LEADING TO LEARN TOGETHER

HANDBOOK

TABLE OF CONTENTS

LATVIA

LITHUANIA

POLAND

ESTONIA

UNITED KINGDOM

PROJECT "LEADING TO LEARN TOGETHER" – WHAT IS IT ABOUT?

SIGNE NEIMANE

EDUCATION AND INFORMATION SERVICES OF RIGA CITY

The project "Leading to Learn Together" (LELETO) is supported by ERASMUS+ Strategic partnership programme (No 2016-1-LV01-KA201-022658) and coordinated by Education and Information Services of Riga City (Latvia) and carried out in the partnership with: Ventspils Education Board (Latvia), Tartu University (Estonia), Utena Education Centre (Lithuania), Foundation EDU-RES (Poland) and Leeds City Council (United Kingdom).

The general aim of the LELETO project was to develop new approach of qualitative school-based professional development of teachers.

Jonson B, (2014) stresses that if we want students to learn, the most critical element is the teacher. Mizell H, Hord S. et al. (2011) has defined that in effective professional development, a leadership team analyses student achievement data to identify learning problems common to students in a particular grade or class, determines which problems educators have the most difficulty addressing, and investigates what they need to know and do to be more successful helping students to overcome learning challenges. Both teachers and school leaders consider that professional development means to participate in different kind of in-service courses outside the school. On the other hand, Bubb S, (2013) outlines in her research that courses are non-effective to improve teaching and learning. She stresses that work-based learning could serve as a basis of effective professional development of teachers and school leaders. At the same time courses, seminars, workshops are carried out on a larger or smaller scale in all EU countries. Consortium of the LELETO project strongly believes that traditional forms of teachers' professional development can't reach high impact on education quality. So we see that innovation of LELETO project is a new approach for school-based professional development of teachers where the main role and responsibility is taken over by school leadership team.

To gain the goal of the LELETO project, it included several activities:

- Learning activities to five countries of the Consortium with the aim to get to know all partners' experience of the project topic and to exchange with the experience, exploring the best practice about school-based professional development of teachers, as well as, to collect examples of the best practice about school-based professional development of teachers.
- Developing the handbook "Leading to learn Together", content of which is based on the experience gained in learning activities.

There were 5 learning activities during 2017 to the United Kingdom, Poland, Latvia, Estonia and Lithuania. During the learning activities each partner had an opportunity to share the best practice of school-based professional development visiting different institutions: pre-schools, schools (vocational, special and private schools included), universities, education centres and other institutions. Participants of the learning activities observed lessons, took part in discussions and identified the most valuable experience.

The best experience and benefits gained in the LELETO project are highlighted by the project partners from Tartu University – Prof. Hasso Kukumelk, Prof. Krista Uibu, Prof. Merle Taimalu in the next section.

References:

- *Bubb, S (2013) 'Developing from within: Towards a new model of staff development' Professional Development Today, Issue 15.1-2, pp82-90*
- *Jonson B, (2014). How should Professional Development Change? https://www.edutopia.org/blog/how-should-professional-development-change-ben-johnson*
- *Mizell, H., Hord, S., Killion, J., & Hirsh, S. (2011). New standards put the spotlight on professional learning. Journal of Staff Development, 32(4), 10–12.*

METHODOLOGY OF COLLECTING SCHOOL BASED GOOD PRACTICE FROM FIVE COUNTRIES FOR TEACHERS' PROFESSIONAL DEVELOPMENT

Hasso Kukemelk, Krista Uibu, Merle Taimalu

TARTU UNIVERSITY

Teachers' continuous professional development (CPD) is one part of creating professional teaching and learning environment in educational institution. At the same time there could be used different terms (and understandings) in professional teaching (e.g. teachers' pedagogical knowledge): Van Driel & Berry (2012) state that teachers' pedagogical content knowledge (PCK) development is a complex process that is highly specific to the context, situation, and person. It implies that professional development programs aimed at the development of teachers' PCK should be organized in ways that closely align to teachers' professional practice, including opportunities to enact certain (innovative) instructional strategies and materials and to reflect, individually and collectively, on their experiences. The studies indicate that providing teachers with specific input can contribute to the development of their PCK (Van Driel & Berry 2012). Therefore in LELETO project partners were looking for good practice in different schools to share it much wider for teachers' CPD.

Teacher's professional development begins in the pre-service teacher stage, where the future teacher's identity is founded, and the attitude of continuous self-development and the perception that CPD is a continuous, lifelong process should be developed.The first level of teacher education is a comprehensive preparation, and it is important today to focus not only on the teaching of different areas separately, but to emphasize the importance of knowledge and skills to integrate different domains. For example, integrated subject content-based, pedagogical, and technological preparation of teachers is highlighted (Martin, 2018; Tondeur, Pareja Roblin, van Braak, Fisser, & Voogt, 2013).

In different countries, the pre-service teacher education varies, because official national requirements for teachers are different. For example, in Estonia there are professional standards (e.g. for teachers level 6-8), where it is set up that master's degree for teachers is required generally (except in kindergarten and vocational school where a bachelor degree is

sufficient), but in other countries there are different requirements for teachers: bachelor's education is sufficient for all teachers (e.g. in Latvia) in some cases for example.

Teachers' continuous professional development (in-service professional development) is provided by different agents – schools itself, local municipality, private service providers, universities, state organisations. Those service providers act from different perspectives of teachers' CPD. School knows the best teachers' weaknesses and strong sides and therefore CPD provided by school itself meets targets the best (e.g. in England, in Estonia, etc.), but knowledge and good practice that could be shared is limited by the staff members expertise. Municipality level recognises much better more general teachers' problems in different schools in the area and trainings provided are more general than organized by schools and therefore could be problematic to solve teachers' individual needs in their professional expertise. That type improvements are organized by different bodies belonging to the municipality (e.g. in Latvia, Lithuania, Poland). Private service providers are very often looking for the specific niches in teachers' CPD and they are fulfilling those needs (e.g. in Estonia, England). Universities care very much not only for pre-service education for teachers but also for in-service teacher education. Universities cover usually regional or even national needs in teachers' CPD. There are state agents providing teachers' CPD in some countries (e.g. INNOVE, HITSA in Estonia) covering the most general needs in the field. This pluralism of teachers' CPD providers creates a significant list of options in front of the school and particular teacher to find the best solution.

Looking teachers' CPD from personal and methodological professional perspective some other lines of system can be discovered. Although, the in-service teachers' CPD at schools is mainly initiated and coordinated by the principals, the teachers of all visited countries participate voluntarily in in-service courses, not because they are forced to learn. Teachers of all countries were expected to participate in courses with the purpose to develop their professional excellence, to innovate their pedagogical content knowledge, knowledge about curriculum, cultural influences and subject didactics as well as increase of their self-efficacy. On the basis of the main focus, different options offered to the teachers in England, Poland and Baltic states can be divided into three categories.

1. DEVELOPING TEACHERS' PERSONAL PROFESSIONAL EXCELLENCE

From the point of view of the school principals, teachers should solve pedagogical problems independently, work well in a team and be responsible for their CPD. Teachers have possibilities to participate in pedagogical courses, connected to their everyday work and learn-ing process, as well as to develop their teaching skills and communication with students in Estonia, Latvia and Lithuania. For example, 93% of Estonian teachers spent regularly time in different activities supporting their personal professional qualification, but their participation on specific in-service courses is quite low. Despite that, 48,7% of teachers have willingness to participate on courses, supporting their professional development (see for TALIS survey) (OECD, 2014). Teachers' main occasion in several countries is how to ensure the quality of the learning process and implement inclusive education means (e.g., Baltic states and Poland), which working methods are appropriate for achieving new pedagogical approaches (e.g., Poland, Lithuania) etc. Teachers' needs for practical advice and developing evidence-based methods is obvious (e.g., Estonia, Poland). For that purpose, universities and companies offer different courses and methodological support.

2. INITIATING TEAM LEARNING

Team learning is important for supporting all teachers' CPD in schools. In some countries school principals book pedagogical courses from the university for all pedagogical staff in schools (e.g., in Latvia and Estonia). Sometimes teachers individually participate in courses, arranged by the universities or any training centre, and share the acquired knowledge after the course with their colleagues. Such team learning is successful because of team members start to share their visions and learn from each other. This is a safe way to implement changes for many people, like in Leeds/England. However, it requires readiness for cooperation, communication, diversity and consistency among the members of the team and the ability to resolve conflicts, as well as the existence of motivating micro-climate. This might be the reason why in meetings with school staff in Poland, Lithuania and Estonia, the teachers described more thoroughly the personal mastery and development, however, the team learning was expressed in a more modest manner.

3. SUPPORTING COOPERATION WITH COLLEAGUES

The long-term networking and mentoring offer good options to support teachers' CPD in schools. According to TALIS survey, the most frequent implemented CPD forms are informal discussions with colleagues and observing colleagues' lessons at aiming to develop their own instruction. Teachers of all countries appreciate the cooperation and support from their colleagues with aim to share their visions and experiences, to analyze teachers' work and find solutions for preventing and solving problems (e.g. with school psychologist and speech therapist in Estonia). In some countries (e.g., England and Latvia) we saw how teachers conducted lessons together with their colleagues. Different kind of observation sheets are used in schools. In addition, in England and Latvia teachers had strong network with colleagues from neighbor schools. For the purpose to enhance teachers' competence to communicate and collaborate with their colleagues, students and parents, school principals offer possibilities to develop teachers' pro-social skills.

There are different solutions of teachers' CPD used in different countries involved in LELETO project. Current handbook presents the best practical solutions from each project partner schools and kindergartens. The cases published in the handbook were selected by the international visitors from visited schools (e.g. by Estonian, Latvian, Lithuanian and Polish partners from English schools, etc.), but opened in the handbook by local authors. That provides the situation that fresh eyes discover interesting and useful tools but essence of those tools is opened by the experts knowing the best local circumstances and reasons to use the tool. In that sense the handbook provides the best practices of five European countries of teachers' CPD based on field studies in schools and kindergartens.

References:

- *Martin, B. (2018). Faculty technology beliefs and practices in teacher preparation through a TPaCK lens. Education and Information Technologies. https://doi.org/10.1007/s10639-017-9680-4*
- *OECD [The Organization for Economic Cooperation and Development]. (2014). TALIS 2013 results. An international perspective on teaching and learning. Retrieved from http://www.keepeek.com/Digital-Asset%20Management/oecd/education/talis-2013-results_9789264196261-en#page1*

- *Tondeur, J., Pareja Roblin, N., van Braak, J., Fisser, P., & Voogt, J. (2013). Technological pedagogical content knowledge in teacher education: in search of a new curriculum. Educational Studies, 39(2), 239-243. https://doi.org/10.1080/03055698.2012.713548*
- *Van Driel, J., H. & Berry, A. (2012) Teacher Professional Development Focusing on Pedagogical Content Knowledge, Educational Researcher Vol. 41(1), pp 26-28.*

LELETO HANDBOOK - LEARNING FROM EXPERIENCE
Inga Pāvula

VENTSPILS EDUCATION BOARD

The ability to learn from the experience of own and others is one of the important features of the development of a school as a learning institution and the professional development of each teacher. How to learn from other experiences and how to find the basis in co-operation for joint growth and development? This is a challenge for all - students, teachers and schools.

To develop and implement these skills at schools, examples of best practice are necessary; trust, not afraid to make mistakes, willingness to share, open classes for colleagues, give and accept feedback on learning and teaching process, accept constructive criticism and discuss professionally – these all are necessary things for teacher's professional development in everyday life of schools.

This Handbook has been prepared to provide you with examples on sharing experiences and the opportunity to learn from others, possibly less known - different countries, different educational institutions, different education systems and approaches.

Descriptions of the experience of specific schools and preschools, and insight in each country's education system are included in this Handbook. Materials are arranged by country, indicated both by country name (EE, LT, LV, PL, UK) and national flag.

Schools and preschools, that were happy to share their experience within the framework of LELETO study visits, were invited to provide the Handbook with examples of their practices. Best practice examples, that were assessed as interesting and useful by the project participants for their teachers and school leaders, are included in this book. This shows the way how teachers cooperate at schools in lesson planning and evaluating the study process, lesson observation approaches, professional conversations, the organization of methodological work within one school and between schools within one municipality. Through this guide, each of the educational institutions has offered its expertise to a wide range of users, so inspire colleagues to analyse and evaluate their experiences, dare to share, try something new and

cooperate not only with adjacent schools, but look more extensively. Examples of descriptions are different in terms of form, but each includes information on the educational institution and context, contacts for communication and a description of specific experiences.

The Handbook is in digital format and could be used both individually and by organizing teacher training within one school or between schools as well as school leaders and management teams.

- Teacher training within one school, where ideas and examples are needed for organizing co-operation between teachers, developing and improving methodological work, and diversifying the daily teaching process.
- In school exchange seminars for teachers, examples of this Handbook could be as a starting point for discussions and exchange of experiences. The experiences described by other schools give you a motion into analysing and evaluating your experience and encouraging sharing with it.
- School management teams could use the expertise offered by different schools in planning their school development, identifying the needs and opportunities for teacher development, finding solutions for organizing or improving methodological work, implementation of education quality assurance system or approaches available at school.

Examples of the Handbook provide an opportunity to reflect on own experience, to evaluate how and whether we are learning to learn from other experiences, without criticism and "nothing new" or "we've been doing it for ages," but with these examples of other experiences develop the skill of getting new ideas and create new solutions.

Using the Handbook, it is important to read through the descriptions of the context of each country and school. In any case you are welcome to contact the schools or pre-schools if you have any questions or ideas for cooperation. See the contacts in the descriptions.

LELETO Handbook is a support material for teachers and school leaders for professional development, cooperation between teachers and schools, and gaining excellence in their work.

LATVIA

EDUCATION SYSTEM IN LATVIA

The Latvian education system consists of pre-school education, basic education, secondary education and higher education. In total, general education in Latvia lasts for 12 years consisting of 9-years compulsory basic education and 3-years secondary education. In addition, pre-school education at age of 5-6 is compulsory in Latvia. Pre-school education is available from the age of 2 years till age of 7 years. It is mandatory to participate in pre-primary education programmes for five and six year old children who do not attend pre-school education institutions.

Basic education stage consists of general basic education (grades 1-9) and basic vocational education. Basic education is compulsory in Latvia. Basic educational programmes are partly provided by primary schools.

Secondary education stage comprises general secondary education, vocational secondary education and vocational education.

In state and municipal educational institutions the language of tuition is the state language – Latvian. Education in other languages of tuition can be acquired in private educational establishments, as well as in state and municipal educational institutions where they provide educational (study) programmes for national minorities.

General secondary education can be provided by secondary schools, gymnasiums, evening (shift) schools and extra-mural schools. A school year in general educational institutions lasts 35 weeks. Schools can provide four profiles of general secondary educational programmes for grades 10–12:

- a general education profile;
- a mathematics, natural science and technical profile;
- a humanities and social sciences profile;
- a vocational preparation profile.

There are also support measures and programmes, for example support for persons with special needs – assistant service in support of moving and self care at educational institutions, as well as educational programmes for national minorities.

TYPES OF SCHOOLS IN LATVIA

- pre-primary education institutions;
- primary schools;
- basic schools;
- secondary schools;
- gymnasiums;
- state gymnasiums;
- evening (shift) schools;
- special education institutions – development centres.

Pre-school education, as well as compulsory basic education, in Latvia can be delivered at general education institutions. Children are involved in pre-school preparation from the age of 1.5 years until the age of 7 years. The main objective of the pre-school education curriculum is to promote the child's multi-faceted development and readiness to enter the primary stage of basic education. It is mandatory to participate in pre-primary education programmes for five and six year old children. Children with special needs attend special pre-school institutions.

The acquiring of **basic education** curriculum generally starts when the child has reached age of 7 years and continues until the age of 16 years, but, in special cases, may continue till the age of 18. Basic education is compulsory in Latvia, the programme lasts for 9 years. The National Basic Education Standard determines the compulsory curriculum of basic education which includes also primary school.

Full basic education programmes are provided in educational institutions named **basic schools**. The educational programmes of the first six (in some cases – four) grades or educational programmes of the first stage can be provided by **primary school**. Secondary schools may also provide a full programme of basic education. Basic education can also be provided by vocational schools, special education institutions, evening (shift) schools, boarding schools, educational

institutions of social or pedagogical correction or in any other educational institution, e. g. gymnasium, fully or partly providing a basic education programme.

There are two types of programmes at the **secondary education** level: general secondary education programmes and vocational secondary education programmes. General secondary education programmes are academically oriented, their main task being to prepare for further studies, whilst the vocational secondary education programmes are aimed more at acquiring a vocational qualification, i.e. for entering the labour market. When admitting students to secondary level educational programmes, schools are free to hold entrance examinations according to the basic education standard, except in those subjects for which students have already received assessments reflected in the basic education certificate.

GENERAL SECONDARY EDUCATION PROGRAMMES

The National General Secondary Education Standard determines the curriculum of general secondary education programmes. General secondary education programmes are available in the following profiles:

- a general education profile which includes educational programmes without a focus on specific subjects;
- a humanities and social sciences profile which includes educational programmes with a special emphasis on subjects in the humanities and social sciences;
- a mathematics, natural sciences and technical profile, which includes educational programmes with special emphasis on mathematics, natural sciences and technical subjects;
- a vocational preparation profile which includes educational programmes with a special emphasis on specific professional areas (for example, in arts, music, business, and sports).

The education system in Latvia (diagram and description in English)

http://www.aic.lv/portal/en/izglitiba-latvija

QUALIFICATIONS/EDUCATION REQUIRED FOR TEACHER

Higher pedagogical? education and an appropriate qualification is mandatory for educators in all general education institutions. It is necessary to have a bachelor or masters degree in pedagogics or education or second level professional higher pedagogic education or second level professional higher education and programme B in pedagogics (at least 72 lessons). Each subject teacher is also required to have a teacher's qualification corresponding to their teaching subject. For pre-school education teachers it is necessary to have higher pedagogic education and pre-school teacher qualification acquired with higher or secondary vocational education.

Refresher training or retraining takes place in the state language if it has been funded by government or local authorities.

THE DEVELOPMENT OF EDUCATORS' PROFESSIONAL COMPETENCIES IN LATVIA
(who establishes it, what it is, who implements it)

The procedures for the development of teachers' professional competence in the Republic of Latvia are established in the Regulations No. 662 of 28 October 2014 by the Latvian Cabinet of Ministers.

Teachers of general education, vocational education and interest-related education are responsible for the development of their professional competence, carried out within three years, not less than 36 hours and it is planned in co-operation with the heads of educational institutions in which the teacher carries out their teaching activities. An educator who works at a certified private educational institution need to plan the development of professional competency individually. Information about the development of educators' professional competency is registered in State education information system database by the educational institution.

The teacher can develop his/her professional skills by studying either programme A or B. Four modules can be included in programme A: the module of a teacher's general competencies, the module of curriculum and didactics, the module of the educational process management and the module of a teacher`s experience. A document about the development of professional

competency abroad or at foreign institutions in Latvia also confirms the acquisition of Programme A.

A programme is developed and implemented by:

1) educational institutions or educators' professional non-governmental organisations;
2) institutions below ministry level whose regulation enables them to perform educational activities.

Education and Information Services of Riga City delivers (OR: carries out) A programmes. The development of teachers' professional competence in Riga comprehensive schools is funded by local government (Riga City Council). The teachers employed by other local governments can also apply for courses, seminars, either paying privately or funded by their local authorities.

B programmes are implemented in higher educational institutions which are delivering pedagogical study programmes. After completing B programmes teachers have the right to: teach other educational subjects or work on another educational level; educational subjects teacher – work at a special educational institution; carrying out teaching activities if person does not have a teachers professional qualification.

EDUCATIONAL INSTITUTIONS IN RIGA

There are **114 general education institutions** in Riga, funded by the local authority, including:

5 - state gymnasiums;
5 - evening (shift) schools;
2 - boarding schools;
12 - special schools (including 4 development centres).

Pre-school education is available at **150 pre-primary education institutions**, funded by the local authority, 2 of them are working as advisory centres.

There are **13 interest-related education institutions, 11 sports schools** and **9 music and art schools** in Riga, as well as **26 private schools, co-funded by the local authority**.

There are 24 accredited institutions in Riga offering higher education including 12 institutions of higher education founded by the state.

46 educational institutions carry out professional education programmes and further education programmes.

NUMBER OF TEACHERS IN RIGA

12,810 teachers are working in Riga,

7512 of them – at general education institutions;

3735 – at pre-school education institutions;

665 – at interest-related education institutions;

383 – at sports schools;

515 – at music and art schools.

PROFESSIONAL DEVELOPMENT OF TEACHERS IN RIGA

The professional development of teachers working in Riga also provides an opportunity for ensuring the quality of the education process and international commensurability of teachers' professional qualifications. Teachers are responsible for the development of their professional competence (carried out within three years, at least 36 hours) and it is planned in co-operation with the heads of educational institutions in which the teacher carries out their teaching activities. Teachers' needs for further education are analysed, summed up and defined at the educational institutions. Teachers' professional development is carried out at the educational institutions which are performing suitable further education programmes, as well as through self-education.

The development of teachers' professional competence in Riga comprehensive schools is funded by local government (Riga City Council) and carried out by Education and Information Services of Riga City (RIIMC).

Approximately 200 training programmes directed at teachers are carried out by RIIMC every year. Different professional development activities and assistance are offered to subject

teachers as well as heads of educational institutions and school authorities, pre-school teachers and teaching assistants, pastoral heads, home education teachers, boarding school counsellors, special education institutions' teachers, teachers responsible for careers issues, teachers recently started working at school (newly qualified teachers?) and educational psychologists. The activities of teachers' professional development at Education and Information Services of Riga City are defined in accordance with priorities of each school year. For example, in 2016 – the development of pupils' literacy in all educational subjects at all ages; strengthening of digital competency and development of media literacy; development of career management skills; carrying out project "Education for growth 2016"; research on the impact of teachers' professional development on the quality of education; ensuring there is special knowledge about the rights of the child.

Courses, seminars, conferences, master-class programmes are offered by e-mail to all educational institutions in Riga on a regular basis (once a month). A full schedule of courses is available on the RIIMC website www.riimc.lv. Teachers can apply for courses online. A survey of participants is taken at the final stage of the courses to ascertain usefulness of the courses. Surveys are carried out in a paper or electronic format as well as using selective phone calls.

Professional development can also include international mobility if it supports the aim of professional development, for example through projects and participation in conferences and seminars certified by submitted documents.

Educational institutions, higher education establishments, teachers' professional non-governmental organisations, associations, private adult education institutions and centres also take part in the organisation of training courses and seminars for teachers in Riga city. If any of the institutions mentioned above wants to carry out professional development programmes for Riga city teachers, it is necessary to get the agreement and approval from Riga City council.

The employer (education institution), after the return of teachers from courses, can evaluate the efficiency of carried out programme and its impact on the learning process in different levels, i.e. impact on pupils, teachers and school in general. Consequently, it is possible to evaluate the impact of direct changes on learning environments and learning processes in general, pupils' motivation, knowledge, skills and behaviour.

EDUCATION INSTITUTIONS VISITED DURING THE PROJECT

- Riga pre-school educational institution No 11

- Riga pre-school educational institution "Madariņa"

- Riga pre-school educational institution "Blāzmiņa"

- Riga pre-school educational institution No 273

- Valdis Zalitis Primary School; webpage: http://www.zalisaskola.lv/

- Riga Secondary School No 53; webpage: http://www.r53vsk.lv/?lang=lv/

- Riga Special Primary Boarding School No.1 –Development Centre; webpage: http://www.r1sips.edu.lv/

- Riga Special Boarding School No. 5– Development Center; webpage: http://www.r5sips.lv/

- Zolitude Gymnasium; webpage: http://www.zolitude.lv/

- Riga English Grammar School; webpage: http://www.rag.lv/

- Grammar School of Nordic Languages; webpage: http://www.zvg.lv/

- Riga Imanta Secondary School; webpage: http://www.riv.lv/

EDUCATIONAL INSTITUTIONS IN VENTSPILS

There are **9 general educational institutions** in Ventspils city, founded by the local municipality, including: 3 elementary schools, 1 primary school, 4 secondary schools, 1 State gymnasium.

Total number of students in general education schools - 4100.

Pre-school education is available at **10 pre-school educational institutions**, founded by the local municipality.

Total number of pre-school children (aged from 1.5 to 6 years) attending pre-school educational institutions - 1740.

In addition to school education there is a range of special interest institutions to choose from:

1)   **Interest-related education institution "Ventspils Creative House"**
        http://jaunradesnams.lv/,

2)   **Sport school "Spars"**

           https://www.ventspils.lv/lat/par_ventspili/sports_ventspili/sporta_skola__spars,

3)   **Music school** http://vmv.ventspils.lv,

4)   **Art school** http://www.ventspilsmakslasskola.lv,

5)   **Ventspils Digital Centre** http://www.digitalaiscentrs.lv.

