considered. To this end, extensive surveys (using standardized questionnaires, interviews, observations and document analyses) are conducted at start-off project schools / reference schools.

The Thuringian schools chosen as start-off project schools were selected on the basis of well-founded, clear-cut criteria (e.g., type of school, reform orientation, involvement in previous and present innovation initiatives, size of school, regional specificities and similar criteria). Cooperation agreements have been and will be signed with schools, and a systematic skills upgrading concept tailored to the needs of the school and teaching staffs is being developed. Taking into account the decisions made in the Phase 1, purpose-oriented counselling and training programmes are devised and offered to the schools in question. Plans have been drawn up for providing counselling to teachers, school management teams, other educational staff, pupils, students and parents. Visitations will be conducted to observe how the various elements of innovative learning environments are implemented and to render process-oriented support and obtain feedback from teaching staffs. In that, the focus will be in equal measure on school, teaching and personnel development. At evaluation and development meetings to be held at regular intervals, all the parties involved will jointly review and document the headway made towards achieving the objectives set, appraise the action taken and the progress made and apply the findings to future efforts. Furthermore, regular cooperation meetings will be organised among the reference schools involved. In addition, workshops with extended participation (e.g., with project participants from the V.i.L. (Comprehension-Intensive Learning) initiative or from SINUS or others) will take place. School development counsellors, too, will be able to attend skills upgrading classes, so as to

empower them to assume the role of multipliers in Phase 3. This is the phase where the emphasis on scientific support will be the strongest and which will stretch over a period of two years.

Q.8. Success Factors:

What factors have, in your view, been most influential in the success of this strategy / initiative?

How successfully have risks been managed?

Thuringia was the only German state to take part in the CERI / ILE (Innovative Learning Environments) project run by the OECD. The results that the case analysis yielded have met with a widespread positive response. The Development of the Innovative Learning Environments start-off project is to pick up on the successful groundwork laid by the department of Friedrich Schiller University at Jena participating in the CERI / ILE (Innovative Learning Environments) project with case studies carried out at three selected schools in Thuringia (ImPULS School at Schmiedefeld, Jenaplan School and Lobdeburg School at Jena).

The start-off project also builds on other initiatives and projects existing in Thuringia, as explained in Q.3.

Q.9. Tensions and impediments:

What, if any, are the factors that have impeded the success and spread of the initiative?

How open are they to being overcome?

The project is still in Phase 1 of the schedule outlined in Q.6. A total of 33 schools have been singled out for participation. Quality criteria for innovative learning environments are currently being defined. An assessment of the initial situation obtaining at the start-off project schools has begun. Thus far, no tensions and impediments directly affecting the project have occurred.

Q.10. Source information:

References to documents, websites, etc.

Materials for release to the public are still in the process of being prepared. Please visit the Thuringia school portal (www.schulportal-thueringen.de) for information on the projects, initiatives and development areas referred to above.

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