The Template for Reports that Combine Monitoring Notes 1 and 2

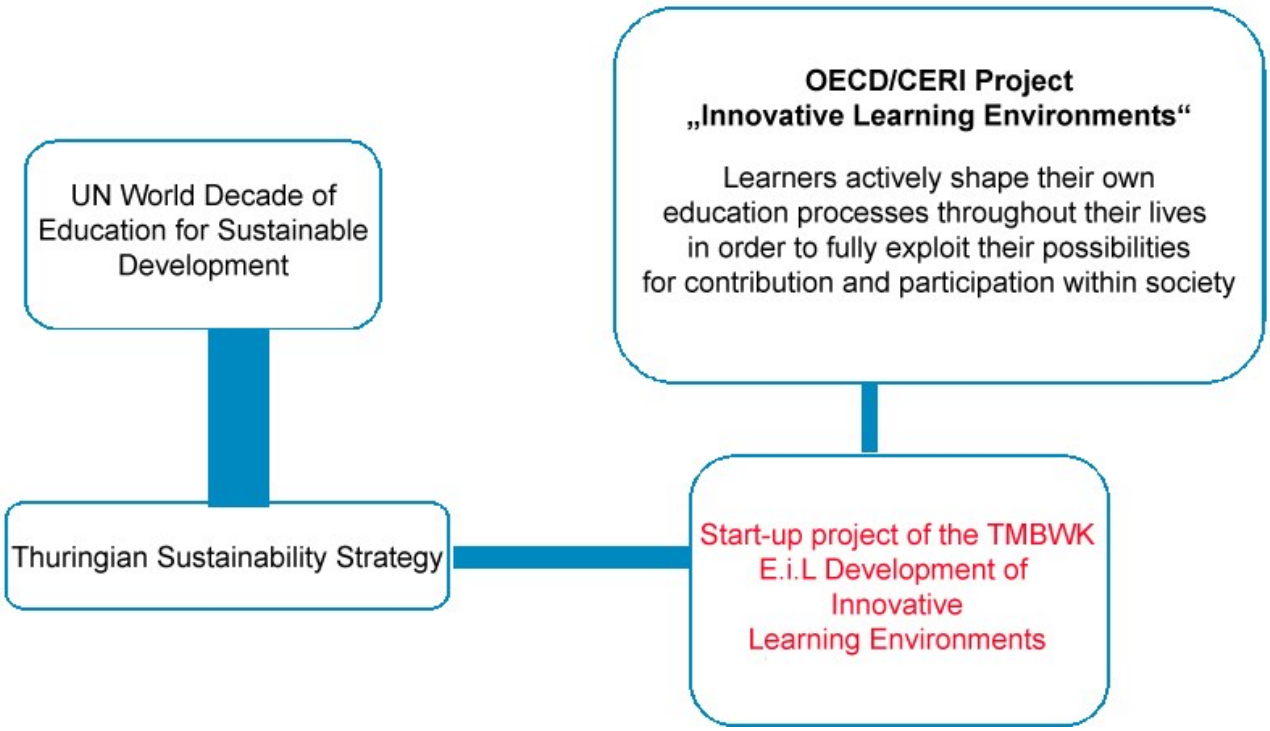
1. Overview of the Selected Innovative Learning Strategy/Initiative

Introduction: how and when did the initiative start and the background.
Then, provide a summary of:

- Aims & rationales,
- The target populations,
- Institutions involved, and
- Accountability, governance, and broader policies that contextualise the featured initiative.

Why does the initiative/strategy look like it does?

The Start-Up project of the Thuringian Ministry of Education, Science and Culture (TMBWK) "Development of Innovative Learning Environments" has been in operation since January 2012. With regards to the Thuringian Sustainability Strategy (TNS), it forms part of the focal point "Education for Sustainable Development" (TNS, Chapter 6). Within this focal point, the sustainability strategy aims at encouraging sustainable thinking in children, young people and adults. Hereby, they are supported in acquiring an individual knowledge on global connections and challenges, as for example the climate change or global equity and their complex economical, ecological and social causes. Sustainable development means to take into account environmental, social and economic aspects in equal measure.
In order to initiate and maintain sustainable educational processes in the context of the start-up project, learners and teachers are to be vigorously and systematically supported in their individual development, their beliefs and convictions, as well as their experience of self- and co-determination.