Higher education - bachelor and master, postgraduate studies - are offered in **Ventspils University College** http://venta.lv/.

Ventspils Technical College provides vocational education http://www.pikc.lv

TEACHERS' PROFESSIONAL DEVELOPMENT AND SUPPORT SYSTEM IN VENSTPILS

Since 2013 a programme for improving the quality of education in Ventspils comprehensive schools has been introduced and a programme called "Improving the education quality assurance system (2013-2018)" was accepted.

The system was introduced in 2013 with a project called "Improving the efficiency of teachers' performance in Ventspils comprehensive schools" run by specialists from the University of Latvia - www.siic.lu.lv. Within the framework of the project, seminars, consultations, lesson observations and monitoring of the quality of the learning process took place.

After that, the main focus was directed at the development of professional supportive systems in the city, such as:

- Collaboration and learning groups;
- Mutual lesson observation and conversations;
- Collaborative lesson planning;
- Regular in-school training;
- Collaboration across Methodological commissions;
- Individual support;
- Goal-setting and development conversations with school leaders.

In order to emphasize the importance of everyday learning processes and to track the performance of each student, in 2014 a Motivational Programme was created, in which 80

teachers and 40 pre-school teachers each year are nominated for financial support for their achievements in improving the quality of daily teaching and promoting each student's growth.

In 2015, aware of the needs for the professional development and support of teachers, a local in-service teacher-consultant service was set up. Ventspils is the only place in Latvia where such an institution works. The methodological service consists of 5 specially trained consultants who provide the necessary methodological support for teachers and school authorities.

The Role of the Methodological service

- At the request of a school principal and / or an individual teacher, as well as a self-designed timetable, provide expertise for young and experienced teachers by observing their lessons, providing feedback to the teacher, and providing feedback to the school principal and/or deputy director in the field of education.

- Define and support the needs of teachers' further professional development, improve students and teachers' open-learning/working environment.

- Enhance mentoring and supervision, as well as developing tools for lesson observation and feedback, communication to the school director.

- Support cooperation between teachers and school authorities, sharing the best experiences.

- Provide individual consultation for teachers on various methodological issues and methodological support for educational institutions to improve the teaching and learning process. Assistance in developing syllabus and lesson plans, tests and other teaching materials.

- Carry out seminars and open lessons, develop and publish methodological work.

- Participate in the process of assessing the quality of teachers' professional activities in the city.

In 2015, to keep track of the needs of students, parents and teachers and the assessment of educational quality in schools and preschools, the EDURIO survey platform https://edurio.com/ (a system for feedback) was introduced in Ventspils. This is used both by the school individually and by the education authority. This system provides an opportunity to receive feedback on school lessons from students, on satisfaction with school activities from parents, satisfaction

with professional development and the school's organisational culture from teachers, as well as to obtain other important data for the improvement of the study process and for further planning of work

Like all the Latvian State Gymnasiums, in 2016 Ventspils State Gymnasium Nr1 received a delegation from the Ministry of Education and Science, to become a regional methodological centre and received appropriate funding to provide professional development for teachers in the surrounding regions. By identifying school needs, they offer special professional development programmes for a large number of teachers.

At present, the methodical system for teachers' professional support is functioning and will be further developed in the city.

EDUCATION INSTITUTIONS VISITED DURING THE PROJECT

- Ventspils Elementary School № 1 http://www.plavasskola.lv

- Ventspils Parventa Elementary School http://vpp.ventspils.lv

- Ventspils Secondary School № 2 http://2vsk.ventspils.lv

- Ventspils Secondary School № 3 http://www.3vsk.lv

- Ventspils Secondary School № 6 http://6vsk.ventspils.lv

- Ventspils State Gymnasium № 1 http://www.vv1g.lv

INTRODUCING CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL) IN RIGA ENGLISH GRAMMAR SCHOOL

School/ Setting:	Riga English Grammar School, Riga, Latvia
Website:	www.rag.lv
E-mail:	rag@riga.lv
Principal:	Maija Kokare
Type of school:	Secondary School
Age-range:	7 -19
Context	Riga English Grammar School (REGS) is a comprehensive school located in Riga with 1068 students in 38 classes from 7 to 19). The school provides secondary education as well as extra-curricular activities for the local community (in the Latvian language). There are 92 qualified teachers as well as support staff for students with additional needs. The examination results of graduates are above the national average.

REGS is focused on high quality English language teaching, content and language integrated learning (CLIL), as well as on finding new approaches for integrating ICT into teaching and learning. The school has a strong focus on academic proficiency, democracy and intercultural interaction leading to the development of high level learning skills, critical thinking and skilful communication in English. |

Other background information relating to this strand of professional development	There are currently two main challenges for the school to be resolved: 1) New legislation, with effect from the 2018/19 school year, means that additional support for teaching English will be cancelled (and the school budget will be reduced by 14%); therefore, new approaches for school development have to be introduced to ensure the focus remains on English; 2) a new national curriculum is being developed, and methodologies for effective collaboration among teachers is one of the keys for success in this context.

DETAILS OF CASE STUDY

Teachers of Riga English Grammar School have been implementing CLIL gradually and in a targeted manner for a number of years - starting with individual teacher initiatives and attendance at CLIL courses in Latvia and Great Britain. This school year 60 teachers are now using CLIL methods in their lessons. CLIL methodology area is one of the key pillars of REGS.

Introducing CLIL to maintain the focus on English in REGS is one of the solutions to the issue of reduced funding. However, it requires powerful capacity building – this involves smart prioritising, professional development of teachers and a collaborative learning culture that supports the development of new practices and solutions for effective teaching and learning.

There are several **priorities that support the introduction of CLIL** both in managerial and educational levels:

- Collaborative teaching and learning,
- Focus on national culture,
- Development of high-level study skills (HLSS),
- Promoting reading skills,
- Extra-curricular activities,
- Strengthening the European dimension (via international projects),
- Effective use of ICT for teaching and learning.

Identifying CPD needs & setting goals:

Continuous professional development (CPD) approaches that contribute introducing CLIL:

In-house CPD is focused on learning English (for teachers of different subjects), ICT, behaviour management, etc. In-house CPD is supported by partnerships with other schools and institutions (local, national, international).

Targeted training and professional development are the key priorities for the teachers and the management team of Riga English Grammar school. This process has been funded by Erasmus+ grants enabling staff to attend K1 (Learning Mobility of Individuals) courses:

1) 'Using CLIL (Content and Language Integrated Learning) to improve the process and content of learning' in March 2016 (5 participating teachers);

2) 'Strengthening the Capacity of multimodal activities in Riga English Grammar school'. The project was implemented in Riga English Grammar School from August, 2016 to May, 2017 (7 participating teachers);

3) 'Strengthening the Capacity of CLIL Methodology and Management in Riga English Grammar School', school year 2017/2018. 4 teachers have already participated in CLIL courses in Great Britain and Malta and 5 teachers are going to participate in shadowing to gain the experience of school's management and learning process and to observe the implementation of CLIL methodology.

ICT and CLIL have become an essential part of 21st century schools. REGS has received Erasmus + grant for K2 (cooperation for innovation and the exchange of good practices) project 'Expanding Content and Language Integrated Learning by Using Technologies'. Three schools - REGS from Latvia, Pelgulinna Gymnasium from Estonia and Michelangelo Bartolo secondary school from Italy are participating in the project, which is going to last for two school years.

Expert teachers are mentoring other teachers in the introduction of CLIL in REGS.

CONTINUOUS PROFESSIONAL DEVELOPMENT (CPD) IN SCHOOL DEVELOPMENT CONTEXT

School / Setting:	**Ziemeļvalstu ģimnāzija** (Grammar School of Nordic Languages)
Website:	www.zvg.lv
Principal / Headteacher	Inga Lande
Type of school:	Secondary school
Phase (Age-range):	Basic (7 – 15) Secondary (15 – 19)
Context	**No of students** – 982

Context (continued):

No of teachers – 84

Other pedagogical/learning support staff:

- 2 psychologists
- Social educator
- Speech therapist
- SEN specialist
- 2 librarians
- Nurse

Educational programmes offered:

Basic School

- Humanities and Social Studies Programme (*Basic School*)

High (Secondary) School

- General Education Programme
- Humanities and Social Studies Programme (Languages)
- Mathematics and Science Programme

Languages taught:

- English (to all students)
- German (from grade 5)
- Russian (from grade 5)
- Danish (from grade 10)
- Norwegian (from grade 10)
- Finnish (from grade 10)
- Swedish (from grade 10)
- Estonian (from grade 10)

Extra-curricular activities offered:

- 5 choirs
- 2 vocal groups
- 4 dance groups
- 2 arts and crafts groups
- Musical theatre group
- Various sport groups

Other activities offered:

- Student Council
- Recital Contests
- Public Speaking Contests
- Nordic Libraries Project
- Talent Shows
- Foreign Languages Song Contest
- Aerobics Festival

Other background information relating to this strand of professional development	Ziemeļvalstu ģimnāzija (Grammar School of Nordic Languages) is a state school situated in the suburbs of the capital Riga. Most of the students at primary level come from the area. Being the only school in Latvia offering four Nordic languages (at secondary level), the school is popular with students not only from Riga but also from the whole country. This means that secondary level students travel from other parts of the city as well as other towns. Students who travel from outside Riga either live with relatives or rent a flat as commuting such long distances is impossible.

The school has two buildings – one for students in classes 1 – 4 (age 7-10), the other for classes 5 – 12 (age 11– 19).

Many of the students come from mixed nationality families where Latvian is not the first language spoken.

DETAILS OF CASE STUDY

WHY DID THE SCHOOL DECIDE TO UNDERTAKE THIS WORK?

Since 2009, when a new system of school financing was introduced, individual schools have been striving to be of higher quality and thus attract more students. To help the development of the school (within a city and national context), a strategic school development plan (with clear strategic goals) was created and is updated every 3 years. For this plan to be realistic and achievable, school staff (including all the teachers and other school staff, such as administrators) decide on three strategic goals for every school year. Having the opportunity to discuss the plan and set the goals at different levels (for example subject groups, school administration, and at whole school level), ensures teachers' full involvement and enables them to identify their own professional development needs. Allowing teachers to develop professionally means that the quality of teaching improves and this in turn raises students' motivation and outcomes.

Figure 1. Professional development model

WHAT ARE THE KEY FEATURES?

Continuous Professional Development approaches

Continuous Professional Development includes attending courses and seminars both within and outside school. The school organises different courses and seminars on-site in order to ensure higher levels of participation. With the financial support from the Education and Information Services of Riga City (RIIMC) in recent years, the school has been able to organize more extended professional development programmes for teachers including courses and field trips to different businesses and educational institutions. These have widened teachers' horizons and developed their skill set, thus motivating them to use new knowledge and experience in their everyday work in the classroom. This makes the learning process more relevant to the students' needs and modern practices.

Teachers are also encouraged to take part in different events and discussions organised by higher education establishments, the local educational department or Ministry of Education and Science in order to ensure a higher quality of education nationally.

Many of the teachers are actively involved in professional associations: for example being on the board, expressing their ideas for quality development or simply attending conferences, workshops or other events organised by the associations.

In addition, the school has always actively cooperated with partner schools abroad, working on common projects involving both teachers and students. This also supports professional development and positively influences the quality of teaching in general.

Identifying training needs

In the modern world things change rapidly and the field of education is no exception to this. Therefore it is essential that teachers can keep up to date with the changes and challenges of the system and students' needs. There are many factors which help to identify the training needs of teachers. The first and the foremost is the state policy concerning educational reforms, including the introduction of the new education content, subject areas, teaching methods and techniques, etc.

In response to this, schools need to establish strategic goals. This then helps to identify needs for professional development. Another way of gathering data on the training needs is to collect suggestions from the subject groups at the end of every school year. This helps to plan the training activities on-site and outside the school. Moreover, teachers can give suggestions on their individual needs. In addition, lesson observation is an effective way to identify the individual training needs of the teacher. This is done regularly.

Although there are many different professional development opportunities offered at school, it is always appreciated when teachers show initiative and a willingness for self-development, so that the learning process for students is not always interrupted.

In order to meet the possible needs (or, in some cases, state requirements for the number of training sessions) of individual teachers, the deputy head teacher is responsible for monitoring the process. During the last several years a special system has been developed to record and track this.

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
Ļudmila	G	20	16	12	8	16	x	Studijas beigtas 2014.g.
Dina	H	68	0	0	36	0	x	
Ināra	J	96	0	0	0	36	x	
Anna	J	98	0	0	0	36	x	
Nora	K	152	0	0	3	33	x	
Rita	K	45	0	18	10	8	x	
Līga	K	86	0	0	36	0	x	
Beāte	K	312	0	0	5	31	x	
Ilze	K	137	0	0	9	27	x	
Ginta	K	76	0	0	36	0	x	
Lelde	K	80	0	0	0	36	x	Studijas beigtas 2013.g.; Studē!
Kristīne	K	56	0	0	30	6	x	
Sandra	K	300	0	0	36	0	x	
Inga	L	164	0	0	0	36	x	
Zane	L	29	7	3	26	7	x	BKA
Vera	L	137	0	0	0	36	x	
Andis	L	47	0	0	20	16	x	
Inita	L	78	0	0	11	25	x	
Guntars	L	42	0	28	8	0	x	
Biruta	M	38	0	9	27	0	x	
Lija	M	130	0	0	0	36	x	
Mareks	M	58	0	4	12	20	x	
Darja	M	71	0	0	33	3	x	BKA
Lilija	M	92	0	0	9	27	x	
Iveta	N	83	0	14	16	6	x	
Janīna	O	120	0	0	25	11	x	
Zinta	P	107	0	0	14	22	x	
Vilhelmīne	P	76	0	0	36	0	x	
Gunta	P	52	0	3	22	11	x	
Signe	R	12	24	4	0	32	x	Studē!
Zane	R	34	2	0	34	2	x	Studē!
Aija	R	57	0	22	14	0	x	BKA

Figure 2. Number of training lessons per teachers

The chart (Figure 2) shows each teacher (name and surname – Columns1 and 2), the number of professional development sessions they have (Column 3), the number of sessions missing (Column 4), the number of professional development sessions needed during the period of three years (Columns 5, 6 and 7). Column 8 marks the completion of the compulsory course on children's rights. The last column (Column 9) gives other supplementary information about the teacher, for example, maternity leave, studies at the university, etc. which might influence the necessary number of professional development sessions.

In addition, the deputy head teacher has also developed a file (Figure 3) showing each teacher's training courses that have been attended during the period of three years. This helps to analyse the needs and offer courses on specific themes.

Figure 3. Training courses attended by a teacher during the period of three years

Dissemination of effective practice

Several years ago the school has decided that the existing system of subject groups should be changed by combining subject areas and developing 5 subject (methodology) groups (or Faculties):

- Latvian language, history and social studies
- Maths and Natural Sciences
- Primary education (age 7 – 11)
- Foreign languages
- Arts and sports

Subject group meetings take place at least twice every semester. This is the time when teachers from the same subject discipline can discuss their experience, their success and failures, problems or new ideas that they have introduced in their classrooms. During these meetings teachers are also involved in decision making and school evaluation process, expressing their views on things that work well and those that should be changed. These can concern both subject specific and whole school issues and the resulting suggestions and recommendations are always welcomed.

Over the last five years, each of the subject groups has organised different activities to advertise their particular subjects. These take place within so-called "Subject Months", and a schedule for these is drawn up at the start of each school year to avoid any overlap. The activities can include competitions, quizzes, exhibitions, shows, etc. and are organized either during lessons (within one class) or after lessons (involving students of different classes).

The school also has a long-standing tradition of organizing at least four professional development events every school year. Some of these events are called "**Teachers learn**" where experts from outside the school are invited to conduct a course or a seminar on a certain theme. Others are called "**Sharing experience**" where teachers share ideas and information from courses and seminars they have attended or share their experience gained while participating in educational projects on different levels (state, local municipality, partner schools in Latvia and abroad) as well as methods and techniques used during lessons.

There has always been a close collaboration with teacher training Higher Education institutions. Every year a number of student teachers come to have their observation or/and teaching practices (school internship) at the school. In these cases, teachers work as mentors, passing their knowledge and experience on to trainee teachers. This has always proved to be useful for the mentors too as mutual sharing of ideas often happens.

Another way effective practice is disseminated is participation in different projects. The school has had several long-standing partnerships (more than 10 years) with schools abroad. Some of them were:

- Levanger videregående skole – Levanger, Norway
- Gymnasium Bäumlihof – Basel, Switzerland
- Liebigschule – Frankfurt am Main, Germany
- Jovaro Pro-Gymnasium – Siauliai, Lithuania
- Hagagymnasiet – Norrköping, Sweden

Many projects on different levels (both students and teachers) and themes have been developed during this time which has helped to enrich the teaching-learning process and led to the much sharing of experiences on different subjects.

The school leadership and teaching staff are always looking for opportunities to participate in educational projects. At present the school is involved in 7 projects linked to the support of the needs of individual students, careers education, sports and healthy lifestyle and school strategic goals. Those projects are coordinated by different state and local institutions, including Ministry of Education and Science, Riga City Department for Education Culture and Sport, Education and Information Services of Riga City (RIIMC) and others.

Ziemeļvalstu ģimnāzija (Grammar School of Nordic Languages) is a forward-looking institution that keeps developing and sees continuous professional development as one of the key tools to achieve its ambitious goals.

THE METHODICAL WORK IN THE SCHOOL DEVELOPMENT PROCESS

School / Setting:	**Riga Zolitude Gymnasium**
Website:	www.zolitude.lv
Principal / Headteacher	Svetlana Semenko
Type of school:	Secondary school
Phase (Age-range):	7 - 19
Context	Riga Zolitude Gymnasium is located in the capital of Latvia (Riga), in the calm and peaceful area called Zolitude.
	For 30 years, the school has managed to create and maintain its own unique character. The focus of the gymnasium today is on high-quality education, the adoption of modern trends in the development of pedagogical and educational methods, as well as on the in-depth study of Mathematics and natural sciences and the development of language skills.
	The gymnasium is open to every student and their parents and aims to meet all the crucial requirements of today's world. The gymnasium actively cooperates with the Latvian and foreign educational institutions.
	The main aim of the gymnasium is ensure the comprehensive development of all students, which is why the school offers educational programmes which enable the study of Mathematics, languages and Sciences in high school in depth. In addition to these programmes, a wide variety of cross-curricular activities and clubs are free for our students, such as

theatre studio, ballet classes, English and Latvian debates, a variety of sports clubs and swimming classes.

Our teachers are experienced in taking part in lots of International projects (Erasmus, Nord Plus, Nord Plus Junior, Comenius).

The result of teachers' professional work is a system of methodical work that helps to find an individual approach to each student and stimulates the development of those who are talented as well as providing help for those who need it.

The centre also manages a social psychological support, in which social educators and psychologists work with students and their parents, helping to overcome psychological difficulties and resolving problems with studying.

In total, more than 1440 students are taught in the gymnasium (so we are the biggest school in Latvia).

The gymnasium is especially proud of the Students' Self-Government under leadership programme through which exciting but serious activities take place in and out of the gymnasium.

DETAILS OF CASE STUDY

METHODICAL WORK AT RIGA ZOLITUDE GYMNASIUM

Background information:

Curriculum at Zolitude School:

- Years 5-9. 3 Programmes of Study (bilingual):
  - Majoring in Mathematics
  - Majoring in Foreign Languages (English, German)
  - General Learning Programme
- Years 10-12. 4 Programmes of Studies
  - Mathematics, Science and Technology (Mathematics & Computer Science);

- Mathematics, Science and Technology (Chemistry & Biology).
- Humanities and Social Sciences (great opportunity to learn German, English & French);
- General Studies Programme.

Gymnasium's vision of Teacher Professional Competence:

- Professionalism & teaching skills
- Expert knowledge of a subject matter
- General Pedagogical/Psychological knowledge
- Teamwork skills
- Pedagogical approaches to using technology for learning
- Information Technology (IT) skills

Professional Development of teachers through the activities at Zolitude gymnasium is the norm and it comprises the following *Basic principles*:

- Systemisation
- Planning
- Non-stop continuous development
- The Importance of teachers belonging to ateam and the role of each member of it
- Teachers' analysis of their work and the result of their self-evaluation report concerning their routine activities.

The ways to develop mastery in teaching at Zolitude gymnasium:

- Professional development courses
- Self-development
- Seminars at all levels
- Project participation
- Contests in Teaching Mastery
- Teacher Collaboration research groups
- Project groups
- School events to improve Teaching
- Working together in Subject Departments at school

- Teacher Training workshops at schools

Professional development courses:

- Out-of- school:
  - Teachers' personal interest in courses, individual study
  - School priorities
- School-based whole-school improvement programmes:
  - Critical Thinking Skills
  - Improving Computer Skills
  - Using Technology (IT) in the Classroom
  - Conflict Management Strategies
- School-based:
  - Our teachers lead courses themselves
  - Teacher digital literacy as a tool to effective lessons
  - The improvement of methodical competence to provide a bilingual learning process

Dissemination of Innovative Experiences Scheme:

- The provision of an effective learning environment
- Positive experience gained in projects, seminars, courses, district-level professional development days etc. has been shared with other teachers :
  - During Staff Meetings, Heads of Department meetings, Senior Management meetings;
  - Within Subject Departments;
  - During Professional Development (PD) days.

Professional Development Day (PD day) is a way to share good practice

Every year once or twice a term a methodical day takes place in our gymnasium. Each methodological day has its own structure, aims and schedule. The aims are usually connected with most important educational issues and are based on the annual priorities of the gymnasium 1-2 times a year

- Hands-on creative workshops, Model lessons

- Our Strategic Priorities and Themes:
  - Delivering an Effective lesson. Modern Teaching methods.
  - Value of Homework. Effective feedback improves students' learning.
  - Best Strategies for assigning homework.
  - Students learning and research skills development.
  - Forming Peer and Self-assessment skills of students.
  - Using Technology to improve students' learning.
  - Modern methods application of reading skills at different subject lessons. Paying special attention to bilingual teaching.
  - Modern forms and methods to establish a favourable learning environment.

By taking part in evaluation and analysis of the lesson, teachers are able:

- to set the expected outcome of the student correctly;
- to state and approve all the stages of the lesson, in order to achieve the initial goal;
- to clarify awareness of both teacher and students about how the planned result will be achieved.

EXAMPLE OF THE RECENT PROJECTS

The Project «The competence approach to the content taught»

Project aim: <u>to work out</u> , <u>probe</u>, <u>introduce gradually</u> the general educational content and teaching methods for the students aged 1,5 to 18 in Latvia so that students obtain the important knowledge and skills necessary for the life in the 21st century.

The most crucial project **goal** is teachers' methodological work planning and constant cooperation within the class level.

In order to achieve   the goal the following objectives should be performed:

1) The regular meetings of teachers of different subjects;
2) The common aims establishment and work planning;
3) Systematic students' performance assessment;
4) Analysis of necessary improvements.

Teacher professional development is a continuous process

The cooperation of a strong school Management Team is a basis of gaining achievements and results

The Principal and her team are the leaders of School Development

The school leadership team has to be confident changes are necessary. It is otherwise impossible for the school to develop.

BENEFITS FOR TEACHERS:
1) wide-ranging lessons,
2) motivated students,
3) new "tools" to work on the texts.

BENEFITS FOR STUDENTS:
1) joy of work,
2) reading skill improvement or skill development,
3) vocabulary extention,
4) new "tools" to work on the texts.

BENEFITS FOR COLLEAGUES:
1) new responsibilities,
2) various school cross-curriculum subjects and cooperation (Bilingual education)
3) talented students.

We have devised a new content

CREATIVE

INSPIRING

ESSENTIAL

ENCOURAGING

EXCITING

THOUGHTFUL

MODERN EDUCATION IS STUDENT-CENTERED. SHIFTING THE FOCUS FROM TEACHING TO LEARNING

Results

School facilities & resources

Teacher's support

Learning environment

STANDARDS & EXPECTATIONS:

Learners' general abilities and skills development;

Focusing on hands-on activities;

The use of IT technologies;

Changes in Assessment.

Professional Competence of teachers is required to promote and realize standards

DELIVERY OF BASIC VOCATIONAL PROGRAMMES FOR STUDENTS WITH SEN

School / Setting:	Riga Boarding Primary School No 5 – Development Centre
Website:	www.r5sips.lv
Principal / Headteacher	Iluta Vilnīte
Type of school:	Basic school
Age range	7-20
Context	In total there are 228 students at Riga Boarding Primary School No 5 – Development Centre. The students are enrolled into the school on the basis of an assessment by the State or the Municipal Medical Pedagogical Commission. The school has to acquire a license to deliver two Special Education Basic Programmes; • Special Basic Programme for students with Mental Health Disability • Special Basic Programme for students with Profound or Multiple Mental Health Disability After finishing school the students receive a Certificate of Basic Education. The school also delivers three Vocational Basic Programmes where students can be qualified in the following professions: • Assistant Chef (Programme: "Catering Services" • Housekeeper (Programme: "Household Management" • Builder's assistant (Programme: "Building and Maintenance" After finishing the programme, the students receive a Level One Diploma in Vocational Basic Education.