The aforementioned goals of the start-up project are to be achieved by means of participation, customization of offers, professionalization of the educational staff, as well as diversity and networking of schools among each other and with other institutions.

Thus, the start-up project is designed to contribute to a sustainable development of the Thuringian education system by taking up and further pursuing existing development approaches of innovative learning environments. Start-up project schools are to serve as a prime example for other schools in Thuringia.

In the start-up project, the learning environments of 33 Thuringian schools from all five education authority areas in Thuringia are systematically enhanced over an initial period of 3 years. This happens under the aforementioned objectives and in accordance with the concrete ideas and goals of each school. Participants of the project are primary schools (GS), regular schools (RS), Thuringian community schools (TGS), integrated comprehensive schools (IGS), grammar schools (GYM), support centres (FÖZ) and vocational schools (BBS). The following table provides an overview of the regional and type-of-school distribution of the start-up project schools.

	GS (primary school)	RS (regular schools)	TGS (Thuringian Community schools) IGS (Integrated Comprehensive schools)	FÖZ (support centres)	GYM (grammar school)	BBS (vocational schools)	Total
Northern Thuringia	3	1	1		1		6
Eastern Thuringia	2	3	2			1	8
Southern Thuringia	1	1				2	4
Western Thuringia	2	2	1	1			6
Central Thuringia	2	1	3		1	2	9
Total	10	8	7	1	2	5	33

Table 1: number and distribution of the start-up project schools involved

The learning environments of these 33 Thuringian schools, which already demonstrate diverse and innovative approaches, will be taken into focus and, under the mentioned objectives and in accordance with the specific development requirements of each school, analysed and enhanced. Innovative learning environments are thereby characterized by:

- conscious dealing with heterogeneity,
- realization of school-specific educational concepts,
- continual and reflective professionalization of educators,
- individualised forms of documentation of education, learning and performance,
- specific interior design,
- utilization of media and technology to support development and learning,
- various types of (supra)regional networking and
- topical work in alignment with the Thuringian Sustainability Strategy.

The start-up project is managed and coordinated by the Thuringian Ministry for Education, Science and Culture (TMBWK), Department of Autonomous School, Educational Planning and School Development (Frau Dr. Baumgart), in close co-operation with the Friedrich-Alexander University of Erlangen-Nuremburg, Chair of School Education (Prof.Dr. Michaela Gläser-Zikuda). In addition, the following departments and committees provide advice and assistance: Board for Sustainable Development, Board for Inclusive Education, TMSFG (Thuringian Ministry for Social Development, Family and Health), TMLFUN (Thuringian Ministry for Agriculture, Forestry and Environmental Issues), ThILLM (Thuringian Institute for Advanced Teacher Training, Curriculum Development and Media) as well as a Start-Up Project Council.

2. The Strategy's "Theory of Change"

What is the theory of change underpinning the strategy – i.e. how is it expected that the desired results will happen? What are the mechanisms in place to realise such a "theory"? Why is it expected that significant change will take place in the nature of learning on the ground and at the same time that this will occur at the hoped-for scale and be sustained? How robust have the underpinning change strategies proved to be?

To support the development process of the 33 start-up project schools, the theoretical framework for impact analysis, the so-called Impact of Professional Development Model (IPROD Model) (cf. Zehetmeier, 2008) will be used, which has been developed as part of the scientific analysis of concepts of advanced teacher training. Next to various levels of impact of advanced teacher training (knowledge, approach and practice), the model also covers a categorization of characteristic elements regarding training measures (e.g, the learners, teaching trainers, programme and context), as well as factors that are beneficial or hindering to results. (see also Fig.1) (cf. Zehetmeier, 2008).