	Training is delivered in small groups in a bespoke way based on individual special needs and physical and mental health levels. The school's management team take every opportunity to improve the educational environment, for example adjusting the building to accommodate wheelchair users or those who require specialist support equipment.
Other information relevant to Vocational Programs	We understand that it is very important for SEN students to use the skills obtained within their studies in real life. Teachers try to integrate students into real life where possible and appropriate by encouraging them to participate in different and relevant activities out of school. Here students can take part in groups or work individually. This can also help them to search possible places for an Individual Practical Course, often with an opportunity to get a job placement after finishing school.

In school the students take part in organising catering activities, such as: Birthday Celebrations for those who stay at school all week; 'Thanksgiving Breakfast' to supporters; 'Chef competitions', 'Newspaper's Second Life': as well as helping to set the tables, serve dishes, bake cakes, decorate rooms etc. Students undertake these jobs within their own skill level and capacity.

In order to improve the social and interactive skills of our students, we participate in: Erasmus+ projects such as 'Life Inclusive' (work and leisure for young people with SEN), the International Art Festival in Panevezys (Lithuania), XXI Integration Art Festivals in the Latvian cities and towns of Kuldiga and Valmiera, ICT competitions and a conference on 'Best Practices in Teaching Autism in Latvia and the world: Diagnose, Therapy, Support'. There is also collaboration with Riga Art and Fashion School and Ogre School.

DETAILS OF CASE STUDY

Every year, all the teachers in our school take part in different CPD activities. In addition, vocational teachers come together twice a term to discuss professional outcomes. They oversee and analyse the learning process and students' successes, identify problems, find solutions and sum up the information on work opportunities.

Teachers work closely with companies, where students are going to do work practice, providing them with the information on students' individual needs. Catering companies are then able to adjust the working space to students' individual needs.

Each public activity aims to increase the students' self-esteem and self-confidence and gives them the chance to work in a team and help their classmates. All these are important factors in their personal development.

The school is constantly improving educational resources to make the learning process better. In addition, the school also searches for wider opportunities for students to secure employment after they have left school.

SCHOOL OUTSIDE SCHOOL

School/ Setting:	Riga Imanta secondary school
Website:	www.riv.lv
Principal:	Ingūna Helviga
Type of school:	Secondary School
Age-range:	6 - 19
Context	Riga Imanta Secondary School is located in the capital of Latvia (Riga), in the (western) suburb Kurzeme - called Imanta, situated on the outskirts of Riga. In total, 783 students are taught in the school, divided into 30 classes (1st to 6th grade in three or four parallel classes; 7th to 9th grades in two parallel classes, 10th to 12th grade - one class each). Students at the school study one of three curricula: mathematics, science and technology programmes, humanities and social programmes (with in-depth learning of music) or general education programmes. The school was accredited in 2012 for 6 years (maximum term), the next accreditation will be in 2019.
Other background information relating to this strand of professional development	In the last two years the management team (the new Principal and deputies) have changed in the school leading to the implementation of this new initiative. This was within the context of the establishment of a new school development vision, which includes not only the arrangement of the school environment, the provision of support to pupils, and other

important areas, but also new approaches to organising the whole study process.

The need for change in the organisation of the study process itself is also required due to state educational reforms. These focus on the complex competences and interwoven skills of pupils which means that, in order for students to be able to work differently, work must also be planned differently.

DETAILS OF CASE STUDY

Changes in the organisation of the study process in the Riga Imanta Secondary School began with the idea initiated by the new principal and subsequently discussed collectively and in detail about the organisation of a carefully planned, coordinated and regular teaching process outside the normal learning environment: classrooms and schools. The idea is based on the founder of humanitarian pedagogy J.A. Comansky, a lesson from the 17th century that "... (people) should be taught to learn as much as possible not from books but from heaven and earth, from oaks and hornbeams, that is, to learn and study the things themselves, not foreign observation and conclusions about things." This was the basis for the new project of the school "School outside school ".

As in the day-to-day learning process, where learners acquire knowledge, skills and competences in four different areas, it was decided that the out-of-school learning process for each class would be planned for 5 days during the academic year (2 days in the first semester and 3 days in the second semester), each day devoted to one of the four areas and career counselling: "Language", "Basic technology and science", "Art", "Human and society", "Careers education".

The activities of each day of the project are planned by the teachers of the respective field of study working with the given class. Teachers agree on the theme to be learned, contact the representatives of the planned training place and discuss the organisation of the study process (offers, costs, etc.)

Prior to the day of the project, teachers:

- Coordinate the planned project activities with the school principal;
- Inform the pupils, their class teachers and parents of the pupils about the place of the project, time, planned activities there, necessary materials and other relevant information;
- With pupils, teachers put forward learning objectives, assign tasks to be carried out at the venue of the project, explain the progress of the work and the expected result.

On the project day, students (under the guidance of class teachers and accompanying teachers) go to the agreed place of study and perform the tasks specified previously. After the project day, the teachers of the subject together with the pupils produce feedback and jointly evaluate the performance of the pupils (see Appendices 1 & 2)

The "School outside school" project provides students with the opportunity to acquire and develop competences in different areas in the real environment - to study animals in the zoo, about the production of electricity in a hydroelectric power plant, about art in the museum, about trees in the forest, etc.

In the school year 2017/2018, the project "School outside of school" is already being planned more broadly and more integrated by linking two areas such as "Language" and "Human and society", "Basic technology and science" and "Art" etc. on each of the project days.

Both pupils and teachers enjoy every day of the project, in which each of them develops their competences – gains knowledge, finds out, tests, learns, co-operates, performs, evaluates, shares experiences, etc.

The project is also highly appreciated by the pupils' parents all of whom each year, after signing the agreement proposed by the school, confirm their consent to the child's study outside the school premises and possible expenses (entrance fees in museums, science centres, etc.).

THE METHODICAL WORK IN THE SCHOOL DEVELOPMENT PROCESS

After the school principal Ingūna Helviga took office, two study semesters were initially spent looking closely at the methodical work and the system of its organisation at the school. It was discovered that teachers have little interaction with each other and mostly work within the limits of one subject, considering each subject as the most important subject, etc.

In the 3rd semester, the results of the observation and research were analysed and a teacher discussion was organised focussing on the reform of the educational content of the country and the need to change the methodical work system. This involves working differently (according to the new content of education) and implementing new approaches to planning and delivery. Staff identified the need for change and decided to modify the system of methodical work of the school, applying it to the school's development vision and the reform of educational content in the country. As a result, a new methodical work model was developed, which was introduced and is being implemented in the current school year (4th semester).

METHODICAL WORK MODEL AT RIGA IMANTA SECONDARY SCHOOL

1. Firstly, the teachers jointly agreed on the essential shift in methodical work from the old system to the new, modern system.

Shift of methodical work accents

From…		To…
Teaching subjects promotional activities	⇨	Lesson
Examples of good practice in the story	⇨	Examples of good practice in everyday life
Lessons observation – As a test for nervous system	⇨	Lessons observation – Opportunity to improve professional competence
Observer – foreign, as a threat	⇨	Observer – friend, supporter, advisor
One person responsibility	⇨	Co-responsibility, affiliation
Result analysis in papers	⇨	Result analysis in *conversations*

2. The school methodical work structure was further developed. All teachers were divided into 5 major groups: 1st-2nd grade teachers' group, 3rd-4th, 5th-6th, 7th-9th and 10th-12th grade teachers' groups. This means that, in each large group, there are about 10 different subject teachers who work with the same pupils on a daily basis. Considering the risks that could occur while working in very large groups, it was decided to divide these large groups into smaller ones including 3 – 4 subject teachers (see the structure of the methodological work below)

Structure of the methodical work

3. Taking into account the school's development vision and trends in the field of education in the country, the priority of methodical work at school for 3 years is: Improvement of learning competence in a diverse, competence-based learning process.

In each of the large methodical groups that were set up, there was discussion about how well this priority was understood, and sub-priorities were established according to the group's understanding. For example, we understand that the improvement of learning competence in a diverse learning process is: a positive atmosphere in the classroom; elements of games in classrooms; environmental change; a research activity, etc.

Each group presented their views to the rest of the groups, resulting in a long list of sub-priorities or activities, within the overall priority of improvement of learning competence in a diverse and competence-based learning process.

Priorities in methodical work
3 school years

Improvement of learning competence in a diverse, competence-based learning process.

4. Being aware of the risks that could arise in the daily co-operation between teachers of 10 different subjects, a methodical group work model or system was created, in which the teachers would plan and organise their work in smaller groups on a daily basis, i.e., each of the large groups of teachers was divided into 3 smaller groups (every 3 or 4 different subject teachers).

Priorities in methodical work

5. And finally, tasks were assigned to each major group that independently organises work in full or small groups (as needed).

<p align="center">Work of methodical groups</p>

- Collaboration meetings in big or small groups every Tuesday from 15.00 - 16.00.
- During the semester, each large methodical group plans, organises and analyses the Project «School outside school» activities.
- Every large methodical group chooses 2 main sub-priorities to work in the 1st semester.
- During the semester, each teacher offers their small methodical team colleagues 1 open lesson, which reveals the selected sub-priorities.
- During the semester, each teacher observes the rest of the 2- 3 open lessons prepared by their colleagues from the small methodical group.
- Lessons analysis – feedback is done after the presentation and observation of the lesson.
- At the end of the semester, the large methodical group analyses the experience learned from the lessons of small methodical groups and sets the sub-priorities for the 2nd semester.

The new methodical work model offers teachers the opportunity to:
- Meet at least once a week and talk to one another (consult, give or receive advice and support, discuss problem situations and seek solutions, share impressions and experiences, etc.);
- Find out what topics are learned in other subjects, find similarities and integrate this information into their lessons;
- Collaborate on planning and conducting lessons, activities of the project "School outside school", etc.;
- Create a culture of trust which enables colleagues to provide constructive criticism
- Watch lessons and gain new experiences from other colleagues;
- Show lessons to their colleagues and get feedback;
- Work with a common understanding on the priority and sub-priorities of the school methodical work, etc.

Project "School outside school" (SOS)
April 13, 2017

Grade	Curriculum Area	Theme to be learned	The achievable result (what students will learn to do, learn, etc.)	Training place, resources needed for students, teaching supplies	Contact teacher
1.a	Human and society	Transport earlier and now	To learn about different types of transport and transport workers	Railway Museum	Marija Berga.
1.b	Language	Book systematisation	To get acquainted with the biggest book collection and the meaning of the language in a human's life	National Library	Marija Keiša
1.m	Human and society	From grain to bread	To learn about different professions in bread production process	Bakery "Lāči"	Kristīne Ziņģīte - Otisone
2.a	Language	Message type essay	Enjoy winter pleasures in the Imanta forest. Learn to write an essay	Imanta forest	Ineta Alksne
2.b	Art. Basic technology and science	The Sun	To learn about the Sun and the Solar System. To colour a plaster sun model using acrylic paint.	Museum of the Sun	Inga Eglīte
2.c	Language	Book systematisation. Literary conference	To learn about the meaning of the language in a human's life and A.A.Milne's "Winnie the Pooh and His Friends" literary images. Participate in the drawing contest.	Imanta Library	Anita Kleina
2.m	Basic technology and science	Seashore and coastal dunes	Students will get introduced to the world of sea plants and animals, will do measurements	Jurmala. Suitable clothes, a notebook and a pen	Aigija Grāvīte

3.a	Language	Book systematisation. Literary conference	To learn about the meaning of the language in a human's life and A.A.Milne's "Winnie the Pooh and His Friends" literary images. Participate in the drawing contest.	Imanta Library	Inese Dundure
3.b	Human and society	Healthy eating, table setting culture	Get acquainted with the history of the catering company "Lido", learn to set the table	"Lido" nutrition school	Ingrīda Bernāne
3.c	Basic technology and science	Tree circumference, plant diversity in the forest	Learn to recognise different plants, trees. To study tree buds. Learn to measure tree circumference, transform the results into larger units of measurement.	The Imanta forest. Weather-suitable clothes, a ruler, a notebook and a pen	Zane Lāma
3.m	Art	To learn about the book systemisation	Learn to appreciate the national language meaning in a human's life	National Library	Iveta Veinberga
4.a	Basic technology and science	Insect diversity	To learn about insect diversity and their circle of life	Latvian? Nature Museum	Rita Madi
4.b	Basic technology and science	Insect diversity	To learn about insect diversity and their circle of life	Latvia Nature Museum	Laura Grāvīte
4.m	Art	Painting original, reproduction, copy	Get acquainted with the collection of art works, analyse works of art	Latvia National Art Museum	Gita Zelka

SCHOOL OUTSIDE SCHOOL

NOVEMBER 30TH 2016

FORM	THE RESPONSIBLE THE METHODOLOGICAL COMMITTEE (THE LEADER OF THE COMMITTEE)	SCHOOL SUBJECT, THE THEME OF ACQUIREMENT	ACHIEVABLE RESULT (WHAT WILL THE STUDENTS GET TO KNOW, LEARN TO DO, ETC.)	THE PLACE OF STUDIES, THE RESOURCES NEEDED FOR STUDENTS, TEACHING AIDS	CONTACT PERSON (THE TEACHER OF THE SUBJECT WHO HAS PLANNED THE LECTURE)
5[A] 5[B] 5[M]	MC OF "TECNOLOGIES AND THE PRINCIPLES OF SCIENCE" SPHERE (I.LAIDINA)	MATHS **LENGTH**	ABILITY TO EXPRESS SOME UNITS OF MEASUREMENT WITH OTHER, TO UNDERSTAND THE DIFFERENCE AMONG NON – TRADITIONAL METHODS OF MEASURING.	FOREST, PARK (IMANTA) TAPE – MEASURE 1,5 M LONG INSTRUMENT "WOOD AT YOUR NOSE" WRITING – MATERIALS WORK SHEETS	IVETA VEINBERGA
6[A] 6[B] 6[M]	MC OF "LANGUAGE" SPHERE (S.LUDZENIECE)	GERMAN LANGUAGE **GENDER OF NOUNS, ARTICLES**	GERMAN LANGUAGE – THE ABILITY TO COMPARE NOUNS IN GERMAN, ENGLISH AND LATVIAN LANGUAGES.	THE MUSEUM OF NATURE	LIGITA BISENIECE
		RUSSIAN **ANIMALS**	RUSSIAN – THE ABILITY TO COMPARE NOUNS IN RUSSIAN AND LATVIAN. TO KNOW THE NAMES OF ANIMALS IN RUSSIAN.		INGA TARASOVA

7^A 7^B	**MC OF "ART" SPHERE** (A.LIKANSE)	MUSIC **MUSIC AS A PART OF CULTURE**	ABILITY TO EVALUATE THE HARMONY OF MUSIC AND THE PLOT.	"FORUM CINEMA" MOVIE **"NEWCOMERS"** DURING THE MUSIC LESSON THE STUDENTS WILL DISCUSS AND FILL IN THE WORK SHEETS MADE BY MUSIC TEACHER	ALDA BULA
8^A 8^M	**MC OF "A HUMAN AND SOCIETY" SPHERE** (S.IGAUNE)	SOCIAL SCIENCES **LEGISLATIVE POWER AND EXECUTIVE POWER OF LATVIA**	<u>FORM 8^A</u> GET ACQUAINTED WITH THE BUILDING OF SAEIMA, WORK OF DEPUTIES. *(THE CLASS IS DIVIDED INTO 2 GROUPS)* <u>FORM 8^M</u> GET ACQUAINTED WITH THE CABINET OF MINISTERS, WORK OF DEPUTIES.	SAEIMA, THE CABINET OF MINISTERS EXCURSION, LECTURE VISITING THE ROOMS OF BOTH PLACES STUDENTS MUST HAVE THEIR IDENTITY CARDS NECESSARY WORK ACCESSORIES: PAPER, PENCIL FOR MAKING NOTES	JANIS LUSIS

WHOLE SCHOOL APPROACH TO ENSURING HIGH QUALITY TEACHING AND LEARNING TO IMPROVE RATES OF PUPIL PROGRESS THROUGH A SERIES OF PRACTICAL ACTIVITIES

School/ Setting:	Riga Special Primary Boarding School No1 – Development Centre
Website:	http://www.r1sips.edu.lv/
Principal:	Laila Lapina
Type of school:	Special Primary Boarding School for students with mild, moderate and severe learning disabilities
Age-range:	6 - 18
Context	- Riga Special Primary Boarding School No 1 – Development Centre, established in 1923, caters for 210 students with special needs. - The school is a part of the municipal school system of Riga and also a part of the Latvian general school system. The national budget pays for: - the education of all children with special needs – this is benchmarked funding for institutions of special education - teacher salaries and maintenance costs of special education institutions - Pupils are referred to our school through special national or local commissions - We have **2 special education programmes**:

<table>
<tr><td></td><td>

- For learners with intellectual disabilities (21015811)
- For learners with severe intellectual disabilities or multiple severe disabilities (21015911)

▪ We have **2 vocational education programmes**:

- Housekeeping (code 2254501),
- Bookbinding (code 2281401).

</td></tr>
<tr><td>

Other background information relating to this strand of professional development

</td><td>

The aims of our school:

- Raising the quality of teaching in the educational environment:
- Provision of a professional, qualitative and goal-oriented educational process
- Individual approach to each student that seeks to incorporate international practices and takes into the account individual capabilities
- Increasing teachers' in-depth understanding of pedagogical, psychological and social aspects of education
- Increasing teachers' hands-on experience and expanding their professional horizons
- Support trust in the professional abilities of teachers

</td></tr>
</table>

DETAILS OF CASE STUDY

▪ The school's Middle Leadership Team supports the senior leadership team by co-ordinating key aspects of teaching and learning by supporting all teachers in their work.

▪ Based on the practical needs of the school and the aims set in the annual development plan, the Middle Leadership Team plans the necessary tasks:

- Coordination of teachers' cooperation in the preparation and planning of educational work (teachers' work plans, thematical plans, individual development plans for students).

- Overseeing the provision and supply of necessary resources.

- Organization of tasks in relation to education process (e.g. further-education seminars, individual and group consultations for teachers, open classes).

- Evaluation of teaching approaches – lesson observation.

- Encouraging teachers to exchange experiences by observing classroom interaction.

- Organisation of continuous professional development (courses, seminars, conferences) in order to promote exchange of information, knowledge, methodological resources and cooperation between educational professionals.

- Cooperation with other educational institutes, organisations and schools.

- Participation in school council.

- Regular updates on documents and information resources.

- Innovation and systematic update of teaching and learning resources, providing easy access to every teacher.

CONTINUOUS PROFESSIONAL DEVELOPMENT PLANNING AND REALIZATION PROCESS IN RIGA SECONDARY SCHOOL NO 53

School/ Setting:	Riga Secondary School No 53
Website:	www.r53vsk.lv
Principal:	Inguna Slapiņa
Type of school:	Secondary School
Age-range:	7 - 19
Context	Riga Secondary school No 53 is situated in Riga in Latvia. It was founded 56 years ago. In the 2017/18 academic year, there are 444 students on roll.The school implements three programmes:

- 67% of the students follow a Basic Education National Minority programme
- 16% of the students are enrolled in a Special Education Needs programme for students who have language disorders and other special needs
- 17% of the students follow a Secondary Education National Minority Programme focusing on Mathematics, Natural Sciences and Technical.

	There is a Prolonged Illness Educational Training Centre (ISIAC) for the students of Zemgale District (5% of the number of students) in the school. The Prolonged Illness Educational Training Centre also cooperates with the Children's Clinical University Hospital, which provides education for students who are ill in a hospital.
Other background information relating to this strand of professional development	There are 60 teachers working at the school, all have higher pedagogical education and further education in line with the Cabinet regulations. 77% of the teachers have got a Master's degree, 3% are completing a doctor's degree and 1.5% have a doctor's degree in geography. Many teachers work in multiple settings, as well as in the ISIAC, which demands constant improvement of teachers' professional qualifications.

DETAILS OF CASE STUDY

The professional competence development plan for the teachers of Riga Secondary School No 53 for the school year is developed at the beginning of September. The plan includes:

- Name;
- Subject and position;
- The topic of the training course or seminar;
- The number of training hours;
- The venue or institution where the training is planned;
- The issue date of the certificate of participation

(See Annex 1)

The three-colour marking shows the progress of the plan. During the term the plan is perfected and adjusted if needed. The changes are recorded in blue. At the beginning of the second term, in January, the plan is updated and re-approved by the principal.

At the end of the school year, the implementation of the plan is analysed at the School Methodological Council meeting.

A summary of the four factors is reflected in the Teacher Professional Development Competence Plan school year XXXX / XXXX.

Four factors are taken into account in the process of elaboration of the teacher's professional competence plan (See Annex 2):

1. Current State legislation;
2. School development plan for 3 years;
3. The topicality of the school in a particular school year, consisting of:
    - City priorities in a particular school year
    - The priorities of the School Methodological Council in a particular school year
    - Conclusions that the school gained from the analysis of the results of the survey of learners, parents and teachers;
4. A variable that can not be foreseen and scheduled. As a variable factor it is possible to mention:
    - purchase of new hardware or software that requires teacher training;
    - the project implemented requires additional training to better implement the planned activities.

Continuous Professional development planning, school year xxxx/xxxx

Status:

| PLANNED | | IS HAPPENING | | ACCOMPLISHED |

Teacher	Subject	Status	Name of the professional development courses	Hours	Location	Accomplished (date, document)

RĪGAS·53.VIDUSSKOLAS
PEDAGOGU·PROFESIONĀLĀS·KOMPETENCES·PILNVEIDES·PLĀNS·2016./2017.MĀCĪBU·GADS
(ar·korekcijām·uz·05.01.2017.)

| | IEPLĀNOTS | | PAŠLAIK·NOTIEK | | IZPILDĪTS | |

Pedagogs·vārds,·uzvārds	Mācību·priekšmets·(-i),·klase	Statuss	Profesionālās·pilnveides·kursu·nosaukums	Stundu·skaits	Norises·vieta	Dati·par·izpilde
	Vizuālās·mākslas·pedagogs		Pedagogu·profesionālo·kompetenču·pilnveide·vizuālās·mākslas·un·interešu·izglītības·programmas·īstenošanai·kompozīcijas·pamatu·apguve	12h	RIIMC	25.10.2016.¶ Kvalifikācijas celšanas·dokuments
			Pedagogu·profesionālās·kompetences·pilnveide·darbā·ar·reemigrantiem·un·imigrantiem	36h	Latviešu·valodas·aģentūra	08.06.2017.¶ Kvalifikācijas celšanas·dokuments
			Seminārs:·"Jaunais·un·aktuālais·Bilingvāla·izglītībā·"	3h	Rīgas·53.vidusskola	22.12.2016.¶ MK·protokols
			Pirmās·palīdzības·pamatzināšanu·12·stundu·apmācības·kurss·bez·zināšanu·pārbaudes	12h	Biedrība·"Latvijas·Sarkanais·Krusts"	07.1.2016.¶ Kvalifikācijas celšanas·dokuments
			Akustika·mācību·iestādēs	36h	Latvijas·arhitektu·savienības·sertificēšanas·centrs	12.01.2017.¶ Kvalifikācijas celšanas·dokuments
			Profesionālās·kvalifikācijas·programma·IT·jomā	6h	SIA·"Uzdevumi.lv"	21.12.2016.¶ Kvalifikācijas celšanas·dokuments

Continuous Professional Development planning in Riga Secondary School No 53

```
TEACHERS' PROFESSIONAL
DEVELOPMENT PLAN
SCHOOL  YEAR
XXXX /XXXX
```

I. LEGISLATION AND REGULATION

II. SCHOOL DEVELOPMENT PLAN

City priorities for the school year

Analysis of pupils' achievements during the school year

III. SCHOOL'S ACTUAL NEEDS

Methodological Council sets priorities

State and School diagnostic work results analysis

IV. VARIABLE FACTOR

Analysis of survey results (Student Surveys, Teacher Surveys, Student Parents Surveys)

State examination results analysis

COLLABORATION WITH PARENTS

School/ Setting:	Riga Pre-School No 273
Principal:	Svetlana Lugovaja
Type of school:	Pre-school
Age-range:	1.5 - 7
Context	Riga Pre-school No 273 was founded in 1989. We provide pre-school education programme for national minorities – 01011121. The pre-school is co-financed by the municipality and National government. There are 11 groups in our school working 12 hours a day.

Staff of the pre-school

Teaching/Pedagogical staff	Technical staff
• Headteacher • Deputy Head • Head of the unit • Teachers – 22 • Music teachers – 3 • Latvian language teachers – 3 • Psychologist • Speech Therapists - 2	• Head of the holding unit • Nurse • Teacher assistants – 11 • Cooks – 3 • Laundry managers – 2 • Handymen - 3

DETAILS OF CASE STUDY

To create successful partnerships with parents, our teaching/pedagogical staff use a variety of collaboration strategies:

Types of collaboration with parents

Individual collaboration

Conversations; academic conversations; individual consultations

Collective collaboration

Parents' meetings; joint creative workshops; parents' involvement in preparation of celebrations; competitions;

Joint celebrations & activities,

Open lessons; Open door days

Informative collaboration

Exhibitions by children and parents; information stands for parents; questionnaires; posters, photos; advice, guidance & recommendations; children's portfolios.

Our experience has shown that parents have little or no information about what is happening in the school. Three years ago we decided to improve and develop types of collaboration with parents. We did this by developing a questionnaire which would ascertain parents' views about what types of collaboration was most useful to them.

Parents' opinion about types of collaboration

After analysing the responses, we concluded that individual conversations, involving parents in the organisation of celebrations and exhibitions, open door days, joint creative workshops are the most popular types of collaboration leading to parents being more actively involved in the school life of their children. We decided to involve parents in joint planning processes for activities, not only as participants but also as organisers and moderators.

Common activities with parents of children

Various exhibitions are regularly organized

Teachers supported parents by helping to write scenarios, preparing learning materials etc. The real success was that the initiative came from parents themselves. As a result, we now have regular sessions with parents such as creative workshops, performance and competitions.

Why collaboration between parents and teachers is needed?

1. Collaboration helps promote a child's social skills;
2. A child's skills are developed over time, their needs are noticed;
3. The learning needs of a child can be more closely matched;
4. Parents receive training and gain knowledge in pedagogy and child psychology;
5. It helps to develop a child's personality – building self-esteem, providing support and developing parents' understanding

When collaboration between parents and teachers is based on mutual trust and respect, this has a huge impact on the overall development of a child's personality. Children learn first in families – the task of schools is to continue the positive learning.

NOMINATION "THE BEST TEACHER OF THE YEAR"

School/ Setting:	Riga Pre-school "Blazmina"
E-mail:	rpiiblazmina@riga.lv
Principal:	Dace Skuja
Type of school:	Local Authority Pre-school
Age-range:	1.5 - 7
Context	• The pre-school institution is responsible for delivering the general pre-school educational programme. The aim is that children acquire the skills needed for primary education through a programme that is implemented by a creative and professional team of employees. • Teaching is carried out in 11 groups from 7:00 a.m. till 7:00 p.m. and is organized by pre-school teachers and pre-school teaching assistants. • 218 children currently attend the institution. • The main form of education is integrated play activity which covers aspects of natural sciences, social sciences and ethics, mathematics, language, technologies, domestic science, art, music and physical activities. Structure of the leadership team: 1. Head teacher – leads and manages the school 2. Deputy Head (Teaching and Learning) – oversees the work of teachers 3. Deputy Head (Business and Finance) – oversees teaching assistants and technical staff

Other background information relating to this strand of professional development	1. The evaluation of Continuous Professional Development (CPD): • Record of courses in the VIIS information system of the institution – pre-school teachers and principals have to attend professional development courses (36 hours) every three years • Annual survey – teachers evaluate existing competences and identify what they want to learn in future • Deputy head collects the information, presents it at the meeting, keeps track of it and offers an opportunity for teachers to attend the courses • Courses, projects, experience etc. are included in annual plan. 2. Types of CPD: • Participation in courses and seminars – feedback afterwards, sharing experiences with colleagues • Open lessons: - pedagogical observation, - analyses – achieved results, suggestions, - plan of the lesson, workout of teaching materials, dissemination of the best practice • Presentations of Bachelor's or Master's Thesis by teachers who still study • Guest speakers from other pre-schools: team building, Mathematics, Speech development etc. • Cooperation with schools – ensuring smooth progression from pre-school to school:

- visiting the school, getting to know requirements
- visiting the pre-school, discussions on how to prepare children so that they can more succeesfully move to the main School

▪ Experience Exchange with other pre-schools – 2 trips a year

▪ Cooperation with other institutions in order to broaden knowledge in different aspects:

- questions of security – State Police, Emergency Service, State Rescue Service
- lectures prepared by Riga City Council Welfare department specialists – healthy food, the role of fathers in children's upbringing, aggressiveness, the formation of addiction etc.

3. Evaluation of teachers' professionalism:

- Collaboration in the team
- Self-control
- Quality
- Dissemination of experience

4. Nomination "The best teacher of the year"

DETAILS OF CASE STUDY

The main criteria:
Attitude towards work:

- planning,
- quality of lessons,
- planning and management of walks,

- cooperation with children (speaking, everyday upbringing),

- design of children's work,

- design of birthday calendar,

- exhibitions

Cooperation with parents:

- problem solving,

- qualitative information display for parents,

- discussion afternoons with parents.

Self-control:

- observance of administration's recommendations and instructions,

- well timed handing over of parents' meetings protocols,

- completion of children's visit logs,

- implementation of educatees' safety training,

- filling in of children's progression evaluation data card,

- attendance at consultations and lectures by guest speakers

- timely handing over of work schedule, self-esteem (attended self education courses, observed classes led by colleagues at the institution, organised thematic afternoons),

- quality and quantity of self-made didactic games,

- organised exhibitions in the group,

- carried out practice for the teachers of the institution,

- introduced innovations at the institution,

- looking after environment in the group (decorations according to season, upcoming holidays, order on shelves, caring about indoor plants, flowers in the group),

- looking after environment in the play-ground (tidiness of the toys box and sandbox – sand outside the box is swept up and the box is covered up after play sessions).

TEACHER COLLABORATION AND THE ORGANISATION OF METHODOLOGICAL WORK AT SCHOOL

School/ Setting:	Ventspils Elementary School № 1
Principal:	Sandra Sulce
Type of school:	Basic education
Age-range:	6 – 16
Background	The school is located in Ventspils city. It was founded in 1923.

School Year 2017/2018:

- number of students in Grades 1 – 6: 259 (age 6 - 12)
- number of students in Grades 7 – 9: 115 (age 13 - 16)

Total number of students: 376

The number of teachers: 38.

The school accomplishes the following licensed educational curricula:

- general elementary education curriculum;
- second level general elementary education (7th to 9th grade) curriculum in Humanities and Social Studies;
- second level general elementary education (7th to 9th grade) curriculum in Maths, Science and Technology;
- special education curriculum for students with learning difficulties.

The school was last accredited in 2017, the next accreditation is in 2023. |

Other background information related to this direction of professional development	From 2013 -2015, at the initiative of Local Municipality, the school had participated in a project run by the Academic Centre of Natural Sciences called "Improving the efficiency of teachers' performance in Ventspils comprehensive schools".
	As a result of this project, previous methodological commissions were reformed into Methodological Collaboration Groups, which organised lesson visits and observation, teachers' cooperation in lesson planning, good practices etc.
	In 2017 the school became a pilot school for the project "Competency Approach to Learning Content". There are 2 teams in the project - primary school (Grades 1-6) and elementary school (Grades 7-9), involving a total of 15 teachers. The whole school is undertaking intensive work on implementing the introduction of the competence - Thinking and Creativity.

DETAILS OF CASE STUDY

The school offers a comprehensive programme of basic education, moving towards humanitarian pedagogy and a Latvian education program.

Priorities:
- Effective teaching and learning processes.
- Personality development in a value-oriented school environment.
- Creativity as the norm in different school activities.

In order to realize these priorities, the professional development for teachers is essential.

There are three main points:

- **The methodological board** defines the needs of the school in the teaching and learning process.

- **Methodological commissions** - working groups, looking for solutions, ways to achieve the intended result.
- **Teachers' cooperation** describes the progress of the school's professional development.

1. The methodological board

Staff:

- Head of Methodological board - deputy director;
- School principal;
- Heads of Methodological commissions.

Aims:

- To create a modern environment in which teachers and students can work creatively;
- To ensure methodological and practical support for teaching, research and cognitive work, implementation of innovative ideas;
- To emphasize the novelty of the new content competency-based approach in general education standards and curricula;
- To promote collaboration between teachers.

Tasks:

- Provide methodological support to teachers, creating a favourable learning environment for the exchange of ideas, experiences and thoughts;
- Coordinate the assessment of diagnostic and test work and analysis of learning outcomes by aspect;
- To promote the professional mastery of teachers, self-education and further education;
- Maintain cooperation with Methodological Commissions in the city on a regular basis.

2. Methodological commissions

There are 5 commissions:

- Mathematics, Science and Technology;
- Languages;

- Art, humanities and sociology;

- Primary school;

- Class teachers.

School Year 2016/2017 - the Aim:

Developing a reading strategy for improving reading literacy and organising reciprocal collaboration in order to promote productive learning for students.

Forms of work:

1. Planning semester activities, events and Olympiads, which provide a differentiated approach to students in the learning process and promote student motivation.
2. Collects, analyses, shares and disseminates the experience of teachers in the school and across the city.
3. The exchange of creative ideas.
4. The development of research work.

3. Teachers' cooperation

Lesson observation   Teachers' learning / collaboration groups

I.   Lesson observation.

The main purposes of the observation:

- To evaluate the quality of the learning/teaching process;

- Get experience;

- Provide personalised support.

During post observation discussions, the colleague thoroughly evaluates the teacher's performance and students' learning and makes decisions about further action. To make it easier three different worksheets were designed:

Worksheet 1 (Appendix 1).

The Aim:

- To observe organizing student cooperation during lessons; they have to work in groups or in pairs.
- Two teachers observe the lesson. One - teacher's activities, the other - students' activities. (The next time the roles are changed).
- Both are being evaluated - the process and the result for two lessons.

Worksheet 2 (Appendix 2).

The Aim:

- Evaluate the purposefulness of observed lesson:
  - are the results to be achieved and criteria understandable for students, clearly formulated and measurable?
  - did students receive feedback from teacher and did students give feedback to teacher?
  - do students succeed in reaching desired outcome?.
- Observe methods, approaches, organisation.

Worksheet 3 (Appendix 3).

The Aim:

- Support the professional development of teachers by providing feedback and suggestions on improving teaching and pupils' learning during lessons.
- Evaluate what's happening in the lesson and record the ongoing activities.
- To provide teacher support on request, with particular reference to what was observed in the lesson.

II. Teachers' learning / collaboration groups.

Development of Learning Groups

2012/2013	Providing a differentiated approach for students in the learning process
2013/2014	Collaboration and cooperation
2014/2015	Problem solving
2015/2016	Sharing experiences to new colleagues
2016/2017	Development of reading literacy
2017/2018	Competency-based approach in general education content

The main area of actions in school year 2016\2017

Primary school (Grades 1-6)	Elementary school (Grades 7-9)
Problem solving, knowledge designing, developing literacy skills.	Literacy strategies for learning.

Results of collaboration:

• When the learning outcomes of pupils are understood, the approach to learning is strengthened.

• Established student-centred learning planning and teacher collaboration at school level as a routine practice.

• More regular lesson visits and lesson observation.

- After school lessons "Express of the Meadow School", languages and sciences for Grades 5-6.
- Integrated lessons.

EVALUATION OF   LESSON OBSERVATION – ASSESSMENT SHEET

Date……………………………………………………..

Form……………………………………………………………

Number of pupils in lesson……………………………….

Subject……………………………………………

Teacher…………………………………………………..

Name/Surname of the observer…………………………………………………………

The purpose of the observation – **organising cooperation during lessons.**

Theme of the lesson……………………………………………………………………………

Planned achievable result for the pupils during the lesson:

………

……

……

……

……

……

………………………….

OBSERVING AND EVALUATING   LESSONS – ASSESSMENT SHEET

Date ....

Form...................

Subject..

Teacher... ....

Theme of the lesson ....

Observer (name, surname) ....

The purpose of the observation – evaluate the purposefulness of given lesson

Criteria	+/-	Evidence and facts that point to prove the criteria
The results to be achieved and criteria are understandable for students, clearly formulated and measurable (e.g. if it is possible to learn during the lesson, is it possible to check it?)		
Cooperation between the teacher and pupil to identify achievable results.		
Assignments carried out by pupils that are focused on achieving the required outcomes.		

Assignments that make the pupils create, judge and explain.		
Assignments are designed in a way that ensures that pupils cooperate and work together.		
Feedback is reciprocal (pupils give feedback about their achievements, and the teacher gives feedback to each student about their achievements)		
Feedback is clearly stated and useful (What I can do, what is successful? What hasn't worked? Why? What to do about it?)		

Other observations and comments

……

………

Signature of observer   :

Signature of teacher   :

Appendix 3, Ventspils Elementary School № 1

OBSERVING AND EVALUATING   LESSONS – ASSESSMENT SHEET

Date ....

Form ....

Number of pupils in lesson ....

Subject ....

Teacher... ....

Theme of

lesson ....

Observer *(name, surname,)* ....

The purpose of observation the lesson – evaluation of the quality of learning process in the classroom.

Observations and comments:

....
....
....
....
....
....
....
....
....
....
....
....
....

      Signature of teacher:

      Signature of observer:

COLLABORATION OF TEACHERS WORKING WITHIN ONE YEAR GROUP

School/ Setting:	Ventspils Secondary School № 6
Website:	www.6vsk.ventspils.lv
Principal:	Valentina Jankovska
Type of school:	Secondary School
Age range:	6 – 19
Background	Ventspils Secondary School № 6, founded in 1983, provides educational study programmes in two languages - Latvian and Russian. The school accomplishes the following educational curricula: • general elementary education curriculum; • general elementary education curriculum for national minority; • general secondary education curriculum in Maths Science and Technology; • general secondary education curriculum in Maths Science and Technology for national minority; • general secondary education curriculum. In the school year 2017/2018 the implementation of the following curricula started: • second level general elementary education (7th to 9th grade) curriculum; • second level general elementary education (7th to 9th grade) curriculum for national minority;

	• general secondary education curriculum (part-time studies, distance learning) • general secondary education curriculum for national minority (part-time studies). School Year 2017/2018: • number of students in Grades 1 – 3: 196 (age 7 - 9) • number of students in Grades 4 – 9: 347 (age 10 - 15) • number of students in Grades 10 – 12: 141 (16 - 19+...) Total number of students - 684 The school was accredited in 2012 - the next accreditation will be in 2019.
Other background information related to this direction of professional development	From 2013 -2015, at the initiative of Local Municipality, the school had participated in the project "Improving the efficiency of teachers" performance in Ventspils comprehensive schools", run by the Academic Centre of Natural Sciences. In the school year 2014/2015 the main focus was on lesson planning, the structure of the lesson, stating the outcomes to be achieved, selection of suitable methods and approaches for the effectiveness and productivity of the lesson; evaluation and task selection, leading to the desired outcome. Particular emphasis was placed on the importance of reading literacy in all subjects. During the teaching process, active lesson visits with observation and sharing of experiences took place. Teachers' learning/collaboration groups working within the same year group were formed.

DETAILS OF CASE STUDY

The way in which teachers collaborate has changed following the discovery that there is no unified strategic approach for teachers to develop students' persistent skills of text analysis in such a way that these skills are meaningfully used in different subjects. Teachers' learning /

collaboration groups working within one class were formed in order to improve the specific skills (reading literacy) of one class of students.

Organization of the process:

Step 1

Problem

In each class, problems / difficulties with reading literacy were identified

Step 2

Aim

In each class, the 'small' reading literacy goal was raised

Step 3
Activities
during
lessons

Teachers use different methods and tasks according to the aim

Step 4
analysis
and aim

The analysis of achieved, the further actions - a new or existing aim

In the initial phase of teacher collaboration, teachers had to identify problems / difficulties individually in each class and prepare teaching methods / techniques for meaningful reading literacy for students. In the subsequent process and in the joint planning of activities in the team, the results to be achieved were set for each class group / class. During a fixed period of time, teachers used different methods / techniques and tasks related to the development of reading literacy in a particular class in their teaching process, according to the stated aim. At the same time, lesson visits and lesson observations were held and analysed (Appendix No. 1). The result of the collaboration of each teacher and pupils in a particular class was analysed in the meetings of the learning/collaboration groups.

Principles of collaboration:
- Common meetings are organized regularly; teachers agree on a specific result to be achieved for further work in a class.
- Commonly developed support materials for improving reading literacy.
- Common evaluation criteria are developed for specific tasks.

Forms of collaboration:

- Collaboration was improved through reciprocal learning.

- Updating the examples of good practice of school teachers, sharing with colleagues.

- In-depth understanding of teachers for using specific methods and techniques to improve students' learning opportunities.

- Teachers know how to use methods / techniques appropriate to the acquisition of specific skills through different forms of teaching.

Benefits for the student:

- Understandable and recognizable, consistent teacher requirements.

- Pupils learn to use one method / technique simultaneously in different subjects, whilst performing different tasks.

- Pupils learn to see the relevance between the result obtained and the optimal result to be achieved.

- Metacognitive skills are developed consciously.

The benefits of a collaborative group in implementing education programs at school:

- The outcome to be achieved was clearly identified in the activities of teachers within one class, including what to improve or develop in their teaching process for a specific period of time.

- The development and implementation of a unified concept of teachers' working principles in the teaching process.

- There are clear criteria for assessing pupils' achievements in acquiring specific skills.

- The student understands that the teacher is interested in the ongoing learning process, because conscious teaching and learning is happening – leading to effective learning.

- It is possible to use appropriate training strategies within one class, because pupils perceive that the meaning of learning is to interact with both teachers and classmates.

- Transferring pupils' wider knowledge from one subject to another.

- Differentiation / personalisation of study work is possible.

In the 2017/2018 academic year, the collaboration of several teachers within one class and one theme / project as well as teacher co-operation in the form of integrated lessons were put forward as a topical issue in the work of the learning / collaboration groups, together with reading literacy.

Lesson observation worksheet

Ventspils Secondary School № 6, form _____ , teacher _____
Subject -
Theme-
Date-

Lesson <u>observation</u> purpose:

Lesson objective, tasks, the result to be achieved:

Activities, events during lesson:

Comments:

Was the expected result achieved?

1. What did the students learn during this lesson? (according to the purpose of the <u>observation</u>)	
2. How did the teacher ascertain what was achieved? (according to the <u>lesson</u> objective, tasks and the result to be achieved)	
3. How did the students understand what they learned in this lesson? (according to the result to be achieved)	

Acquisition of learning skills in lesson (according to the purpose of the <u>observation</u>)

What skills did pupils learn or use during a lesson? Were there skills in the lesson which pupils used at the level of conscious competence?

What did students achieve in this lesson? Why?

What difficulties did students experience during this lesson? Why?

Recommendation:

Observer: Signature:

IMPROVEMENT OF THE QUALITY OF LESSONS

School/ Setting:	Ventspils State Gymnasium № 1
Website:	www.vvlg.lv
Principal:	Parsla Kopmane
Type of school:	State gymnasium
Age range:	13 – 19
Background	The school started as a gymnasium in 1996 – Ventspils Gymnasium № 1. The status of Ventspils State (national) Gymnasium № 1 was acquired in 2015. School Year 2017/2018: • The number of students in Grades 7 - 9: - 179 • The number of students in Grades 10-12-246 Total number of students - 425 • Teachers -42 • School support staff - 13 The school accomplishes the following education curricula second level general elementary education (7th to9th grade) curriculum: • general secondary education curriculum; • general secondary education curriculum in Maths Science and Technology. In the school year 2017/2018 the main objective of the school is to organize a productive learning process aimed at developing pupils' and teachers' competences.

| Other background information related to this direction of professional development | One of the school's main activities is managing methodological work. This includes:

• support systems for teachers preparing for the introduction of new curricula at school;

• improvement of the quality of teaching and professional activities of teachers, learning from each other and sharing good practice;

• professional development for other school teachers within the framework of the Regional Methodological Centre;

• cooperation with other State Gymnasium;

• participation in the School Volunteer Network;

• cooperation with Ventspils University College and Business University "Turiba".

In the school year 2013/2014 effective and targeted learning from each other - open lessons - was launched and then continued in the following school years as "An effective lesson in the 21st century. We learn from each other - I learn how to plan and analyse the lesson properly." |

DETAILS OF CASE STUDY

The senior management team of the educational institution regularly observes lessons, evaluating the quality of the teaching process in accordance with the criteria of an effective lesson.

The reasons for doing this are to look closely at:

1. Compliance with the school methodological work priority: the productive activity of pupils during lessons;

2. The development of a teacher training system within the school;

3. Similar professional support systems for teachers in other schools in the city;

4. The use of experience from other countries and organizations.

During the preparatory stage, the study criteria used by other schools / projects / organizations were explored in order to find an answer to the question - what are the criteria for an effective lesson?

Following discussion with the teachers of each methodological commission, these principles of lesson observation were developed:

1. Observe at least two lessons delivered by the teacher (two different classes on the same day at the invitation of the teacher).
2. Post observation discussion based on observer's notes (maintained by observer).
3. The priority for professional development was stated (what should be improved during the lessons).

Due to the introduction of lesson observation system at the school by administration, teachers have a better understanding of the criteria for effective lesson and there is a positive reflection of professional performance (teachers are more likely to listen to suggestions). In addition, there is the opportunity to receive constructive recommendations and experience ideas for improving their professional performance during lessons.

Alongside the school management team observation, teachers also regularly co-operate in the teaching process, exchange experiences, observing and analyzing colleagues at school in the lessons, sharing examples of good practice.

During the preparatory stage, a list of elements of effective teaching was created (methodological techniques; development of skills for students, etc.); each teacher chose the elements practiced in classes that they wanted to introduce to others; the teachers then signed up to observe another colleague for their professional development needs, and the teachers themselves agreed on the specific time.

As part of this initiative, the following principles of lesson visits and observation were developed:

1. At least one open lesson should be available to other colleagues and one lesson observed per colleague for each semester;

Post-observation professional conversation following the model of 1) praise; 2) offer; 3) ask.

During the organization of the methodological work of the school, teachers worked together to plan integrated lessons. There were several responses / reasons for answering the question - why there is a need for integrated lessons. These were:

To ensure that learning content is not perceived as a set of separate knowledge and skills that are unrelated to everyday life;

- To prevent one topic from being unrelated to different subjects;
- To create a "big picture" and show that the lessons learned are related to each other;
- To activate pupils' creativity and cognitive processes by implementing a comprehensive approach.

Students' parents were also introduced to the educational process. Lessons for parents were modelled and the lecturers, who introduced parents to the latest approaches in teaching and helped to enable them to understand how parents can be engaged in learning, were invited. Parents were also given the opportunity to work with the newest school equipment, which makes it possible to learn natural sciences in a more interesting and deep way. The parents performed the same tasks that students had performed during the classes.

Examples of integrated lesson options:

- Latvian Literature and History - Theme: Latvian Riflemen in the First World War;
- Biology and Chemistry - Theme: Indoor plants and their care;
- Mathematics and Latvian Language - Theme: Numerals;
- Social Sciences and English - Theme: Cultural Diversity and Differences.

As a result of collaboration in designing integrated lessons the following benefits were stated:

- Students broaden their view of what is going on;
- The cognitive process is activated by studying and finding correlations;
- There was a deeper understanding of specific issues;
- Working in pairs, teachers collaborated creatively in areas they were interested in;
- Pupils' knowledge was formed through interconnections, thus linking them to real life.

Both the school management team and the teachers faced challenges through the process of developing integrated lessons:

- The current content of the curriculum leads to the acquisition of the same topic in different subjects in different classes;

- Arrange the timetable in a way that two teachers can work simultaneously in one class;

- To make the integrated lesson meaningful.

Following the introduction of a lesson observation system at school, it is easier for teachers to identify examples of good practice in their classroom and in the work of other colleagues, and teachers began to formulate their own needs for professional development.

The school management team and the teachers faced challenges in the process of lesson visits and observation, such as:

1. Non-acceptance on the part of experienced teachers ("I already know everything!"; "Control or inspection"; "Mistrust").

2. Negative past experience.

3. Progress tracking ways: do teachers use recommendations and change their professional performance.

4. Managing the time for lesson preparation and planning work together.

5. An effective tracking system: how to ensure that all teachers participate in the process with meaning and purpose.

6. In post-observation discussion focus only on the element of the chosen lesson, rather than the entire lesson.

Analyzing the lesson observation process, the following suggestions for better co-operation were stated:

1. To achieve a common understanding within the school about an effective learning process (what are the criteria of productive lesson).

2. Explaining the goals and added value of lesson visits and observation for teachers.

3. Respect the rights of teachers to have a different viewpoint (observation as a conversation for further development for both the teacher and observer).

4. Give the teachers the opportunity to offer their own elements that others can observe in their lessons (voluntary choice).

5. Post-observation conversation of professional experience after the observed lesson- this is an obligation and a necessity.