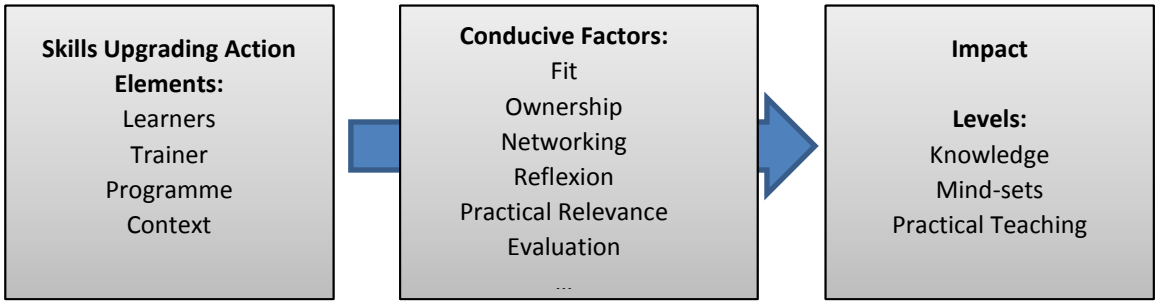


Fig. 1: simplified *IPROD Model*

In the context of communal network management, the schools are supported by using training measures designed for the development of innovative learning environments. These are applied in conjunction with the following aspects (cf. Zehetmeier, 2010a, b):

- *Customization*: The offers for further training are based on the learner's needs (as well as those of the teachers, the school management and other members of the educational staff) and provide different choices and co-determination.
- *Ownership:* The learners are included into the planning and execution process of the measures and are supported in their role as active propagators. Teachers participating in innovative processes are more likely to implement the same on a long term basis (*empowerment*).
- *Networking:* Co-operation and exchange between the schools, the project management and other project partners encourage the formation of groups (learning community or professional community).

- *Reflection:* includes analysis, discussion and reflection of educational actions. Self-observations in written form (diary or portfolio; cf. Gläser-Zikuda, 2012; Gläser-Zikuda & Hascher, 2007,) are also employed.
- *Practical relevance:* is vital for further training, in order to open up possibilities for active learning.
- *Evaluation*: includes continuous evaluation and feedback from different project partners during the entire process.

The implementation measures are developed and put into practice in alignment with the focal points of the Thuringian sustainability strategy for innovative learning environments. An essential part of the school support is the process monitoring of the start-up project schools by qualified advisers for school development. This co-operation aims at continuously discussing and reflecting the development priorities locally at each school. The entire process will be documented and evaluated. Furthermore, concepts and educational material are created which are then used in the schools as well as in teacher training.
In order to create synergy effects, the plan also calls for an interconnection with existing Thuringian initiatives, projects and areas of development. Thus, it is planned to interconnect the start-up project with for example:

- nelecom (new learning culture in communes),
- SINUS (programme to further develop the teaching of mathematics and the natural sciences),
- V.i.L. (Understanding-intensive learning),
- DenkBunt (think colourful) State Programme (Thuringian State Programme for Democracy, Tolerance and Openness),
- ProLesen (pro-reading: project to support competence in reading),
- Demokratisch Handeln (acting democratically: competition for general-education schools),
- buddY-Projekt (motto: Take care of each other. Be there for each other. Learn together),
- school for environment (pupils and teachers are committed to environmental and sustainability projects at their school and their surroundings) and
- SefU (pupils as experts for classroom teaching).

3. The Unfolding Strategy in its Policy Context

The intention of this section is to offer insights on the change and policy process itself as it has evolved since the strategy's inception.

- Compared with the situation when the strategy/initiative was established as outlined in Section 1, how far have the original intentions and mechanisms been maintained and, if they have changed, why? How responsive has the initiative been to altered circumstances?
- Elaborate on the role of policy and policy-makers, at various levels of the education system, in realising the innovative change.
- Has the policy context changed? Have new challenges, opportunities, stakeholders or resources emerged?

The start-up project's main objective is to make a sustainable contribution to the further development of the Thuringian education system by taking up existing development approaches at start-up project schools. Furthermore, it aims at developing the participating schools in such a way as to serve as a reference for other schools.
In relation to the Thuringian sustainability strategy, this means that children, young people and adults are encouraged and actively supported in acquiring an individual knowledge on global connections and challenges, as for example the climate change or global equity and their complex economical, ecological and social causes. Next to the development of diverse competences, the learner's individual development of beliefs and convictions, as well as their