PROFESSIONAL DEVELOPMENT FOR TEACHERS BASED ON PRACTICE

School/ Setting:	Ventspils Parventa Elementary School
Website:	www.vpp.ventspils.lv
Principal:	Vesma Laurecka
Type of School:	Elementary school
Age range:	6 – 16
Background	The school was founded as a secondary school. It was reorganised into an elementary school in 2016. Since September 1st, 2017 the school's principal has been Vesma Laurecka. School Year 2017/2018: • number of students in Grades 1 – 3: 115 (age 7 - 9) • number of students in Grades 4 – 6: 114 (age 10 - 12) • number of students in Grades 7 – 9: 77 (age 13 - 15) Total number of students – 306 • Pedagogical staff – 34 The school accomplishes the following licensed educational curricula: • general pre-school education curriculum; • general elementary education curriculum; • elementary education curriculum in Maths, Science and Technology;

	• special education curriculum for students with learning difficulties. The education institution is managed by a principal, three deputies and a deputy director for business and finance matters.
Other background information related to this direction of professional development	One of the goals set by this educational institution is to improve the quality of education by organizing the study process and the gradual introduction of a system to quality assure the standard of teaching and learning. Since a teacher is a direct provider of education at school, the quality of education depends on the professional mastery of the particular teacher. Improving the quality of lessons is possible only with continuous improvement of the teachers' professionalism and educational knowledge to ensure they are fully up-to-date. To develop and improve specific competences for students, these competences must first be acquired by the teachers themselves.

DETAILS OF CASE STUDY

To facilitate the high quality development of teacher training on a school basis, the school has developed and implemented a system of professional development for teachers based on practice.

The continuous professional development (CPD) of teachers can be divided into two large groups / approaches that interact with each other - internal CPD (on a school basis) and external CPD. Internal CPD consists of lesson visits for sharing good practice and follow-up analysis of the observed lesson and giving /receiving individual feedback for future development.

With financial support from the Local Education Board in order to improve teaching and communication work, the school carries out surveys of learners, parents and teachers in EDURIO platform. There are two trained data consultants in the educational institution. The views of both learners and parents are sought and feedback on various processes at the educational institution was received. In addition, the pedagogical observations of teachers are taken into account, the outcomes are analysed, solutions are found and a future action plan is developed.

In order to develop the teachers' professional development and continuing education, the school successfully implements various international projects. During the implementation of

the projects, teachers actively collaborate in acquiring and improving relevant and high level skills and competences.

Teaching and learning focus in seminars includes both internal and external professional development. Participation of teachers in externally defined reforms improves the ability to share, plan, implement, conclude - to recognise themselves as part of the whole system whilst, at the same time, to see and use the potential of developing an individual approach in organising the study process in the school.

For **personal professional development** teachers act in the framework of their professional competence and personal development, make independent decisions, take responsibility and realize that their success in the school environment is basically determined by their own personal mastery, professionalism in subject knowledge and self development.

The issue of **classroom management** is also linked to external professional development. Whilst this applies to all pedagogical aspects, classroom management is also closely linked to the social context. Pedagogy sits alongside all the changes that have taken place in the world, all influences.

Professional competence, experience gained through **cooperation** is very important for teachers' daily work, as well as the ability based on education and knowledge, experience, values and attitudes, that is required for the role of a teacher.

Lesson visits to other schools/open lessons in school and post observation discussions and analysis **are** aimed at introducing and sharing the best practices seen in interesting, high quality and meaningful lessons. This then broadens the professional horizons of teachers.

To progress the introduction of new teaching methods in school, to improve the effectiveness of traditional teaching methods in practice, to provide a pupil-centered learning process and to make sure that the development impacts directly on teaching work, the school cooperates with the **Methodological Centre** and offers various other opportunities that help teachers to become and develop professionally.

The designed system - continuous professional development for teachers based on practice, provides opportunities for improving the professional competence of every teacher, ensuring

an impact on the general professional development of the whole school team, thus ensuring the educational processes of the school in accordance with the current statutory requirements, providing education for sustainable development.

Benefits:

- Reorganization of the teaching process in the school - division of classes into grades 1-3, 4- 6, 7-9.

- Teachers' Methodological Collaboration Groups according to 1st-3rd, 4th-6th, 7th-9 th Grades.

- Methodological commissions of the subject area(s) - languages, natural sciences, social sciences, art and sports.

```
                    ┌─────────────────────────┐
                    │ Organising alternative days │
                    └─────────────────────────┘
```

Organising alternative days

Professional development -
sharing experiences after courses,
open lessons, etc. necessity.

Olympiads, competitions -
participation, organization,
recording, analysis

Meetings for students' progress
and achievements (predictions)

Analysis of learning outcomes,
analysis of diagnostic work and
exam results

Update of the reform of new
curriculum and standards at school

Challenges:

1. Acceptance of new ideas.

2. Understanding of/for responsibilities.

3. Changes - positive.

METHODOLOGICAL WORK AND TEACHERS' PROFESSIONAL COMPETENCE IN THE SCHOOL

School/ Setting:	Ventspils Secondary School № 3
Website:	www.3vsk.lv
Principal:	Vera Sengelija
Type of School:	Minority school, Secondary
Age range:	6 – 19
Background	The school is located in the city of Ventspils. It was founded in 1959. School Year 2017/2018: • number of students in Grades 1 – 9: 319 (age 6 - 16) • number of students in Grades 10 – 12: 65 (age 16 - 19) Total number of students: 384 The number of teachers: 37. The school accomplishes the following educational curricula: • general elementary education curriculum for national minority; • general secondary education curriculum for national minority. Since 1996 multilingual traditions were started at the school. Nowadays English is taught as the 1st foreign language (Grade 1), German and French as the 2nd language (at secondary level).

Other background information related to this direction of professional development	From 2013 -2015, at the initiative of Local Municipality, the school had participated in a project run by the Academic Centre of Natural Sciences called "Improving the efficiency of teachers' performance in Ventspils comprehensive schools". There were several teacher training courses, classes for the school administration (leadership) and a group of advisers, which motivated the school administration and the teachers to independently continue their work - to increase teachers' professional competence.
	In the school year 2013/2014, a process of lesson visits and observation was started – open lessons under the title "Effective 21st century lessons - we learn from each other". This continued the following year.

DETAILS OF CASE STUDY

The school's strategic development plan states that this is a "School of Health and Individual Development".

All managerial, methodological and analytical activities are systematic and content-oriented, focusing on the exchange of pedagogical discoveries and the possibility of developing co-operation.

Pedagogical cooperation is provided by the school methodological service (Appendix 1).

METHODOLOGICAL SERVICE OF VENTSPILS SECONDARY SCHOOL № 3
OBJECTIVE: Improvement of teachers' professional competence and personal efficiency in the process of implementation of the "new pedagogy"

Part of the structure	Participants	Functions
Pedagogical council	Pedagogical staff	When analysing the school's work, decisions are made for the further development of the school including decisions on the participation of teachers in school and city pedagogical conferences and other related conferences.
Methodical council	School administration and heads of methodological commissions	Supervises the work of methodological commissions, creative and learning groups.
Methodological commissions	Each teacher, according to the subject taught, is involved in one of six commissions.	Provides active teacher collaboration in realization objectives, contributes the quality of teaching and the achievements of pupils, and determines the ways of

		improving the results of pedagogical cooperation.
Creative group	Mobile group. Depends on the direction of work.	Generates ideas, plans the form and content for a specific event. It refers to methodological work and personal development.
Teacher learning group	Natural sciences and maths, English and Latvian language groups.	Sharing experience by observing "good practice examples" in order to improve the efficiency of the learning process through productive cooperation.

The goals and strands of work of **the methodological commissions and creative groups**, and the outcomes to be achieved by this cooperation, are presented in Appendix 2.

One of the ways of improving a teacher's professional competence is cooperation in learning groups.

The group's common goal is:

1. Promoting and developing cooperation between different levels and forms of learning among different age groups and teachers as well as updating the learning models:
   - teacher ↔ student
   - teacher↔ teacher
   - student ↔ student
2. Encourage the increase in the quantity and quality of research and creative work.

Teaching group activities / actions:
   - The agreement of areas for improvement in teaching in the subject has been reached and proposals put forward.
   - A plan to assess each student's learning outcomes has been developed and approved.
   - The extent of homework in their subject was evaluated.
   - Criteria for evaluating creative work in their subject are developed.

- Using collaborative models in lessons: pair work, group work, etc.
- Thoughts about transition and progression through different school phases: primary school, elementary school, secondary school.
- Discussions in a group - how to prepare a student for each part of the learning process, who is responsible for it.
- Specifies the measurable group goal for a specific period. Personal goals are then adjusted as necessary.
- Predictions for each student at the end of the semester - grade in particular subject and what needs to be done to raise this.
- Lesson visits and observation schedule with the focus we want to observe.
- Determine what help is needed from school management team, Educational Board.
- Productive teaching tasks were designed and approved.
- Sharing experience.
- Analysing the use of ICT in teaching process, about assistance and improvement.

Additional activities:

- Extra-curricular activities for primary school, elementary school and secondary school. The classes were run by the students.
- Designing and managing an integrated cross-curricular game for secondary school students. The game was run by students and teachers.
- Group work with Google Drive and documents.

It is important that each teacher set their professional goal in the light of the school's priorities (to ensure a co-ordinated approach), as well as actively engaging in lesson observation (to learn from each other). The analysis and evaluation of these new pedagogical experience will then help to improve their own practice.

Criteria for evaluating creative work and scientific research work have been developed.

The cooperation of the school administration (leadership), methodological service and teachers in teaching groups has led to a significant increase in the professional competence and efficiency of teachers.

The school development dimension is determined by the scheme for the implementation of the scientific methodological theme (Appendix 3)

- Pedagogical meetings determine the content and forms of the school year (training, exchange of pedagogical findings, decisions),
- Meetings of the school management team (analysis of the quality of the implementation of the seven key areas).
- Psychological, pedagogical and valeological seminars (teacher training, parental training, open days, counseling).
- Organization of the school pedagogical conference "Effective teacher - successful pupil" (presentation of students' intellectual research work, teachers' pedagogical discoveries).

The school develops the professional competence of pedagogues (Appendix 4):

- Consider challenges ahead, working to create and improve the quality of the education environment, co-ordination, anticipating the outcome.
- An important role in raising the professional competence of teachers is the learning environment: methodical, beneficial, creative, health-improving, and cultural.
- On a regular basis the school works on improving the educational environment, personal, professional relationships and satisfaction of teachers (Appendix 4).

Appendix 1

METHODOLOGICAL SERVICE OF VENTSPILS SECONDARY SCHOOL № 3

OBJECTIVE: Improvement of the teacher's professional competence and personal efficiency in the process of implementation of the "new pedagogy"

Structure of Methodological Service

PEDAGOGICAL COUNCIL

METHODOLOGICAL COUNCIL

Methodological Commission

Creative Group

Teacher Learning Groups

PEDAGOGICAL CONFERENCES
(SCHOOL, CITY, INTERNATIONAL LEVEL

FUNCTIONS:

- ✓ INFORMATIVE
- ✓ ANALYTICAL
- ✓ EXPERT MONITORING
- ✓ EDUCATED
- ✓ ADVISORY
- ✓ INNOVATIVE

THE CONTENT OF

METHODOLOGICAL WORK:

- ✓ TEACHER PROFESSIONAL NEEDS DIAGNOSIS
- ✓ COOPERATION IN PLANNING TO REACH THE SCHOOL'S GOALS
- ✓ APPROVAL OF NEW METHODS, APPROACHES, NEW TECHNOLOGIES
- ✓ ANALYSIS OF LEARNING ACHIEVEMENTS
- ✓ RESEARCH ACTIVITIES

THE FORMS OF METHODOLOGICAL ACTIONS;

- ✓ THEMATICAL AND ANALYTICAL MEETINGS OF PEDAGOGICAL COUNCIL
- ✓ METHODOLOGICAL COUNCIL (LONG TERM OBJECTIVES)
- ✓ SUBJECT WEEKS (AFTERSCHOOL AND AFTERCLASS ACTIVITIES FOR DIFFERENT SCHOOL SUBJECTS)
- ✓ PSYCHOLOGICAL PEDAGOGICAL SEMINARS
- ✓ OPEN DAYS AT SCHOOL
- ✓ CONTESTS „TEACHER OF THE YEAR", „NOMINEES OF INNOVATION FUND", NOMINEES OF „MOTIVATION PROGRAMME FUND", „ PERSON OF THE YEAR", „STUDENT OF THE YEAR"
- ✓ PEDAGOGICAL CONFERENCES (PRESENTATIONS OF IDEAS AND PEDAGOGICAL DISCOVERIES)
- ✓ PEDAGOGICAL DIAGNOSTICS /MONITORING
- ✓ SHARING EXPERIENCES (LESSON VISITS)

Appendix 2

Work of Ventspils Secondary School №3 Methodological Council and Creative groups, School Year 2017-2018

Methodological Commission of primary school teachers	Methodological Commission of Russian teachers	Methodological Commission of Latvian teachers	Methodological Commission of foreign language teachers	Methodological Commission of natural sciences teachers	Methodological Commission of „Human and sociology"
Goal To perfect pedagogues' qualifications and improve professional integrity, tutoring more effective methods and methods of teaching students on the back of personalized tutoring: by mastering and implementing modern technologies.	**Goal** To improve rational lesson planning tasks and class conduction skill, in order to improve every student work and progress through team play and motivation	**Goal** Development of students' creativity. By using critical thinking in reading and writing. Improvement of Latvian language competence in the effect of student integration in Latvian society and establishing the basis for education, as well as advancing teachers' critical thinking.	**Goal** To promote pupils (seen as creative people) personal growth by improving foreign language competences in communication, recurrent education and cultural dialogue within a modern society.	**Goal** Improvement of the lesson's effectiveness using modern technologies and integration of lesson's content.	**Goal** Upgrading the efficiency of the lesson using resourceful teaching methods.
Work streams • Acquisition and usage of different methods for improvement of elementary school pupils critical thinking by reading and writing • Perfection the work system of how to work with D-students and talented students • Analysis of the lesson and self-analysis	**Work streams** • Improvement of productive reading skills • Promotion of critical thinking skill • Demonstration lessons • Visiting different lessons • Analysis of the lesson and self-analysis	**Work streams** • Creation of inter subject connection by learning other school subjects' vocabulary • Bringing the necessary knowledge, conversation and writing skills up-to-date • Actualizing pupils' skill of self-evaluation	**Work streams** • Taking notice of the pupils' improvement of reading and writing skills to develop their communicative and social culture competences • Improvement of pupils' skills of selecting and analyzing of the items of information, structuring, comparison of views and reasons	**Work streams** • Developing pupils' productive thinking by studying and using oral and text exercises • Improvement of pupils' skills of selecting and analyzing of the items of information, giving reasons and learning to listen to others • Focus on the work with D-students and pupils with a talent	**Work streams** • Helping the teacher to improve the effectiveness of teaching and learning process, drawing attention to the development of lesson's structure • Encouraging the motivation, strengthen the positive attitude of the teacher • Draw attention to the development of pupils' critical thinking

Priorities

1. To develop pupils' competences in learning performance and general education.
2. To record, analyze and improve the dynamic of learning achievements of each pupil.
3. To increase pupils' interest and motivation in the learning process by proficient planning result to be achieved, as well as students' social optimism and independence.

Planned results

1. Positive dynamics and self-fulfillment of each pupil's learning achievements.
2. Teachers' and parents' satisfaction.
3. Improvement in the results of National Tests.

Developing the critical thinking of pupils and teachers in the framework of bilingual education

Scheme of realization of the scientific methodological theme

Senior Leadership Team meetings

- Dynamics of students' achievements
  Grades - 3rd, 6th, 7th – 9th, 11th   *October, April*
  Grades - 2nd, 5th, 10th, 12th   *November, March*
- Developing pupils' creative potential using critical thinking and ICT Technology (Communication and Presentation Skills).
  December

- The role of homework in strengthening core material (extent, evaluation, evaluation criteria, result)
  January

- The role of creative tasks in raising academic achievement (quantity, evaluation quality, evaluation criteria)
  February

- Collaboration of Primary, Elementary and Secondary school teachers, realizing the basic priorities (interim report of learning groups)
  November, February

Psychological Pedagogical Seminars

- Sharing experience – continue to organize and manage open lessons, optional classes, master classes.
- Methods and techniques working with students with low motivation and learning difficulties. *October*
- Pair work, group work and management of the individual development of students.
  November

- Identification and implementation the school's main priorities (goals) and personal goals.
  January

- Learning time - deficit time. Linguists.
  February

- Development of universal thinking activities in the group of 5th-12th grade students. Language learning group.   *March*

School and family

co-operation

- **Parents' meeting**
  Priorities and perspectives of school and family co-operation.
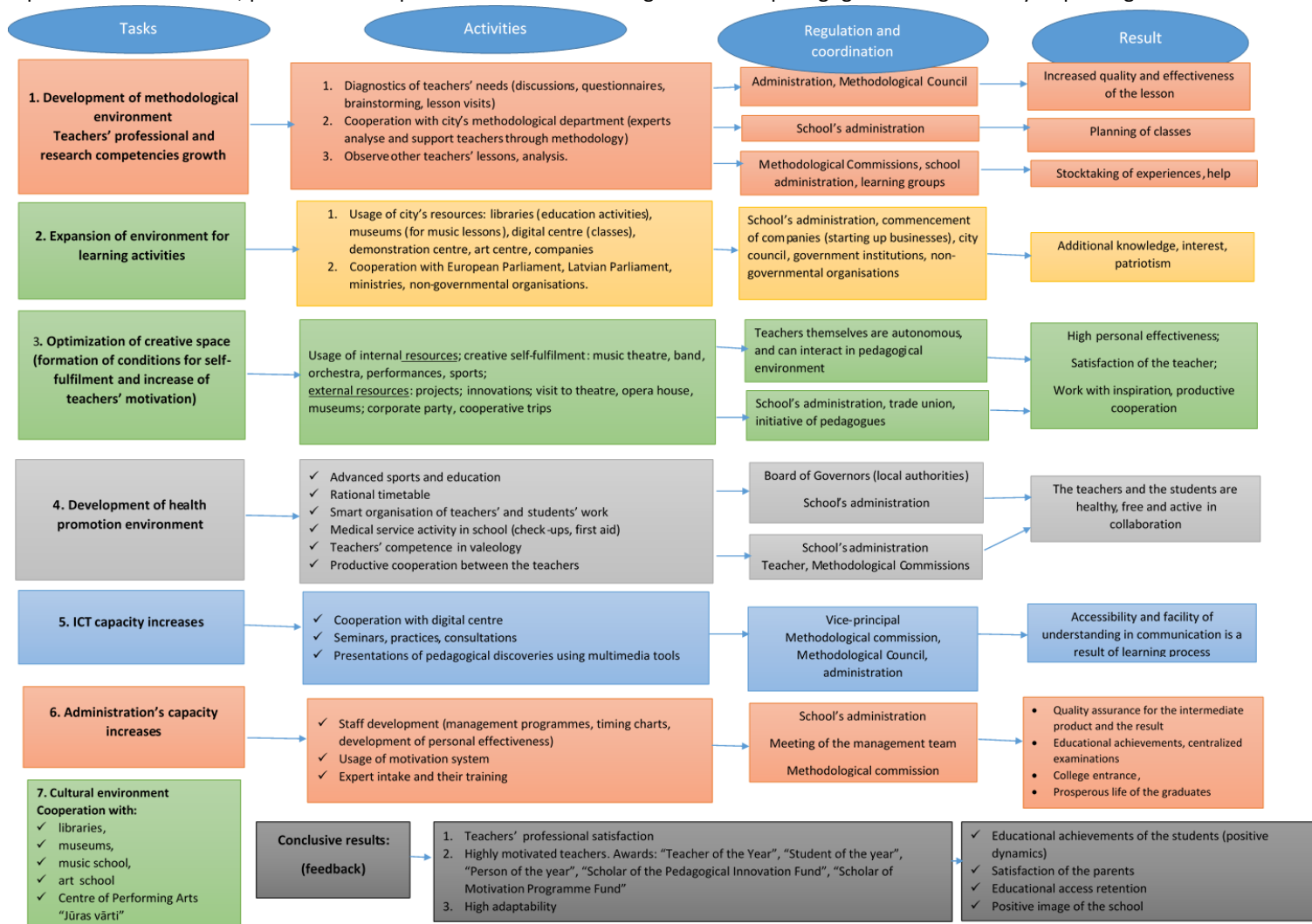 *January*

- **Parents' meeting**
  Effective ways to develop students' thinking and motivation, move towards creativity in the learning process.
  March

Pedagogical meetings

pedagogical collaboration

- Analytical – prognostic meeting:
  - Stating priorities and dimension of reaching the goal.
- The process of developing pupils' key competencies and thinking levels.
  V.Sengelija, August
- Use of critical thinking in teaching with the aim of improving the quality of students' achievement and the efficiency of teachers' work:
  - Presentations of learning groups
  - Presentations of productive tasks through subjects.
    I.Sahmanova, A.Karelis, J.Basarova,December
- Use of ICT for optimizing learning and extracurricular work and for improving the students' performance dynamics.
  J.Filippova, N.Matjusenko March
- Pedagogical meeting dynamics of students' achievements (increasing/ decreasing) for 1st, 5th, 6th, 9th, 10th, 12thGrades:
  - The system for monitoring and recording the optimal student performance dynamics.
  - Assessment of the quality of the learner's knowledge - improvement of methodology.
    L.Ivanova, through the year (2x a month)

Methodological Council

- The quality and measurability of the goal stated by Methodological commission and each teacher.
  October

- Results of lesson visits and observation.
  November

- Dynamics of students' achievements (analysis)
  December
- Teachers' performance in accordance with the goals set (feedback)
  February

- Effectiveness of the lesson using productive tasks. Interaction of the quality and training outcome of a class (quality analysis)

Organization of informative open days

- Bilingual open classes, (state language) and in Latvian.
- Presentation of intellectual and creative activities of pupils and teachers.
- Parental counseling on issues of psychology, pedagogy and valeology.
- Dialogue with school administration and methodological council.
  November, December, February, March

Seminars for parents

Constructive conflict resolution technique at school. Lesson to agree.
November

Reducing the risks of intellectual congestion and emotional collapse for teachers and pupils.
February

School Conference « From key competencies to quality»

Presentations of students' intellectual – research papers   Pedagogical discoveries   Exhibition of ideas
(all teachers are participating)   *April*

City Conference «An effective teacher - successful student» *August*

The effectiveness of teachers' professional competencies at Ventspils Secondary School Nr 3

Development of personal effectiveness, professional responsibilities and increasing the level of pedagogues' satisfaction by improving school's educational environment.

Tasks	Activities	Regulation and coordination	Result
1. Development of methodological environment Teachers' professional and research competencies growth	1. Diagnostics of teachers' needs (discussions, questionnaires, brainstorming, lesson visits) 2. Cooperation with city's methodological department (experts analyse and support teachers through methodology) 3. Observe other teachers' lessons, analysis.	Administration, Methodological Council / School's administration / Methodological Commissions, school administration, learning groups	Increased quality and effectiveness of the lesson / Planning of classes / Stocktaking of experiences, help
2. Expansion of environment for learning activities	1. Usage of city's resources: libraries (education activities), museums (for music lessons), digital centre (classes), demonstration centre, art centre, companies 2. Cooperation with European Parliament, Latvian Parliament, ministries, non-governmental organisations.	School's administration, commencement of companies (starting up businesses), city council, government institutions, non-governmental organisations	Additional knowledge, interest, patriotism
3. Optimization of creative space (formation of conditions for self-fulfilment and increase of teachers' motivation)	Usage of internal resources; creative self-fulfilment: music theatre, band, orchestra, performances, sports; external resources: projects; innovations; visit to theatre, opera house, museums; corporate party, cooperative trips	Teachers themselves are autonomous, and can interact in pedagogical environment / School's administration, trade union, initiative of pedagogues	High personal effectiveness; Satisfaction of the teacher; Work with inspiration, productive cooperation
4. Development of health promotion environment	✓ Advanced sports and education ✓ Rational timetable ✓ Smart organisation of teachers' and students' work ✓ Medical service activity in school (check-ups, first aid) ✓ Teachers' competence in valeology ✓ Productive cooperation between the teachers	Board of Governors (local authorities) School's administration / School's administration Teacher, Methodological Commissions	The teachers and the students are healthy, free and active in collaboration
5. ICT capacity increases	✓ Cooperation with digital centre ✓ Seminars, practices, consultations ✓ Presentations of pedagogical discoveries using multimedia tools	Vice-principal Methodological commission, Methodological Council, administration	Accessibility and facility of understanding in communication is a result of learning process
6. Administration's capacity increases	✓ Staff development (management programmes, timing charts, development of personal effectiveness) ✓ Usage of motivation system ✓ Expert intake and their training	School's administration Meeting of the management team Methodological commission	• Quality assurance for the intermediate product and the result • Educational achievements, centralized examinations • College entrance, • Prosperous life of the graduates
7. Cultural environment **Cooperation with:** ✓ libraries, ✓ museums, ✓ music school, ✓ art school ✓ Centre of Performing Arts "Jūras vārti"	**Conclusive results:** **(feedback)**	1. Teachers' professional satisfaction 2. Highly motivated teachers. Awards: "Teacher of the Year", "Student of the year", "Person of the year", "Scholar of the Pedagogical Innovation Fund", "Scholar of Motivation Programme Fund" 3. High adaptability	✓ Educational achievements of the students (positive dynamics) ✓ Satisfaction of the parents ✓ Educational access retention ✓ Positive image of the school

TEACHERS' COLLABORATION AS AN OPPORTUNITY FOR PROFESSIONAL DEVELOPMENT

School/ Setting:	Ventspils Secondary School № 2
Website:	www.2vsk.ventspils.lv
Principal:	Ludmila Volodina
Type of School:	Minority school, Secondary
Age range:	6 – 19
Background:	The school is located in city Ventspils. It was founded in 1945. School Year 2017/2018: • number of students in Grades 1 - 9 - 445 (age 6 - 16) • number of students in Grades 10 - 12 - 95 (age 16 - 19) Total number of students - 540 The number of teachers - 40. The education institution is managed by a principal, six deputies (education, methodological work, personal development, extra-curricular work, ICT and the coordinator of the timetable). The school accomplishes the following education curricula: • general elementary education curriculum for national minority; • general secondary education curriculum for national minority;

	• general secondary education curriculum in Maths Science and Technology for national minority. The school was accredited in 2012, next accreditation in 2018.
Other background information related to this direction of professional development	From 2013 -2015, at the initiative of Local Municipality, the school had participated in a project run by the Academic Centre of Natural Sciences "Improving the efficiency of teachers' performance in Ventspils comprehensive schools". There were several teacher training courses, classes for the school administration and a group of advisers. As a result, two learning groups of teachers were formed at the school, two school consultants worked as assistants for teachers, and a process of lesson visits and observation was developed. The Methodological Centre was established by the Local Municipality and the assistance are widely used at school: during the two academic years, eight teachers received professional support in cooperation with advisers from the Methodological Centre.