experience of self- and co-determination are of substantial importance; as has been shown, these factors are essential for a successful and sustainable education process. In conjunction with sustainable education, the Thuringian sustainability strategy particularly aims at increasing the number of young people with a school-leaving qualification (particularly those people with a migration background), the number of first-year students, as well as the number of adults with tertiary and post-secondary, non-tertiary degrees. (see also indicators 11, 12 and 13 of the Thuringian Sustainability Strategy 2013). Furthermore, questions of health education and environment education are addressed. Sustainability in the start-up project is implemented at the personnel level and at the structure and content level. On the one hand, learners who are supported by the start-up project are to self-regulate (Boekaerts, 1999), plan and implement their own individual education processes in such a way, as to experience them as emotionally positive, rewarding and important. In this, physical and psychological well-being (Eder, 1995; Hascher & Baillod, 2000), social inclusion as well as experience of competence and self-determination (Deci & Ryan, 1993) are important factors. Thereby, and in connection with a sustainable gaining of competences, "idle knowledge" (Renkl, 1996) shall be evaded. On the contrary, the learners are to be enabled to become life-long, active designers of their education processes and to optimize their possibilities of contribution and participation within society.

To reach these objectives, it is necessary to create optimal conditions for the qualified personnel involved in the start-up project schools. It is no less important to create ideal conditions at the level of structure and content within the education system, as well as to implement various effective measures. At the level of structure and content, it is important to create room conditions that allow all learners to make use of the education and learning offers (e.g, construction measures, accessibility, stimulating educational arrangements). The development of innovative learning environments aims at developing school-specific, educational conceptions, which present individualised forms of teaching and learning as well as learning- and performance-related documentation. These innovative learning environments take into account the heterogeneity of the learners and offer diverse, inspiring and adaptive educational content. They bring learners from formerly separated learning rooms together and are characterized by a room design that has a beneficial effect on development and learning and features learning supportive technology. Since education is accomplished not only in formal contexts but also in non-formal as well as informal contexts, the understanding of innovative learning environments goes beyond the education institutions. It also opens up to family, that is, parents and legal guardians, the further living environment of the pupils, and also the overall communal and regional environment. Therefore, there is a close co-operation with the Thuringian initiative „nelecom“ (new learning culture in communes, http://www.nelecom.de). At the level of professional personnel, the educational staff has to be further trained and has to attain qualification through extensive, appropriate (locally, at each school) and continuous offers. This is to be realized with the participation of several experts (national and international, and from several disciplines) and institutions (e.g., ThILLM, University) as well as through projects (z.B. „V.i.L“ / understanding-intensive learning, http://www.verstehenlernen.de/?page_id=672). The interconnection with existing initiatives and projects like, for example, SINUS (a continuation of the BLK programme, dedicated to the increase of efficiency of the education in mathematics and the natural sciences), DenkBunt state programme, ProLesen, Demokratisch Handeln, buddY-project, or environmental protection in Europe is to be expanded in the start-up project in order to produce synergy effects. Furthermore, the start-up project helps to support the networking among the schools and the councils.

To reach the objectives of the project, the criteria for "innovative learning environments" as defined by the OECD, the principles of inclusive pedagogy against the background of the UN Disability Rights Convention (UNESCO, 1994, 2000) as well as the latest concepts and results of international school and teaching research are particularly useful. A particular orientation is offered by the results of the CERI/ILE (Innovative Learning Environment) project of the OECD. On behalf of the Centre for Educational Research and Innovation (CERI), the Organisation for Economic Co-operation and Development (OECD) and the TMBWK, the Chair of School Education and General Didactics of the Friedrich-Schiller-University of Jena

conducted case studies at three different Thuringian schools, in accordance with the "Innovative Learning Environments (ILE) project (cf. http://www.oecd.org/site/eduilebanff/48834621.pdf).The focus of the case study rested on the question, how the learning process in the context of innovative learning environments is supported and organized at the three participating schools. In this, innovative learning environments distinguish themselves by specific educational conceptions, contents and forms of teaching and learning, but also by the diagnosis, assessment and support of learning processes, performance and results. Another essential feature of innovative learning environments is the focus on the heterogeneity of the learners. Furthermore, a specific room design, or the use of learning supportive media and technology is of interest. Innovative learning environments are characterized by multiple elements of this kind. The empiric part of the ILE project dealt with the identification and description of concrete examples of existing innovative learning environments within OECD and non-OECD countries. As part of the project, all participating countries are presenting at least one innovative learning environment on the basis of a scientific analysis and documentation. As part of the project in Germany, the TMBWK has chosen the ImPULS-School Schmiedefeld (www.schule-schmiedefeld.de), the Jenaplan-School Jena (www.jenaplanschule-jena.de) and the Lobdeburg-School Jena (www.lobdeburgschule.de) with regards to the specific innovative character of these schools(cf. Gläser-Zikuda et al., 2013). Throughout this, the following four key areas have been examined:

- objectives, development and important context details of the innovative learning environment;
- characteristics and structure of the innovative learning environment;
- condition and quality of the learning process within the innovative learning environment;
- results and effectiveness of the innovative learning environment.

Next to interviews with the school management, the teachers, the learners and further education personnel, as well as with the learner's parents, structured, participatory observations within selected teaching-learning and the examination of key documents were used for data mining and case reports. Thuringia has been the only German federal state to participate in the CERI/ILE project of the OECD, and the results of the case examples of three innovative schools have been met with great national as well as international response. For this reason, the overall continuation of this project in the context of the start-up project "Development of Innovative Learning Environments" opens up many possibilities to internationally support the implementation of innovative concepts in schools and in (further) teacher training as well as in communal education contexts beyond Thuringia. The foundations for a further development of the schools of Thuringia are furthermore:

- The School Law of Thuringia (http:/www.thueringen.de/th2/tmbwk/bildung/schulwesen/rechtsgrundlagen/schulordnungen/schulordnung/),
- the General School Rules of Thuringia (http://www.thueringen.de/th2/tmbwk/bildung/schulwesen/rechtsgrundlagen/schulordnungen/schulordnung/),
- the National Education Standards (http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2004/2004_12_16_Bildungsstandards-Konzeption-Entwicklung.pdf),
- the existing and to-be-further-developed curriculums of Thuringia (https://www.schulportal-thueringen.de/lehrplaene)
- as well as the education plan of Thuringia (http://www.bildungsplan.uni-jena.de), which has to be taken into consideration in the start-up project.

4. Evidence of Impact

Please report any evaluative evidence concerning the impact of the innovation strategy/initiative on as many of the following points as you can:

- *Change of learning environments*: How have arrangements and behaviours been altered – inspired or driven by the initiative? How far-reaching is that change?
- *Reach*: How many learning environments (schools etc.) have shown evidence of change and has such reach met the ambitions of the initiative?
- *Change in learning outcomes:* What are the learning criteria by which effectiveness or success of this strategy/initiative can be judged? What does existing evidence show about positive change in learning outcomes?

Please reflect and report on the evaluations that have been done and that ideally would have been conducted to get the most from the initiative/strategy (including why these may have proved difficult to put in place).

A special feature within the start-up project is the collaboration with start-up project schools that already distinguish themselves by an exemplary work flow within selected areas of innovative learning environments (see OECD / CERI project). Hereby, they give other schools an insight into the daily practice of the project. All participating schools are continuously supported and counselled and are encouraged to interconnect with other schools and other institutions. An active support of the development processes of schools and classroom education is provided particularly by counsellors for school development, but also by several participants and institutions. Exchange, work shadowing and access to multiple information and work material (e.g, on the platform "Thuringian School Portal" of the ThILLM) are likewise included in the offer. Adaptive further training and development material is offered on basis of the framework of the start-up project as well as on the basis of the registration of the initial situation (the so-called "current-state-analysis" of the schools). In this, the learning environments and the development needs from the point of view of the participants play a key role. Suitable consulting and further training offerings are developed and subsequently offered at central events (e.g, the ThILLM) or locally at each school. Counselling for school management and teacher staff as well as for further education personnel but also for pupils and their parents is planned. In terms of a general school development, the development of education, organisation and personnel are focused upon in equal measure. Regular review meetings are held by all participants in order to examine and document the objectives, measures and progress of the project, which are then implemented into further development. Moreover, regular co-operation meetings are held between the star-up project schools, as well as conferences with an expanded circle of participants (e.g, the project participants of V.i.L, nelecom, SINUS, etc.). The counsellors for school development are likewise further educated.