DETAILS OF CASE STUDY

The school is focused on the process of teaching and personal development, its motto is "Become better, know more!" This applies to pupils and teachers.

Our **school's mission** is to provide learners with a safe and appropriate learning environment as well as to take care of upbringing well-behaved and versatile personalities by using innovative teaching methods and modern technologies, following the amendments in teaching standards and examination contest according to the requirements of the Ministry of Education and Science of the Republic of Latvia.

School's Vision

A school that learns and teaches to learn. The learning process focuses not on teaching but on learning, where the priority is the participation of all the sides involved – learners, staff, parents, etc. – in the learning process.

School's values - sustained knowledge, traditions, ability to change.

The goal of the school's work is to implement the educational process in order to achieve the goals set by the general education program in a democratic, professional and creative environment.

The school is open to new progressive ideas, being actively involved in projects and activities in the city: presentations of ideas, experience exchange seminars, methodological days. There are four heads of Methodological Commissions, a Junior Achievement Coordinator, two school counsellors and a Methodological Centre consultant at the school. The school is well equipped with new technologies, the teachers and the students use them in learning process. The process of improving the qualifications of teachers takes place on regular basis: courses, experience exchange activities at the state, city and school level.

Ventspils Secondary School No. 2 teaching and educational PRIORITIES for School Year 2017/2018

Teaching priorities
1. Continuing developing scientific and research skills in Forms 1-6.
2. Developing reading skills during the lessons and outside the school. Analysing and presenting good practice examples.
3. Self-regulated learning during the lessons.
4. Teachers' cooperation within the Learning Circles.
5. Development of students' entrepreneurship activities.

Educational priorities
To strengthen belonging and loyalty to the Republic of Latvia due to preparing for the 100th anniversary of the state:
1. Patriotic education, beginning with patriotism towards the class and school.
2. Promoting the position of an active life style, development of leadership qualities.
3. Researching history, traditions, contemporary events of the Republic of Latvia.

In recent years a lot of attention has been paid to the methodological work of the school, in particular the forms of work that promote teacher co-operation. An effective structure has been developed (as can be seen in the chart).

Structure of School's Educational and Methical Activity

Headmistress → School Board

Deputy Headmistresses

School counselors

Methodical Commission of the Latvian Language
Methodical Commission of the Russian Language
Methodical Commission of Foreign Languages
Methodical Commission of the Primary School
Methodical Commission of the Exact Sciences
Methodical Commission of the Artistic Sciences
Methodical Commission of Form-Tutors

Language Teachers' Learning Circle (Forms 5-12)

Language Teachers' Learning Circle (Primary School)

WORKFORMS
- Pedagogical meetings
- Administrative sessions
- Meetings of Methodical Commissions
- Meetings of Learning Circles
- Theoretical and practical seminars
- Demonstration lessons
- Events for promoting school subjects
- Creative Exhibitions / Idea Terminal
- Thematic days
- Methodical days
- Conferences
- Master classes

Types of teacher co-operation

1. Learning groups

On a voluntary basis, two language (Russian, Latvian, and English) teacher groups have been formed at the school. The main objective of the work is teacher co-operation - teachers support each other, give advice, put forward proposals for improvement of the teaching process, increase the efficiency of a lesson, learn to reflect on their work. Each learning group has its own goals and objectives.

School Year 2016/2017	Learning groups	
	Primary school	Elementary and Secondary school
Tasks	1. Understand the difficulties and benefits of 1st grade students learning 3 languages simultaneously: • mother tongue (Russian); • state language (Latvian); • foreign language (English). 2. To develop the learning process, when obtained communicative competences, language competences and socio-cultural competences in one language lesson, and then learn to apply in other language classes.	1. To agree on common methods for teaching a language in order to use a unified strategy in the language lessons for the teaching of individual language subjects.
Results	• tasks and worksheets in three languages are worked out; • organized integrated classes in three languages; • organized integrated classes in two languages; • calligraphy contest in all three languages.	Worked out: • Sample plans in all languages to facilitate text comprehension, retelling and the writing part; • Common measurement tools (e.g. check lexicon knowledge before working with a text and then); • A common strategy for task assignment (e.g. finding keywords, giving instructions: read, write down, underline), etc. • feedback - "I knew - I learned".

Once a month, members of the learning team share their experience, discuss work results and problems.

Group coordinators - subject teachers are equal members of the group, which not only fosters reflection and conversation, but also actively engages in group work and helps the others to move forward.

The participants of the learning groups present the results of their work during the pedagogical meetings and methodological days, also introduce the school staff to the ongoing process. It varies and improves the school's activities and facilitates language learning for students of the minority school.

2. In-School Support team

The other way teachers cooperate is a work in the In -School Support team. In the School Year 2017/2018, this involves teachers working in grade 7a, a school psychologist, a social pedagogue and a class teacher. The head of the team is a deputy director in the area of personal development.

There were discipline problems in the classroom and the lack of motivation for some students to learn subjects. In order to resolve the situation, the support team worked out a plan and, on the basis of the experience of other schools, a system for monitoring student's progress dynamics was introduced (see Appendix 1).

 Activities of the In-school Support team:
- sharing experience;
- discuss students' progress;
- working out recommendations for teachers to help students who succeed, not to lose motivation to learn and to provide support to those with learning difficulties;
- observe colleagues' lessons to learn work strategies, give and receive feedback.

3. Lesson visits and observation

In school, the most effective strategy for improving the quality of teaching is **lesson observation** and **post-observation discussions**. The exchange of experience in the most successful educational systems in the world (for example, in Finland, the United Kingdom, Singapore) is

the responsibility of the teacher, which is included in the job description. The project "School 2030" is also based on teachers' ability to work purposefully and effectively collaborate.

As only half of the teachers were involved in the project run by the Academic Centre of Natural Sciences, the school administration decided to offer teachers the opportunity to cooperate with each other, gain practical experience and knowledge acquired during the project. It was decided to form mixed groups in order to ensure that teachers looked more broadly, beyond the viewpoint of only one subject or age-group.

L1	L2	L3	L4
English Primary School	English	English	English
Natural Studies	Russian	Russian	Russian Primary School
Russian	Russian Primary School	Latvian Primary School	Latvian
Latvian	Latvian	Latvian	Latvian

Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
Primary School	Primary School	Primary School	Primary School	History
Physical Education	Physical Education	Music	Art	Primary School
Computer Studies	Mathematics	Mathematics	Social Studies	Mathematics
Physics	Chemistry	Biology	Mathematics	Home Economics (boys)

- Between February and April 2015, the task of teachers was to visit their colleagues' lessons (from the appropriate group) and observe the way of students' learning as a result, how feedback is given and received. Subsequently, a teachers' pedagogical meeting "An Effective Lesson" was held where the results of the lesson visits were presented.

- During the school year 2016/2017 each teacher observed at least two lessons. Teachers observed the lesson structure, and how productive the learning of pupils was. The teacher invited colleagues from other schools as well. The lesson observation worksheets were designed (see Appendix 2) by the school management team and the

ready-made lesson observation worksheets designed by other school improvement organisations, who work with schools, were introduced.

As a result of meaningfully directed work, the awareness that lesson visits and observation is not an inspection, but a great opportunity to give and receive immediate feedback, started to form. During school year 2016/2017, 60 lessons were observed (including 14 double lessons).

4. Consultants

1. Several teachers for professional advice and assistance are involved in co-operation with consultants. Among them are both experienced and new teachers.

2. Two of the school's in-service consultants are involved in the lesson observation process:
   - help to organize post-observation conversations after lessons, because it is important them to be constructive,
   - participate in the meetings of the methodological commissions, organize the training for core subject co-ordinators about the analysis of observed lessons;
   - visit to observe teachers lessons at their request and according to the plan of school administration.

Most teachers now understand the principle of "learning from one's own experience and others", they are ready to share ideas and / or solve problems. At their request, they ask the school or city consultants for assistance to improve their teaching and to develop their understanding of the effectiveness of the lesson.

Twice a year the school administration organises individual discussions with each teacher, discussing specific issues related to teacher's improvement and professional development, successes and difficulties in their professional work. This discussion is a part of self-evaluation. (see Appendix 3). The purpose of the discussion is to give and receive feedback, promoting the reflection process. Now, once a year, such conversations will take place with the class teachers as well.

Student's Progress Dynamics (Intelligence, Intellectual and Learning Skills)

The Aim: Obtaining summary of the development of various aspects of the pupil's personality, determination of his development tasks according to the criteria set, to assess the extent to which specific abilities have developed in the stage of development of a certain personality.

Student's name and surname, whose progress dynamics are followed	Motivation of the study process	To what extent did the intellectual skills (analysis, synthesis, comparison, determination of regularities) form	Degree of training opportunities	Learning skills	Accomplishment in individual lessons	Accuracy and discipline	Communication and degree of cooperation
1	2	3	4	5	6	7	8

Criteria for assessing dynamics

Nr	Criteria	Score points
1.	**Motivation of the study process:**	
	• **learn deliberately,** aspires to get deep knowledge and share them with classmates.	5
	• **studying with interest,** participates in educational activities, not limited to a school program, however, under the supervision of teachers and subjects of their own interest;	4
	• **reluctant to study under the supervision of teachers**, educational activity is low - no more than the school program provides;	3
	• **does not show** a particular interest in acquiring knowledge, educational activity completely low, poor knowledge of school curriculum;	2
	• **indifferent** to studies, no educational activity, knowledge of the school program is unsatisfactory.	1
2.	**To what extent did the intellectual skills (analysis, synthesis, comparison, determination of regularities) form:**	
	• **high,** independently determines the content, the idea (including the latent) to be analyzed summarizes precisely and extensively, easily reveals the regularities;	5
	• **good,** deliberately formulates the idea of the analyzed content with the insignificant help of adults, is able to collect, to find differences in the comparative, regular relationships detected with the help of adults;	4
	• **medium,** tasks that require analysis, synthesis, comparison, compilation and identification of regularities, are not always happy with the appropriate adult stimulus;	3
	• **low,** tasks are performed with the help of organizing and directing the teacher, does not know how to use the type of activity has already learned in a similar task; the regularities are determined with great difficulty;	2

	• **very low,** performing the task requires training assistance, receives the assistance offered with difficulty, the acquired activities are not independently used, cannot determine the regularities.	1
3.	Degree of training opportunities:	
	• **high,** learns during lesson, uses all types of memory, high ability to turn attention;	5
	• **good,** study materials are generally acquired within a lesson; if necessary, uses the more advanced types of memory; if desires, freely turns attention;	4
	• **medium,** there is a need for additional work at home in order to acquire study materials; only one type of memory is used, switching attention is not developed sufficiently;	3
	• **low,** poor learning skills therefore the study materials are not acquired, poorly developed memory, almost unable to turn attention;	2
	• **very low,** is not able to acquire study materials, no memory developed, unable to turn attention.	1
4.	Learning skills:	
	• **high,** is able to plan and control own activities, organized, the pace of work firm and high;	5
	• **good,** with the help of a teacher able to plan and control own activities, not always organized, the pace of work is not always good;	4
	• **medium,** with difficulty plans and controls own activities, unorganized, slowing down the pace of work;	3
	• **low,** does not plan activities, self-control ability is poorly developed, the pace of work low;	2
	• **very low,** does not know and does not want to plan own activities, the pace of work is extremely low.	1

5.	Accomplishment in individual lessons:	
	• **high,** there is a growing interest in knowledge, a practical initiative is revealed;	5
	• **good,** firm interest in knowledge, the initiative is not always observed;	4
	• **satisfactory,** interest in knowledge depends on the situation, the initiative appears after the teacher's request;	3
	• **low,** There is almost no interest in knowledge, there is no initiative;	2
	• **very low,** no interest in knowledge.	1
6.	Accuracy and discipline:	
	• **high,** self-organized, complies with the Rules of the Internal Regulations, is always ready to help others (classmates, teachers) understands what this is need for;	5
	• **good,** at the request of adults, ready to cooperate in following the Rules of the internal order, is aware of the significance of these qualities for the student;	4
	• **satisfactory,** these qualities are revealed by the teacher's remark, does not really understand their significance;	3
	• **low,** passive in revealing these qualities**,** takes position of "performer as necessary", does not realize their significance;	2
	• **not at all,** does not consider these qualities as necessary.	1
7.	Communication and degree of cooperation:	
	• Communicates with others without difficulty, creates and maintains a good, positive relationship in the class/group, gets respect from students and adults;	5

	• Communicate with others, maintains a good relationship in the class/group, but rarely is the initiator of this relationship, gets respect from the majority of learners and adults;	4
	• can become a cause of conflict with others; unable to maintain a normal relationship, respect only in a small number of pupils;	3
	• often indifferent to good relationships in the class/group, practically does not get the peer's respect;	2
	• indifference to what they are, unable to adequately analyze the situation, there is no respect from other.	1

Appendix 2

Lesson Observation Worksheet

Subject _____

Teacher _____ Form_____

Date _____

Theme _____

The aim of the lesson visit _____

Result to be achieved (within lesson)

Planned	Achieved

The process of the lesson:

Teacher's activity	Students' activity	Notes/Comments

Teacher's activity	Student's activity	Notes/comments

Conclusions

_____
_____
_____
_____
_____
_____

Observer _____

(signature)

Teacher Self-Evaluation   **(year)** _____

Name, surname   _____

Subject(s) _____

1. TEACHING SUBJECT

   1.1. Study programs (developed and implemented)

   _____
   _____
   _____

   1.2. Study programs for afterschool activities or interest groups

   _____
   _____
   _____

   1.3. Teaching aids (new developed)

   _____
   _____
   _____

   1.4. Open classes (performed)

Date	Subject	Grade	Theme	Audience	Comments

   1.5. Lesson observation, conclusions, recommendations

Date	Subject	Grade	Theme	Comments

1.6. Support for students

Work with talented students	Work with students having learning difficulties

1.7. Students' achievements (e-journal)

Grade	Subject	Insufficient %	Sufficient %	Optimal, %	High ,%	Average

1.8. Presentation of students' achievements (exhibitions etc.)

_____
_____
_____
_____
_____

1.9. Success in olympiads, competitions, contests.

Grade	Student's name, surname	Name of competition, type, olympiad	Result

2. TEACHER'S CREATIVE ACTIVITY

    2.1. Organizing a study week

_____
_____
_____
_____
_____

    2.2. Participation in projects

_____
_____
_____
_____
_____

    2.3. Afterclass activities at school

_____
_____
_____
_____
_____

    2.4. Out-of-school activities

_____
_____
_____
_____
_____

3. WORK IN THE METHODOLOGICAL COMMISSION, SCHOOL COUNCIL

_____
_____
_____
_____
_____
_____
_____
_____
_____

4. DISCIPLINE IN THE WORKPLACE

Responsibility	succeeded	have to improve
Follow the deadline (papers)		
Be in time (lesson starts)		
Compliance with the rules of the internal school regulations (on duty, violation ....)		
Collection of the teaching material of the teacher (portfolio)		

5. PROFESSIONAL DEVELOPMENT

5.1. Improvement of teacher's professional development

Nr.	Name of course, program, seminar	Training time (date)	Hours	Issued document	Financing (state budget, personal)

5.2. Studies (universities, educational curricula, year)

_____
_____
_____
_____
_____

6. SCHOOL WORK ORGANIZATION

Positive aspects	Recommendations/ remarks/ comments	Your contribution to the development of school and promotion the name of school

Recommendations for the next year

me

_____
_____
_____
_____

school

_____
_____
_____
_____

Date: _____

Signature: _____

LITHUANIA

LITHUANIAN EDUCATION SYSTEM

LITHUANIAN SCHOOL EDUCATION

School education in Lithuania comprises of pre-school, pre-primary, basic and upper secondary schools. Education is free of charge and compulsory from the age of 6 or 7 to 16 years. Pre-school educational level is not mandatory. Primary education lasts for 4 years, followed by basic/lower secondary education that lasts for 6 years. Attendance at both of these educational levels is mandatory in Lithuania. Upon completion of lower secondary studies, students can move on to upper secondary education that lasts for 2 years and covers grades 11 and 12. Upper secondary education ends with the maturity examination, opening the door to tertiary education. Vocational and technical education starts at the fifth year of basic education/lower secondary education (age 14-15). Its structure is similar to comprehensive education. The programme lasts two to three years. Adults can obtain general secondary education at adult general education schools and, for some classes, attend general education schools.

Pre-tertiary Education

Period of compulsory education

- Entry age: 6
- Exit age: 16

Pre-school/Pre-primary Education

- School type: Nursery schools and Kindergartens; and pre-primary schools
- Ages: 5 or 6
- Duration: 1 year

Primary Education

- School type: Primary school
- Ages: 6 to 10
- Duration: 4 years
- Grades: 1 to 4

Lower Secondary Education/Basic Education

- School types: Lower secondary school/basic, progymnasium, secondary schools and youth school
- Duration: 6 years
- Ages: 10 to 16
- Grades: 5 to 10
- Credential awarded: Certificate of lower secondary education

Upper Secondary Education

- School type: Secondary school, Gymnasium, International Baccalaureate school, and Lyceum
- Duration: 2 years
- Ages: 16 to 18/19
- Grades: 11-12
- Credential awarded: Maturity Certificate or School Leaving Certificate

Vocational and Technical Education

- School type: Vocational schools, Youth schools, and Technological gymnasium
- Duration: 1-5 years
- Ages: 14 to 20
- Grades: 8-12 or 11-12 to get secondary education certificate and one year to complete vocational training
- Credential awarded: Maturity Certificate or School Leaving certificate and Vocational Qualification Certificate

LITHUANIAN HIGHER EDUCATION

Higher education/tertiary education in Lithuania can be divided into university and college. Universities offer bachelor, master and PhD degree programmes. Colleges offer vocational education. Since 2006, they can award professional Bachelor degrees. The Lithuanian Ministry of Education and Science manages the education system. The quality of the courses to study

and research activities is periodically evaluated by the Centre for Quality Assessment in Higher Education.

Undergraduate Studies- Bachelor's degree

- Duration: 4 years
- Credential: Bachelor degree or diploma of higher education

Master's degree

- Duration: 2 years

Doctoral studies

- Duration: 4-6 years (varies)

EDUCATIONAL CREDENTIALS

School Credentials

- Lower secondary/Basic School Leaving Certificate
- Vocational Secondary School Certificate
- Maturity Certificate
- Vocational Qualification Certificate

Higher Education Credentials

- Bachelor's degree
- Diploma of Higher Education
- Master's degree
- Specialized Professional Programme Diploma
- Doctorate Diploma
- Post-doctoral qualification

EDUCATIONAL PRINCIPLES

- Educational institutions are state, municipality or private;
- Education is free of charge (except private institutions);

- Education is compulsary for children from 6/7 to16 years;

- The official language in schools is Lithuanian.

GENERAL PRINCIPLES

- 1st of September is the beginning of a school year;

- The end of May is the end of a school year for the 1st to 5th and the 12th graders;

- The middle of June is the end of a school year for all the rest of the students;

- There are two semesters of three terms per year (school decides)

- A lesson lasts for 45 minutes; but only 30-35 minutes for pre-school pupils and the first graders;

- Lessons take place from Monday to Friday and students have 22-31 lesson per week;

- There are 24-30 students in a class, as a rule.

EVALUATION SYSTEM

- Prie-school children and 1st-4th graders are evaluated using idiographic evaluation;

- At Lower and Upper Secondary Level it is a ten-point scale;

Result and grade	Description in English
Pass 10	excellent
Pass 9	very good
Pass 8	good
Pass 7	Just about good
Pass 6	satisfactory
Pass 5	Just about satisfactory
Pass 4 (in general education)	weak
Fail 4 (in higher education)	poor
Fail 3	poor
Fail 2	very poor
Fail 1	nothing answered, task was not completed

MAJOR REGULATORY DOCUMENTS PROVIDING FOR LEARNING AND STUDIES

Law on Education (2011), National Education Strategy 2013–2022 (2014), General programmes and standards for education attainment levels (renewed every four years), Law on Vocational Training (1997, draft law on amendments to the law is underway), Law on Non-formal Adult Education (2014), Good School Concept (2017).

FRAMEWORKS OF CONTINUING PROFESSIONAL DEVELOPMENT IN LITHUANIA

CPD is a planned, continuous and lifelong process whereby teachers try to develop their personal and professional qualities. Effective teaching requires considerable knowledge and skill, which should be developed as teachers' careers progress. It relies upon teachers, headteachers and leadership teams in schools and organisations providing professional development, being clear about their respective roles and working together effectively.

In Lithuania a teacher has the right to be certified and to acquire a qualification category in accordance with the procedure established by the Minister of Education and Science (Article 49 of the Law on Education of the Republic of Lithuania). The attestation process is governed by the Regulations for the certification of Teachers and Assistants (excluding psychologists) and the Teachers Qualification Requirements Description. The certification of teachers and Support Assistants encourages a teacher and a student support specialist to increase responsibility for educational outcomes and professional development, improve their competence and career development, e.g. to acquire competence and practical qualification category.

Since 2010, students who enter pedagogical studies need to take a motivation test. The motivation test helps to select the mostly motivated students. Future pedagogues with the best achievements receive an incentive – an additional target grant.

There is a system implemented for the appraisal of teachers. The Regulations of the appraisal of teachers specify four teacher qualification categories:
- teacher,
- senior teacher

- teacher-supervisor,

- teacher-expert.

During an academic year, teachers in Lithuania shall allocate 5 days for improvement of their skills. Teachers can improve their qualification in:

- National or Local Education Development Centre

- Regional Education Centres that function in every municipality,

- Education Centres establised next to Universities

- Various private institutions.

The training process should ensure coherence between the needs of the individual teacher, educational institutions and national needs (The concept of teacher development (2012).