Another objective of the scientific support is the evaluation of the start-up project of the TMBWK in terms of the varied characteristics of the schools and their personnel. In doing so, it is possible to provide a target-oriented consultation and support as well as to ensure a further development of the participating schools towards reference schools in Thuringia, with regards to the development of innovative learning environments. In terms of school development, school quality and education quality, a current-state-analysis will be performed for every participating school in order to examine the initial condition. With regards to the type of school, the participating start-up project schools widely disperse. This heterogeneity of the samples presupposes a diverse array of research tools. Methodically, document analyses, questionnaires, oral interviews and competence identification procedures in central education sectors are planned for pupils of the 3rd, 5th, 7th and 9th grade (excluding vocational schools). To document and analyse the changes regarding the start-up project, data of the participating schools will be collected. In this, the scientific approach includes the Mixed-Methods-Examination design (Gläser-Zikuda et al., 2012), in order to combine qualitative and quantitative research methods. This strategy aims at adequately illustrating the different sample sizes of the participants on a school level. For the purpose of data collection, the re-

search design thus includes the elements of a cross section design as well as a panel analysis with regards to a process monitoring throughout the execution up to the completion of the start-up project. By means of document analysis on school level and group discussions with education personnel, the starting point as well as the respective objectives of the schools are detected and documented. Likewise employed are questionnaire surveys which are based on the instruments ThüNIS (Thuringian Network of Innovative Schools) and SEfU (Pupils as Experts for Education). Both have been devised as part of the project "kompetenztest.de" (competence test.de) at the Friedrich-Schiller-University of Jena. Both survey instruments were also developed in the context of school development in Thuringia and they have already successfully proven themselves in field use. The questionnaires collect data at the level of players (from teachers, pupils, parents, other education personnel (ThüNIS)), and at the level of pupils and teachers (SEfU).
The ThüNIS instrument focuses on an evaluation of school development processes while taking into account the perspectives of different educational level of players (pupils, parents, teachers, education personnel) with regards to central education aspects and processes (like education, climate in school, qualification, communication and information, leadership and management, assessment of performances etc.).
The SEfU instrument has been devised for online surveys, however, within the supportive studies a paper-and-pencil version is utilized. The advantage of the SEfU instrument is the focus on the pupils's perspective of education while also taking into consideration the teacher's perspective. By comparing the perspectives of pupils and teachers, the instrument aims at providing individual feedback in order to enable improvements and concrete suggestions with regards to the further development of the classroom education. The constructs detected by the SEfU instrument are, among others, advice and assess, mission statement and development prospects, as well as the school's outward connections.
These survey instruments and scales are completed by further dimensions and questionnaires, which represent a specific selection of standardised instruments from many different international school development projects. Collected is, among other things, data on self-efficacy, burnout, well-being, job satisfaction, attitude towards innovation as well as inclusion/integration.
Also, oral interviews are conducted with the head of school, the education staff, the pupils and the parent's representatives. In this, the main objective of the qualitative data collection is to analyse the respective objectives, specific characteristics and conditions of every school participating in the start-up project. The interviews are to complete the information gathered by the questionnaires.
Finally, the competence tests (project *www.kompetenztest.de*) of the central education sectors of the 3rd, 5th, 7th and 9th grade will be used to document the development process of the pupils. The selection of the dimensions and factors of the education and school quality within the start-up project is based on the international current state research as well as on the guidelines of the Quality of School Development of the TMBWK.

Next to the selected management and co-ordination group of the start-up project (TMBWK and FAU Erlangen-Nuremburg) the students are systematically included into the start-up project. This marks an essential contribution to the professionalising of future teachers. Students of the teaching profession support pupils and teachers over a longer period of time, carrying out various tasks. They document the advisory processes carried out by the advisors for school development at the schools, and they participate in the data collection, data preparation and data evaluation.
That way, future teachers and pedagogues are gaining valuable, practice-oriented insight into the complex challenges of school development, while at the same time expanding their competences in the field of educational sciences as well as general didactics. They also deepen their knowledge in the area of research and evaluation methods. In turn, the teachers who already work professionally are actively supported and thus gain insight into the current development of school and education development. Thus, the start-up project makes an

innovative contribution to a stronger and comprehensive orientation towards practice and research in the field of teacher training. The first results of the current-state-analysis within the start-up project can be expected in autumn 2014; the final surveys will be conducted in spring of 2016.

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