EDUCATION IN UTENA DISTRICT

Municipality of Utena District

Population ~ 40,000, urban population -   67%, nationalities: Lithuanians - 96,1%, Russians- 2,5%, other - 1,4%, working age population - 62%, pupils in rural schools -   11,6%, over a thousand pupils get transport to schools

Educational institutions

Nursery schools − kindergartens − 6, schools- kindergartens − 2, primary schools − 1, progymnasiums - 4, basic schools − 3, gymnasiums − 4, special education school− 1, multifunctional centre -1, non formal education schools −4, education support bodies− 2

Changes in the number of pupils in schools

2009 year − the number of pupils was 6455, 2010 − 6048, 2011 − 5637, 2012 − 4961, 2013 − 4607, 2014 − 4357, 2015 − 4191, 2016 − 4022

Changes in the number of teachers

2009 year - the number of teachers was 890, 2010 − 876, 2011 − 865, 2012 − 817, 2013 − 778, 2014 − 754, 2015 − 714, 2016 − 697

Number of teachers in schools by age

Younger than 25 years old – 1, 25-29 – 12, 30-34 – 15, 35-39 – 37, 40-44 – 72, 45-49 – 97, 50-54 – 108, 54-59 – 99, 60-64 – 34, 65 year and older - 3

Number of pupils per teacher

2009 year – the number of pupils per teacher was 10,8, 2010 year – 10,7, 2011 year – 10,4 2012 year – 10,2, 2013 year – 9,8, 2014 year – 9,6, 2015 year – 9,5, 2016 year – 8,9

Number of pupils in non-formal education schools

Music school - 259 pupils, art school – 124 , children's and youth recreation centre – 243, multifunctional sports centre – 545

Municipal budget (%) spent on education

2009 year – 49,7%, 2010 – 52,7%, 2011 – 49,3%, 2012 – 47,5%, 2013 – 46,6%, 2014 – 45,4%, 2015 – 44%, 2016 – 47%

References:

- *https://www.classbase.com/countries/Lithuania/Education-System*
- *https://en.wikipedia.org/wiki/Education_in_Lithuania*
- *https://educationpolicytalk.com/2013/05/01/the-unending-lithuanian-educational-reforms-restructuring-of-schools/*
- *https://www.european-agency.org/sites/default/files/education_lithuania.pdf*
- *https://www.slideshare.net/baustas/the-system-of-education-in-lithuania*
- *http://www.lithuaniaeducation.info/Education-System/Lithuanian-Education-Structure.html*
- *http://slideplayer.com/slide/1732019/*
- *http://oecdeducationtoday.blogspot.lt/2017/05/how-to-surf-new-wave-of-globalisation.html*
- *http://www.nmva.smm.lt/vadovu-vertinimas/mokytoju-atestacija/*

Schools and education institutions visited during a teaching/learning/training event in Lithuania:

- *Utena Education Centre, Maironio str. 12, Utena, LT-28143,*
  https://www.usc.utena.lm.lt/

- *Utena kindergarten "Želmenėlis", Sėlių str. 22, Utena, LT-28202,*
  https://www.zelmenelis.utena.lm.lt/

- *Utena kindergarten "Gandrelis", Vaižganto g. 38, Utena, LT-28196,*
  https://www.gandrelis.utena.lm.lt/

- *Utena Vyturiai progymnasium, Sėlių str., Utena, LT-28203,*
  https://vyturiai.utena.lm.lt/

- *Utena Aukštakalnis progymnasium, Taikos str. 44, Utena, LT- 28157,*
  https://www.aukstakalnis.utena.lm.lt/

- *Molėtai progymnasium, Jaunimo str. 1, Molėtai, LT-33127,*
  https://www.progimnazija.moletai.lm.lt/

- *Molėtai gymnasium, Jaunimo str. 5, Molėtai, LT-33127,*
  http://www.gimnazija.moletai.lt/

- *Utena Dauniškis gymnasium, Vaižganto g. 48, Utena, LT-28185,*
  https://www.dauniskis.utena.lm.lt/

- *Utena Adolfas Šapoka gymnasium, Paupio str. 1, Utena, LT-28140,*
  https://asg.utena.lm.lt/

1. PROJECT-BASED TEACHING AND LEARNING
2. PEER-TO-PEER OBSERVATION – AN EFFECTIVE METHOD OF PROFESSIONAL DEVELOPMENT

School / Setting:	**Utena Vyturiai Progymnasium**
Website:	https://vyturiai.utena.lm.lt/
Principal / Headteacher	Edita Kadūnienė
Type of school:	Progymnasium
Phase (Age-range):	7 – 15
Context	Number of students: 370
	Number of teachers: 40
	Established in: 1976

DETAILS OF CASE STUDY

1. Project-based teaching and learning: local, national and international projects.

Teachers continuously gain professional experiences through local, national and international cooperation projects which have become part of the school's everyday life. Utena Vyturiai progymnasium has had decades of participation in different project experiences. Around 60-80% of the school community regularly takes part in project-based activities. All projects are a great way to encourage students and teachers to; work in a cooperative way, deepen their knowledge of the Lithuanian language, learn foreign languages and pursue wider cultural awareness and social integration. Projects help students to apply the knowledge learned in classes and labs to real-world situations. Project work helps students to become better collaborators, critical thinkers, public speakers, and communicators. Such projects promote

tolerance to other cultures and respect to different opinions. They provide an opportunity to share ideas with other educators and test the effectiveness of educational methods.

Some examples of Utena Vyturiai progymnasium projects are as follows:

- "Use Paper – Plant Tree" (a part of the national project "We are Creating our Republic", 2013-2014) https://www.youtube.com/watch?v=SdO52GgEjqk, **(see Appendix 1)**

- "We are United for Sustainable Development" (international multilateral Comenius project, 2007-2009)

- "We all came here from somewhere" (international multilateral Comenius project, 2010-2012)

- "Languages, Cultures and Greener Future Connecting People" (international bilateral Comenius project, 2013-2015)

- "Your History is our History" (international multilateral Erasmus+ KA2 project, 2016-2018)

- "Ravens" (national project that developed social, ecological and literacy skills, 2016)

- "The 110 Birth Anniversary of Astrid Lindgrend" (schoolwide project that united a big part of the school community, 2017) **(see Appendix 2)**

- "Happy Water – Happy People" (national project, 2017)

2. Peer-to-peer observation - an effective way of professional development.

School educators believe that using observation as a method of continuous professional development is one of the best tools, as it is time and cost effective, as well as having a high level of impact. One of the greatest benefits is that it provides effective forms of authentic professional growth both for an observer and for the person who is being observed, as this form of professional development leads to suggestions around how to handle behaviour problems, as well as opportunities to share successful teaching approaches; combining both theoretical and actual practice.

The school has developed effective class observation as part of the CPD system. Every year lesson observation frequency and the number of lessons observed is discussed by school authorities and teachers. School authorities observe 2-3 classes of each teacher a year. Teachers are free to choose which colleagues' classes to visit. Usually teachers observe 2-4 lessons inside or outside the school a year. Observed lessons are discussed in the methodological subject groups. Sometimes lessons in a certain grade/class (if there are some specific problems with teaching or students' behaviour) are observed. In such cases the discussion of observed classes takes part among those class teachers.

The school educator practice has also demonstrated that one way in which peer observation can be very effective is when teachers acquire new skills or ideas at courses, conferences or workshops and then model those new approaches for their colleagues in the classrooms.

Peer-to-peer observation practice at school shows that class/activity observation is most successful when the teacher and observer work together and reflect on teaching behaviour. The school educators use the following to make the observation process effective:

Overview. A short overview of the programme with a focus on what the main point of observation will be.

Observation.

Discussion. Immediate discussion concerning the observation, feedback from the teacher.

Reflection. Reflection concerning how information from the sequence may be used by the observer.

The school has a classroom observation template which is filled in by observers and discussed with the teacher whose class was observed. (see Appendix 3)

Example of a national project "Use Paper – Plant Tree"

Goals:

1. To develop a responsible approach to consumption, promote sustainable use of natural recourses, protect the environment that surrounds us.

2. To renew civic education at school, integrating into the curriculum interesting and socially useful civic practices, to enable young people to experience their civic abilities.

3. To strengthen ties with social partners;

4. To develop participants' autonomy, creativity, individual and team work skills, and learn how to discuss problems and find solutions.

Coordinators: English language teacher and geography teacher.

Participants from school: 70 % of the school community members.

Participants - social partners

Utena Forest Enterprise

Utena Education Center

Utena City Municipality

Kindergartens for kindergartens.

Utena Public Health Bureau

Utena A. and M. Miškinis public library

Civil Society Institute

Activities:

1. Project management and implementation group formation;

2. Questionaire on paper consumption at school, paper consumption at school observation;

3. Waste-paper collection and its change to a toilet paper;

4. Boxes for once used paper keeping production, their decoration by project key words; use, reuse, recycle, reduce, box settlement and encouragement to use in each classroom;

5. Handicrafts from a used material workshops; their exposition;

6. Project stand – the shape of a tree- for activity dissemination production in the craft lessons;

7. Projects to commemorate Earth Day

8. Meeting with Utena town municipality architect to talk about possible areas to plant more trees in Utena; tree planting around the lake of Dauniskis;

9. Meeting with Utena Forestry representatives; oak and fur tree planting in the outskirts of Utena;

10. Meeting with the Utena nursery garden head; fur hedge in the school teritory planting;

11. Environment cleaning action "Let's do";

12. Exhibition of innovatively created trees made of second hand materials'

13. Meeting with the communities of surrounding kindergartens'; environment care promotion actions;

14. Mathematical projects on the topic of ecology';

15. Drawing of „Friendship trees", primary school students worked in pairs elementary level friends;

16. Constant care of the trees planted by the school community;

17. Film about the project creation https://www.youtube.com/watch?v=SdO52GgEjqk;

18. Project dissemination in the llocal newspapers, websites, national radio, final project event in the capital of Lithuania Vilnius;

19. Frugal paper use habit formation.

Example of a school project "The 110 Birth Anniversary of Astrid Lindgrend"

Goals:

1. Commemorate the 110th birth anniversary of a famous writer Astrid Lindgren.

2. Get known with the writer's biography and her oeuvre.

3. Encourage children to read and love books.

4. Develop pupils' reading, foreign language, mathematical, writing, artistic, computer, etc. skills.

5. Develop school community communication and collaboration skills

Coordinators: Teacher of Lithuanian language and the librarian.

Abbreviations: ST – students, T – teachers, LB –librarian, HCS - health care specialist, CT - computer technician

No	Activity	Performers
1	"WRITER WHO DID NOT WANT TO BE ADULT". Tailor puppets – Astrida Lindgren"s book characters Prepare mini performances	ST -7a T – Lithuanian T – technology
3	„SWEDEN –HOMELAND OF ASTRID LINDGREN" Collection and presentation of information about Sweden.	ST -5-8 graders T – geography
4	„PIPPY'S BISCUITS" Baking of biscuits.	ST -4 b T – primary school

5	„FUNNY SONG OF PIPPY" Learn and sing the Pippy song	ST -5a T – English T - music
6	„ONE CANDLE AND 100 CAKES" Students get acquainted with Pepe's mathematical knowledge, calculate the number of Lindgren's books and their process	ST -5-8 graders T – mathematic
7	„MOTIVES OF NATURE IN THE PIPPY'S APRON" Production and decoration of aprons „PIPPY - HANDICRAFTER" Reuse of old things	ST -5-6 graders T – biology
8	„CHARACTERS OF ASTRID LINDGREN" Painting production and exposition.	ST – 1 -4 graders T – painting hobby group
9	„A WELL-BUILT GUY - KARLSSON" Sports competition.	ST - 5-8 graders T – PE
10	„LET'S CELEBRATE PIPPY LONGSTOCKING'S BIRTHDAY TOGETHER" Best school library readers' event..	ST – 1-4 graders LB T – Lithuanian
11	„ASTRID LINDGREN BOOK CHARACTERS" Book marker production and exhibition.	ST - 5-8 graders T – art
12	„NEW INVENTIONS OF PIPPY" attractive experiments.	ST - 8 graders T – chemistry
13	„FLY TOGETHER WITH KARLSSON" Interesting experiments	ST - 8 graders T – physics
14	„CATHOLIC FESTIVALS IN THE VILLAGE OF PERISHERS'" Swedish traditions and customs.	ST – 1-4 graders T – religious studies

15	„FAVOURITE JAM OF KARLSSON" Conversations and competition on healthy life style.	ST - 1-8 graders HCS
16	„SWEDEN HISTORY, ASTRID LINDGREN'S FAMILY HISTORY"	ST - 5-8 graders T – history
17	„ASTRID LIDDGREN CHARACTERS IN CARTOONS" cartoon watching secssiont at the library reading room.	ST - 1-4 graders CT
18	„KARLSONO PROPELERIS" Propeller production in technology lessons.	ST - 5-8 graders T – technology
19	„KNYGŲ VEIKĖJAI RUSŲ KALBA" Astridos Lindgren characters in Russian.	ST - 5-8 graders T – Russian
20	„WRITER'S LIFE AND OEUVRE" Information search online..	ST - 5-8 graders T - IT
21	„MINI PERFORMANCE" Students will play extracts from the writer's works in English.	ST - 5 b T – English
22	„LETTER TO A BOOK CHARACTER" Students write letters to characters of Astrid Lindgren.	ST - 5b, 7b T - Lithuanian
23	" CHRISTMAS SOCKS „ Students make and decorate Christmas socks for Pippi Longstocking. They revise vocabulary of English names of shapes and colours and use them to decorate socks.	ST – 3 a T – English

Appendix 3

Example of a lesson observation template

UTENA VYTURIAI PROGYMNASIUM
LESSON OBSERVATION TEMPLATE

Teacher or student support specialist   Observer, assessor

_____   _____

(full name)   (full name, position, qualification category)

Subject ----------------------------------

Qualification category -------------------------------------
Date:--

Grade	Total number of students in the class	Number of students attending the class	Number of students with special needs

Lesson (educational activity, workshop, event) theme:

Teaching goal/goals and objectives:

1.--
2.--
3. --

Lesson observation aspects		Very well	Good	Satisfactory	Needs to to be improve (notes)	Com-ments
		Marking (+)				
1. Teaching goals	Manages to set specific educational goals and objectives					
2. Lesson content	Manages to plan lesson content					
3. Teaching methods	Manages to choose and use educational					

and strategies	methods and teaching strategies					
4. Differentiation and individualization	Manages to properly select teaching and learning materials and techniques					
5. Educational content in the classroom	Manages to reveal educational content					
6. Learning environment/atmosphere	Manages to create learning atmosphere and educational environment					
7. Planning	Manages to plan lesson time and use educational resources					
8. Evaluation and self evaluation	Manages to evaluate students' achievements and progress.					

Observers notes and suggestions:---

Strengths:
1)--- 2)-
----
3)--

Areas of improvment:
1)--- 2)-
--- 3)-----

Signature of the observer/assessor

Signature of the teacher

THE ROLE OF THE UTENA EDUCATION CENTRE IN THE CONTINUOUS PROFESSIONAL DEVELOPMENT OF SCHOOL LEADERS AND TEACHERS

School / Setting:	**Utena Education Centre**
Website:	www.usc.utena.lm.lt
Principal / Headteacher	Vitalija Bujanauskienė
Type of institution:	Education Centre
Learner age-range:	Adult
Context	Number of employees: 7
	Established in : 2007

DETAILS OF CASE STUDY

The Utena Education Centre (UEC) is an accredited institution which provides services for non-formal adult education. The centre team has had 10 years of experience in the sphere of adult education. Most of the centre trainees are educators working in education institutions in the region. The centre team also work with other groups of adult learners who are interested in gaining an area of particular knowledge. The UEC team investigate the needs of adult students. After a thorough analysis of investigation results the team prepares a yearly and monthly syllabus for their in-service training. The UEC team closely cooperate with the Utena District educators and coordinate work of 25 methodological circles of subject teachers (eg. Principle, Deputy of principles, Physicians, Mathematicians, Historians and etc.) Every year an activity plan of each methodological circle is prepared by subject teachers' and the UEC methodologist. These are responsible for a certain subject, which correlate to the following areas:"Sharing of experience", "Innovation analysis", "Raise of qualification", "Solving of actual issues, problems", "Organization of competitions, competitions, events, exhibitions" (see Appendix 1).

The Utena region librarians truly believe that the library of a modern school is not just a workplace for obtaining and distributing educational material and dealing with book funds. Each library aims to become an attractive centre of information and culture through establishing and maintaining constructive relations with partners and initiating and implementing activities together with a variety of local community members. Educational institution librarians who work in the Utena District work closely in the methodological circle to develop professional competencies. This is achieved by sharing experiences and participating in various qualification improvement activities. Every year an activity plan for the librarian methodological circle is prepared, based on the structural elements shown in appendix 1. Members of the circle are very active. The chairman of the methodical group is V. Gudelienė, is a librarian of Utena A. Šapoka gymnasium. The librarian works actively and creatively not only at her gymnasium, but sincerely shares ideas at the local and national levels. V. Gudelienė has been a chairman of the methodological circle of the region library for a number of years. The chairman is able to inspire and motivate the whole librarian team, initiate activities and share experiences. This case study presents a summarized list of the most valuable and interesting activity examples of the regional librarians in the period of 2013 – 2017 (see Appendix 2).

Appendix 1

Methodological activity plan of .... (subject circle title) for 2018

No.	Activity title	Date Location	Participants	Expected result	Responsible people	Comments
I. Sharing of experiences						
II. Innovation analysis						
III. Raise of qualification						
IV. Solving of actual issues, problems						
V. Organization of competitions, competitions, events, exhibitions						

Name of the methodological circle chairman ....

Title of activity	Location, date
I. Sharing of experiences	
• Open integrated lesson „Commemoration of the 75th birth anniversary of prosaist Broniaus Radzevičiaus" Participants: gymnasius students, lithuanian language teachers, librarians.	Utena Adolfas Šapoka gymnasium (2015 m.)
• Open integrated lesson „From idea to its realization" Participants: students, technology teachers, librarians.	Utena Regional Vocational Training Center (2016)
• **Methodical workshop "Application of reading and writing strategies in the library".**	Utena Krašuona progymnasium (2016 m.)
• Methodological trip under the program "What does a modern library look like?"	Vilnius Library Scientific Communication and Information Center, Vilnius Baltupiai Gymnasium (2013)
• Methodological trip to Molėtai education institution libraries using school information system MOBIS according to the program "Library in the context of modern school: Experiences and challenges".	Molėtai region education institutions
• Methodological trip under the program "Librarian's role in developing pupils' creativity".	Daugpils city, Latvia and Zarasai town, Lithuania, education institution libraries (2015 m.)
• Educational trip under the project "Strengthening creativity and community".Meetings and discussions with museum and library staff.	Kaunas, Klaipėda, Telšiai museums and libraries (2017 m.)
• Kaunas city school librarians trip under the program "Utena school libraries – the centre of student and teacher assistance".	Utena Adolfas Šapoka gymnasium (2015 m.)
• Rokiškis District School Librarians' visit under the program "Dissemination and analysis of work experience of Utena school librarians".	Utena Adolfas Šapoka gymnasium (2013 m.)
II. Innovation analysis	
• Conference for School Librarians "School Library - Challenges for Education in Context" the town of in Jonava	Jonava (2015 m.)

• Conference " Academic Library for Z-generation: Services, Spaces, Technologies"	Vilnius university (2015 m.)
• Conference "Reading-a Key to Self-Conceptual and Creative Thinking".	Kaunas (2016 m.)
III. Improvement of qualification	
• Seminar "Work in the School Library: Psychological Aspects".	Utena Adolfas Šapoka gymnasium (2014 m.)
• Workshop "Contemporary Media and Information".	Utena Adolfas Šapoka gymnasium (2016 m.)
• Seminar "Year of the Library: How to Meet Librarian Expectations".	Vilnius (2016 m.)
• •Seminar "Year of the Library: How to Meet Librarian Expectations".	Utena Education Centre (2017 m.)
• Project. In 2017 Utena Education Centre carried out the project "Strengthening of Creativity and Sociality", financed by the Lithuanian Culture Council. The target group of the project was librarians and museum employees of the Utena region. The project was aimed at enhancing cooperation between project participants, creativity skills needed for community building, increasing attractiveness and accessibility of cultural services.	Utena Education Centre (2017 m.)
IV. Solving of actual issues, problems	
• Individual, group counselling, discussion.	
V. Organization of competitions, competitions, events, exhibitions	
• Event "I read, I write, I am," for reading promotion. A special guest A. Augustaitienė, Director of the Children's Department of the National M. Mazvydas Library was invited to the event.	Utena Adolfas Šapoka gymnasium (2016 m.)
• Educational lesson/event "The way of Cheese"	Utena Aukštakalnis progymnasium (2016 m.)
• Librarian meseum employees workshops under the program " Environment and Educational Programs of the Utena City Museums ".	Utena museums
• Cardinal Juozas Bačkis visit.. Presentation of the book "I'm Happy". Participates the book author A. Gailius and Dr. V. Kniūraitė.	Utena Adolfas Šapoka gymnasium (2016 m.)

• Literary event (integrated lesson) "An Hour with Shakespeare". The event is dedicated to the Year of the Library.	Utena Adolfas Šapoka gymnasium (2016 m.)
• An integrated cultural event "Library - an Place for Exciting Discoveries".	Utena Regional Vocational Training Center (2017 m.)
• Literary event (integrated lesson) "100 kilometer of poems".	Utenos Dauniškis gymnasium (2016 m.)

1. THE FOCUS OF TEACHERS ON PROGRESSING EDUCATIONAL SPACES TO ENSURE THEY ARE WELL ADAPTED TO CHILDREN'S DEVELOPMENT AND EDUCATION
2. AN OVERVIEW OF CELEBRATIONS, FESTIVALS AND EVENTS

School / Setting:	Utena nursery - kindergarten "Želmenėlis"
Website:	https://www.zelmenelis.utena.lm.lt/
Principal / Headteacher:	Sigita Balčiūnienė
Type of school:	Nursery - kindergarten
Children age-range:	1 – 7
Context	Number of children: 210
	Number of employees: 48
	Number of classes: 12
	Number of children per class: 16-20

DETAILS OF CASE STUDY

1. THE FOCUS OF TEACHERS ON PROGRESSING EDUCATIONAL SPACES TO ENSURE THEY ARE WELL ADAPTED TO CHILDREN'S DEVELOPMENT AND EDUCATION.

The kindergarten has improved the quality of its pre-school education programme, following recommendations stated in the publications: "Description of Pre-school Children's Achievements" and "Methodological Recommendations for the Preparation of Pre-school Education Content" prepared in the framework of the project "Development of Pre-school and Pre-primary Education". As it is stated in the documents, a kindergarten today is not only an institution of socialization, but also an educational environment.

The kindergarten community, parents, other partners and volunteers have created new, suitable indoor education spaces (playing groups, bedrooms, locker-rooms, bathrooms, halls, coridors, and landings) and outdoor education spaces which are creative, comfortable, functional, and which promote children's activity. These educational environments help to reveal children's abilities and to encourage learning through exploration and experimentation (https://drive.google.com/open?id=0B5pIEa6ULFZbSEtZcGpnUmVvVjg).

2. THE FOCUS OF TEACHERS ON PROGRESSING EDUCATIONAL SPACES TO ENSURE THEY ARE WELL ADAPTED TO CHILDREN'S DEVELOPMENT AND EDUCATION.

The kindergarten year is filled with celebrations, festivals and events. It is the philosophy to keep them meaningful and simple. They follow a path through the year by marking the changing seasons and traditional national events through festivals. Some of the celebrations include parents, while others are spent with the children and teachers https://www.youtube.com/channel/UCoTnD8SaN5yKxUjkfSg5ODQ/videos?view_as=subscriber&shelf_id=0&view=0&sort=dd).

One of the annual festivals, rarely celebrated in Lithuania, but traditional and well-liked of the kindergarten community and in peculiar for this institution in the town is "St Martin's Day" which, in the kindergarten, is renamed "Goat's Festival" (see Appendix 1).

Appendix 1

Scenario of the „St. Martin's Day" that is traditionally

called „Goat's Festival" in the kindergarten

Every year on 11th November the kindergarten teachers invite children and their families to celebrate the last autumn feast - St. Martin's day. St. Martin's Day is the time when autumn wheat seeding was completed and the end of the pasturage began. This is rarely celebrated in the region, so the Kindergarten seek to introduce children, their parents and the festival guests to traditional values, traditions, culture, and appreciate all creatures.

The night before the festival the community members stack wood for bonfire, a symbol of warmth and family unity, which is lit when the festival starts. They organise a passage based on the kindergarten and receit it in the yard where the music teacher, wearing a traditional garment, shepherds and a goat meet them. The music teacher provides an overview of the meaning of St. Martin's Day: in the past this day used to be a very important day for mercenaries and shepherds, as after the 11th November they were free of work till the spring time, so they could leave their place of work and go home.

During the feast participants warm up around the bonfire, sing shepherd's songs, and listen to fairy tales. Every year there is a tradition to bring a real goat to the kindergarten's yard. It is a real attraction for the whole community. Children have a possibility to see a goat alive, to stroke and feed it. They decorate the goat with flowers or some handicrafts made by themselves. Later they lead the goat around a white birch, asking for winter and white snow. An important

moment in the feast is a ceremony of young shepherds' swear that is led by an artistic director who plays the role of the elder shepherd.

These festivals remind children and adults that it is useful to remember old but important traditions as they are still pretinent and correlate to past and present traditions.

1. CREATIVE APPROACHES THAT RAISE TEACHING AND LEARNING STANDARDS
2. THE EXCHANGE OF IDEAS AND BEST PRACTICE AMOUNG EDUCATORS – ONE OF THE MOST EFFECTIVE WAYS OF CONTINUOUS PROFESSIONAL DEVELOPMENT

School / Setting:	**Molėtai Gymnasium**
Website:	http://www.gimnazija.moletai.lt/
Principal / Headteacher:	Rimutė Guobienė
Type of school:	Gymnasium
Children age-range:	15 – 18
Context	Number of students: 412
	Number of teachers: 44
	Established in : 1980

DETAILS OF CASE STUDY

1. CREATIVE APPROACHES THAT RAISE TEACHING AND LEARNING STANDARDS. PROJECT BASED INTEGRATED/ ACROSS SUBJECT CLASSES.

Molėtai Gymnasium has a long history of participating in various projects that involve the integration of different subjects. These help to; transfer and adapt knowledge and skills acquired in one lesson into the lesson of another subject, investigate cross-subject correlations, and explore the practical use of knowledge and skills in real life.

To promote the continuous professional development of teachers, the school encourages close co-operation and collaboration between teachers, the research of educational content, and innovative ideas and the successful implementation of these. The school believes that

integrated lessons are an effective way of learning that helps encourage communication between students during the lesson, reduces tension, and that motivates students to be more active in the learning process. See appendix 1 for the lesson plan of integrated Biology and German language class.

2. EXCHANGE OF IDEAS AND BEST PRACTICES AMONG EDUCATORS, WHICH IS ONE OF THE MOST EFFECTIVE METHODS OF CONTINUOUS PROFESSIONAL DEVELOPMENT.

Molėtai Gymnasium works in collaboration with the Molėtai Educational Center to organise methodological days. On 30th October 2017 a methodological day called "Education for Personal Progress" took place. The purpose of the methodical day was to share the best experiences of teachers from the Molėtai region about pupil's education, with regard to personal progress, fostering of self-confidence and self-directed learning. The lecturers presented continuous professional tools that focused around; self-assessment, evaluations, personal development, volunteering experiences and group work. They also discussed the influence of non-traditional education on the progress of students, adaptation and reflection days held at schools. An analysis was also carried out, on the role and influence of: a teacher, a classroom educator, a social educator, a career development specialist, and a psychologist on student motivations and academic, social and cultural achievement (see Appendix 2).

Biology and German subject integrated learning experiences under the project "Content and German Language Integrated Learning in Lithuanian schools", run by the Goethe Institute

The integrated teaching of foreign languages and science are an effective combination to teach both subjects to students around the world. In Lithuania, difference subjects and German language integrated learning programmes are implemented for both single lessons and long-term learning modules.

Beginning in 2016, a German teacher, a biology teacher and eleven first- year students from Molėtai gymnasium have been participating in an international project called CLILIG @ LITAUEN, which is run by the Goethe Institute. The aim of this project is to teach science through German language. Active content-based language teaching strategies provide new perspectives on foreign language learning. Foreign language and science integrated learning helps students develop competencies for collaboration, open-mindedness, critical thinking and creativity.

Teachers, implementing bilingual modules, are equipped with "EcoLabBox"- a veritable mobile laboratory for carrying out *water*, *soil* and *air* research. During these integrated lessons, students conduct experiments which enables the students to learn about plants and animals in their natural living environments and to describe their experiences in German.

The advantages of implementing the integrated module "German language and experimental biology" are as follows:

1. Integrated activities help students to develop knowledge in two subjects

2. Teachers have the opportunity to work innovatively and to develop their own teaching skills

3. There are a plethora of experiments which allow theory to be tied to practice

4. Students are not assessed; they feel more motivated to learn and focused on their continued *improvement*

Both students and teachers benefit from this integrated module:

1. It is a challenge for teachers, as they have to develop their own teaching plan and select the material

2. It is time consuming, but provides a lot of gratification because students enjoy the lessons

3. A great variety of teaching strategies and teaching tools are applied

4. Students also learn in non-traditional environments (Vilnius University Life Sciences Center, Botanical Garden in Kairėnai)

5. There is cooperation with academic staff from Vilnius University and Vytautas Magnus University

Lesson plan "Cell's genetic information. Interesting facts"

1. **Opening activity.**

After watching a video https://www.youtube.com/watch?v=80QkERGziJg and scanning the pictures, students decide on the subject and objectives of the lesson.

2. **Objectives of the lesson.**

    - Using a microscope, detect the chromosomes of onion cell at the certain phase of mitosis. Take a photo of it with a smartphone.

    - With the help of interactive tools, learn parts of the body in German and be ready to tell what attributes you have inherited from your parents.

    - Conduct research, find the DNA of different plants and answer the questions.

3. Practical work.

- Students examine cells in the onion root tip; they take pictures of certain phases of onion root mitosis.

- Students learn parts of the body in German through interactive activities and songs. They prepare to talk about inherited traits using active vocabulary.

  https://www.youtube.com/watch?v=iCqA7E36bs0

  http://www.allgemeinbildung.ch/fach=deu/Koerperteile_01a.htm

  https://www.allgemeinbildung.ch/fach=deu/Koerperteile_05k.htm

- Practical work – mysterious discoveries in the lab.

  Warming up activity.

  A short video: https://www.youtube.com/watch?v=2tCxMH1ijpo&t=209s

  Worksheets

  Steps:

  1) Put a fruit of your choice (half a banana, kiwi, strawberry or tomato) into a plastic bag and mash it for 4 or 5minutes.

  2) Prepare a lysis solution (1 tablespoon of dishwashing liquid, 2 pinches of salt and 4 tablespoons of water) in the plastic cup. Stir well. Add 2 tablespoons of puree from the plastic bag. Swirl to mix for about 2-3 minutes.

  3) Filter the mixture through the strainer and absorbent paper into another plastic cup.

  4) Extract DNA. Take the third plastic cup and pour 2 tablespoons of filtered liquid. Slowly, avoiding mixing, pour 2 tablespoons of alcohol in to the cup down the side so that it forms a layer above the filtered liquid with lyse cells.

5) Take a wooden stick and keep it at the interface of two layers (not deeper than 1-2 millimetres). Carefully swirling, collect white string on the stick.

- Analysis of the practical work (in groups).

    1) Why was it necessary to mash the fruit, not just to cut a piece and pour over a solution?

        A) What was detergent in this case?

        B) What was its function?

    2) Why does alcohol layer stay above the liquid?

- Reflecting on the lesson.

This material was prepared by the German and biology teacher

P.S. German teacher and biology teacher participated in the experts' meetings organized by Goethe Institute to discuss CLIL curriculum guidelines initiated by the *Ministry* of *Education* and Science of *Lithuania*.

METHODICAL DAY
"FOCUS ON INDIVIDUAL STUDENTS' PROGRESS"

October 30, 2017
AGENDA

Aim - to share teachers' best practices about teaching strategies that help raise students' motivation and achieve academic, social and cultural progress.

9.30–10.00	Registration
10.00–10.10	**Musical Welcome** By Students Of Molėtai Gymnasium **Welcome Speech** –Vice Mayor
10.10–10.30	**School Community Agreements on Students' Achievements And Progress.** The Headmistress Of Molėtai Gymnasium.
10.30–11.00	**Individual Progress Monitoring in Molėtai Gymnasium.** V. Dubauskienė, The Deputy Of Molėtai Gymnasium.
11.00–11.10	**Integrated Curriculum and Safe Environment – the way to help students make individual progress and unleash creativity.** Music And Theatre Teachers Of Molėtai Gymnasium.
11.10–11.20	**Individual Progress from a Student's Viewpoint.** Psychologist Of Molėtai Gymnasium.
11.20–11.30	**What Helps Me to Focus on My Individual Progress**? 3rd Grade Student Of Molėtai Gymnasium.
11.30–11.40	**Child's Progress And Development from the Parents Viewpoint.** Parent.
11.40–11.50	**Personal Progress Motivators.** Social Pedagogue Of Molėtai Gymnasium.
11.50–12.00	**Self-Evaluation - an Important Part of Learning Process and Student's Progress.** Lithuanian Language Teacher Methodologist.
12.00–12.30	**Coffee Break**

12.30–12.40	Assessment And Self – Evaluation And Individual Progress. Maths Teacher, Expert Of Molėtai Gymnasium.
12.40–12.50	A Career Path And Individual Progress. Careers Consultant Of Molėtai Gymnasium.
12.50–13.00	The Influence Of Class Teacher On Students' Progress. Physical Education Teacher Methodologist Of Molėtai Gymnasium.
13.00–13.10	Digital Assessment Tools. IT Teacher Methodologist Of Molėtai Gymnasium.
13.10–13.20	The Influence of Innovative Teaching Strategies on Students' Progress. Physics Teacher Methodologist Of Molėtai Gymnasium.
13.20–13.30	Innovative Education and Individual Progress. Biology Teacher Expert Of Molėtai Gymnasium.
13.30–13.40	Alternative Measurement Of Students' Achievements: Almanac "Through The Window Of Imagination", Lithuanian Language Teacher Methodologist, Lithuanian Language Senior Teacher Of Molėtai Gymnasium.
13.40–13.50	Cooperative Learning In VGTU (Vilnius Gediminas Technical University) Classroom And Individual Progress Chemistry Teacher Methodologist Of Molėtai Gymnasium.
13.50–14.00	The Influence Of Non-Traditional Learning Environments On Students' Progress. History Teacher Methodologist Of Molėtai Gymnasium.
14.00–14.10	Teaching Strategies And Individual Students' Progress. Math's Teacher Methodologist Of Molėtai Gymnasium.
14.10–14.20	We Were Looking For, Found And Grew Up… (Volunteering Experiences). Public Health Care Specialist.
14.20–14.30	Cooperative Learning In Physical Education And Individual Students' Progress. Physical Education Senior Teacher.
14.30–15.00	Reflection.

1. PROFESSIONAL APPROACHES TO CHILDREN WITH SPECIAL NEEDS AND CHILDREN WHO NEED SUPPORT IN SOCIAL AND PHYSICAL SKILLS DEVELOPMENT
2. CONTINUOUS PROFESSIONAL DEVELOPMENT THROUGH COOPERATION WITH OTHER EDUCATION PROVISIONS

School / Setting:	Utena nursery-kindergarten "Gandrelis"
Website:	https://www.gandrelis.utena.lm.lt/
Principal / Headteacher:	Diana Kraujalienė
Type of school:	Nursery-kindergarten
Children age-range:	1 – 7
Context	Number of children: 160
	Number of children with special needs: 63
	Number of teachers: 25
	Number of classes: 10

DETAILS OF CASE STUDY

1. PROFESSIONAL APPROACHES TO CHILDREN WITH SPECIAL NEEDS AND CHILDREN WHO NEED SUPPORT IN SOCIAL AND PHYSICAL SKILLS DEVELOPMENT.

In Utena, the nursery-kindergarten "Gandrelis" has achieved a set goal for many years: to provide children, including those with special needs, high quality education through adapting suitable educational programs. The content of pre-school and pre-primary education programs meets the needs of children and parents' expectations. It is provided through developed and timely special and social assistance programmes to children, their families, and families at risk. A safe and functional environment in the kindergarten is created for children who have special needs. The highly qualified teachers, child care providers and healthcare professionals work as a well-tuned team who closely cooperate with all partners.

The organisation of social skills development activities and sport activities for children with special needs and their families

Activities:

1. Day of Cakes organised with the school community to raise funds for children with disabilities:

    https://www.gandrelis.utena.lm.lt/238-pyragu-diena-2016

    https://www.gandrelis.utena.lm.lt/327-pyragu-diena-2017

2. Traditionally celebrated "Day of Tolerance":

    https://www.gandrelis.utena.lm.lt/330-tolerancijos-diena-2017

3. Parental assistance each spring in improving the Kindergarten with children:

    https://www.gandrelis.utena.lm.lt/181-graziname-darzelio-teritorija-2016

4. "Day without a car" traditionally organised for all school community and neighbours:

    https://www.gandrelis.utena.lm.lt/98-judejimo-savaite-2015

    https://www.gandrelis.utena.lm.lt/211-diena-be-automobilio-2016

5. Educational programme with horses for children with disabilities lasting five years:

    https://www.gandrelis.utena.lm.lt/222-draugyste-su-zirgais-tesiasi-2016

6. Educational programme for the care of domestic animals for pre-school children and children with special needs:

    https://www.gandrelis.utena.lm.lt/295-pas-modesta-ukyje-2017

7. Regional sporting festival "Active family" organised for four years:

   https://www.gandrelis.utena.lm.lt/185-aktyvi-seima-2016

   https://www.gandrelis.utena.lm.lt/290-aktyvi-seima-2017

8. Participation in Lithuanian Special Olympics educational programme "Young Athlete" which introduces children and their families to the world of sports and the Special Olympics. At the nursery, we have included children in fun activities in the pursuit of the goal of the widest possible social integration of children with special needs:

   https://www.gandrelis.utena.lm.lt/109-jaunasis-atletas-2015

9. Sporting feast "Catch the Christmas" for pre-schoolchildren and their parents, schoolchildren of the eighth grade, foster families of Utena district, organised for four years by Utena nursery-kindergarten "Gandrelis" and its social partners:

   https://www.gandrelis.utena.lm.lt/122-sugaukim-kaledas-2015

   https://www.gandrelis.utena.lm.lt/252-sugaukim-kaledas-2016

   https://www.gandrelis.utena.lm.lt/336-sugaukime-kaledas-2021

2. CONTINUOUS PROFESSIONAL DEVELOPMENT THROUGH COOPERATION WITH OTHER EDUCATION PROVISIONS.

Teachers share ideas with other teachers, using these to test the effectiveness of educational methods. The school has developed a system to meet the individual needs of children, to foster their development of their cognition, knowledge, creativeness and health. To provide children and their parent the complex aid, social support and health care services required, there is a professional team who consists of a psychologist, special pedagogue, speech therapist, social pedagogue, physical therapist and dietician.

1. The special pedagogue is organising training for educators from Utena pre-school provisions on how to help children with autism to adapt, to develop and expand their educational possibilities:

   https://www.gandrelis.utena.lm.lt/329-pasidalinimas-patirtimi-2017

2. The psychologist leads the training of positive parenting and provides the individual consultations for children and their families facing different problems (such as communication, behaviour, fears etc.), strengthens the psychological resilience of children and motivates the creation of an environment that is safe and friendly for development

3. The professional team of specialists helps the teachers, guardians and parents who have children with disabilities to integrate:

    https://www.gandrelis.utena.lm.lt/administracija/pagalbos-vaikui-specialistai

1. PROFESSIONAL APPROACHES TO CHILDREN WITH SPECIAL NEEDS AND CHILDREN WHO NEED SUPPORT IN SOCIAL AND PHYSICAL SKILLS DEVELOPMENT
2. CONTINUOUS PROFESSIONAL DEVELOPMENT THROUGH COOPERATION WITH OTHER EDUCATION PROVISIONS

School / Setting:	Utena nursery-kindergarten "Gandrelis"
Website:	https://www.gandrelis.utena.lm.lt/
Principal / Headteacher:	Diana Kraujalienė
Type of school:	Nursery-kindergarten
Children age-range:	1 – 7
Context	Number of children: 160
	Number of children with special needs: 63
	Number of teachers: 25
	Number of classes: 10

DETAILS OF CASE STUDY

1. PROFESSIONAL APPROACHES TO CHILDREN WITH SPECIAL NEEDS AND CHILDREN WHO NEED SUPPORT IN SOCIAL AND PHYSICAL SKILLS DEVELOPMENT

In Utena, the nursery-kindergarten "Gandrelis" has achieved a set goal for many years: to provide children, including those with special needs, high quality education through adapting

suitable educational programs. The content of pre-school and pre-primary education programs meets the needs of children and parents' expectations. It is provided through developed and timely special and social assistance programmes to children, their families, and families at risk. A safe and functional environment in the kindergarten is created for children who have special needs. The highly qualified teachers, child care providers and healthcare professionals work as a well-tuned team who closely cooperate with all partners.

The organisation of social skills development activities and sport activities for children with special needs and their families

Activities:

1. Day of Cakes organised with the school community to raise funds for children with disabilities:

   https://www.gandrelis.utena.lm.lt/238-pyragu-diena-2016

   https://www.gandrelis.utena.lm.lt/327-pyragu-diena-2017;

2. Traditionally celebrated "Day of Tolerance": https://www.gandrelis.utena.lm.lt/330-tolerancijos-diena-2017;

3. Parental assistance each spring in improving the Kindergarten with children:

   https://www.gandrelis.utena.lm.lt/181-graziname-darzelio-teritorija-2016;

4. "Day without a car" traditionally organised for all school community and neighbours:

   https://www.gandrelis.utena.lm.lt/98-judejimo-savaite-2015

   https://www.gandrelis.utena.lm.lt/211-diena-be-automobilio-2016;

5. Educational programme with horses for children with disabilities lasting five years:

   https://www.gandrelis.utena.lm.lt/222-draugyste-su-zirgais-tesiasi-2016;

6. Educational programme for the care of domestic animals for pre-school children and children with special needs: https://www.gandrelis.utena.lm.lt/295-pas-modesta-ukyje-2017;

7. Regional sporting festival "Active family" organised for four years:

   https://www.gandrelis.utena.lm.lt/185-aktyvi-seima-2016

   https://www.gandrelis.utena.lm.lt/290-aktyvi-seima-2017;

8. Participation in Lithuanian Special Olympics educational programme "Young Athlete" which introduces children and their families to the world of sports and the Special Olympics. At the nursery, we have included children in fun activities in the pursuit of the goal of the widest possible social integration of children with special needs: https://www.gandrelis.utena.lm.lt/109-jaunasis-atletas-2015

9. Sporting feast "Catch the Christmas" for pre-schoolchildren and their parents, schoolchildren of the eighth grade, foster families of Utena district, organised for four years by Utena nursery-kindergarten "Gandrelis" and its social partners: https://www.gandrelis.utena.lm.lt/122-sugaukim-kaledas-2015
https://www.gandrelis.utena.lm.lt/252-sugaukim-kaledas-2016
https://www.gandrelis.utena.lm.lt/336-sugaukime-kaledas-2021

2. CONTINUOUS PROFESSIONAL DEVELOPMENT THROUGH COOPERATION WITH OTHER EDUCATION PROVISIONS.

Teachers share ideas with other teachers, using these to test the effectiveness of educational methods. The school has developed a system to meet the individual needs of children, to foster their development of their cognition, knowledge, creativeness and health. To provide children and their parent the complex aid, social support and health care services required, there is a professional team who consists of a psychologist, special pedagogue, speech therapist, social pedagogue, physical therapist and dietician.

1. The special pedagogue is organising training for educators from Utena pre-school provisions on how to help children with autism to adapt, to develop and expand their educational possibilities:
https://www.gandrelis.utena.lm.lt/329-pasidalinimas-patirtimi-2017

2. The psychologist leads the training of positive parenting and provides the individual consultations for children and their families facing different problems (such as communication, behaviour, fears etc.), strengthens the psychological resilience of children and motivates the creation of an environment that is safe and friendly for development

The professional team of specialists helps the teachers, guardians and parents who have children with disabilities to integrate.

https://www.gandrelis.utena.lm.lt/administracija/pagalbos-vaikui-specialistai

1. CONTINUOUS CAREER EDUCATION AND IT'S INTEGRATION INTO THE SCHOOL CURRICULUM
2. APPROACHES TO SUCCESSFUL CROSS-CURRICULUM INTEGRATION; WHY CROSS-CURRICULAR TEACHING IS ESSENTIAL

School / Setting:	Utena Aukštakalnis Progymnasium
Website:	https://www.asg.utena.lm.lt
Principal / Headteacher:	Arvydas Šilinskas
Type of school:	Progymnasium
Children age-range:	6 – 15
Context	Number of students: 782 Number of teachers: 83 Established in : 1982 School contains: pool, large gym, ethnographic museum, yamaha music school, branch of the Central A. and M. Miškiniai library, canteen, two informatics classes.

DETAILS OF CASE STUDY

1. CONTINUOUS CAREER EDUCATION AND IT'S INTEGRATION INTO THE SCHOOL CURRICULUM

Careers are considered as a path of personal growth through lifelong learning, with successful careers possessing the ability to balance work, leisure and family as well as feeling satisfied. The school has experience of providing successful career education for the last few years and it is playing an important role in supporting the career development of young people. At school there is a person responsible for career education organization, provision of vocational

information and vocational counselling services. The career education coordinating teacher gained career education skills in the national project "Creation of career education, their integration to and development in general education and vocational training institutions" (Nr. VP1-2.3-ŠMM-01-V-01-002) which ran between 2012 and 2014.

Every year, to ensure that there is a continuous career process, career education weeks are organised. Students meet representatives of Utena Gymnasiums, representatives of Lithuanian higher education and vocational schools. Particular attention is paid to meeting representatives of various professions and visiting different working environments.

In addition to this, career education is being integrated into the school education curriculum. Teachers demonstrate a subject's relevance to real life and emphasise its application in a labour market; this has been found to strengthen students' motivation to learn the subject.

Everything the school does in career education is important for the students for them to successfully choose a course of study, a profession or work moving from the teaching environment to the labour world, as well as further professional development and lifelong learning (see Appendix 1).

2. APPROACHES TO SUCCESSFUL CROSS-CURRICULUM INTEGRATION; WHY CROSS-CURRICULAR TEACHING IS ESSENTIAL

Integrated studies brings together diverse disciplines in a comprehensive manner, enabling students to develop a meaningful understanding of different associations and influences within a topic. The progymnasium educational personnel who have experience in this type of teaching (Maths – Physics, ICT-Russian-Technology, English-Biology etc.) truly believe that these classes provide an effective approach, helping students to develop multifaceted expertise and learn the important role interrelationships can play in today's dynamic global world. This method of teaching helps educate students who will become fluent in several disciplines and be comfortable moving among them. Outcomes of this type of education are:

- Increase motivation - students enjoy these lessons.
- Increase understanding, retention, and application of general concepts.

- Help comprehend global interdependencies,

- Develop the ability to make decisions, think critically and creatively

- Teach synthesize knowledge beyond the disciplines.

- Promote cooperative learning and a better attitude toward oneself as a learner and as a meaningful member of a community.

To sum up, integrated/cross subject learning makes school more attractive and productive for students and teachers (see Appendixes 2 and 3).

Career education week

Aim – to stimulate students' curiosity about different professions, future studies and career planning through teaching them to formulate proper questions and encouraging students to address them to the event lecturers.

Place	Participants	Content (activities)
Room 219	Interested in professional sports related career	Meeting with Kastytis Stankevičius, member of *Lithuanian Shotokan Karate Federation* and the head of sports club "Impulsas"
Room 219	Interested in medical studies	Meeting with Augustinas Tumėnas, resident doctor. Medical profession, medical studies and everyday life wearing a white coat.
Room 219	Interested in business studies	Meeting with Saulius Kromalcas, marketing lecturer of Utena University of Applied Sciences. The realisation of a dream.
Cinema theatre „Taurapilis"	Interested in creative careers	Meeting with Miglė Križinauskaitė-Bernotienė, the head of cinema theatre „Taurapilis"and media experimentalist. „ Venture to offer a dream"
Utenos radijas FM	Interested in journalism, radio broadcasting	Meeting with Linas Bražionis, the head of „Utenos radijas". Microphone and I.
Utena County police department Maironio str. 4	Future police officers, crimialists	Students will become acquainted with the professions of police officers ad criminalists
Utenos PPT (pedagogical psychological service)	Future psychologists	Meeting with the staff of pedagogical psychological service. A day in a life of a psychologist, characteristics of the profession, studies, directions for specialization in the field of psychology.
Room 219	Undecided	Meeting – seminar with Justina Araminaitė-Talakauskė, senior specialist of department of youth affairs in Utena Labour Exchange. „*Plan* and Develop Your *Future Career* Path"
Utena vocational education and training centre	Future mechanics	Experience based learning activities. Mechanic jobs.
Utena University of Applied Sciences,	Future beauticians	A visit to cosmetology education centre, cosmetology study programme, makeup lesson.

the Faculty of Medicine Utenio		
Utena University of Applied Sciences Maironio	Future IT specialists	Programming of everyone by Associate Professor Dr. Jūratė Urbonienė.
Utena University of Applied Sciences, Faculty of Business and Technology	Interested in a career in engineering and electronics	Control Systems, Automation and Robotics. Dr. Aleksandras Kirka.
Utena University of Applied Sciences, the Faculty of Medicine Aušros	Future odonatologist	Dentistry today. Visiting training centre.
Room 103	8c	Meeting with member of Open Youth Space „Uncommon America – volunteering and the biggest parks"
Room 219	Interested in an art career	Meeting with Giedrius Mazūras, sculptor –ceramist and the deputy of Utena Art School. Meaning of art, relationship between art and artist.
Room 219	The most active 8- graders	Presentation „ Advantages of being a member of youth organization. Erasmus+ projects", introduced by students from UYO „Round table".
Room 317	8c	„Interesting experiments". Lecturer – Dovydas Grigaitis.
Room 318	8a	„Interesting experiments". Lecturer – Dovydas Grigaitis.
Utena vocational education and training centre	8c	Experience based learning activities. Professions of salesman, carpenter and chef.
School museum	Members of journalist club	Meeting with journalism student at Vilnius University
JSC „Utenos trikotažas"	Interested in science	Visiting a laboratory. How to carry out a scientific research.
Animal shelter	Animal lovers	Meeting with Jolanta Tarkauskienė, the founder of animal shelter.
Utena municipality	Interested in economist career	Meeting with Jūratė Brasiūnienė, the Economist of the Strategic Planning and Investment Management Division
	Interested in architecture and design	Architecture and design as a profession. When a hobby becomes a business. Meeting with a Gintaras Pociūnas, architect and the head of international company.

Integration of three subjects: information technology, technology,
Russian language
" Setting of the breakfast, lunch, dinner table".
Grade 7

The teacher of information technologies, technology teacher-methodologist and the senior teacher of Russian language conducted an integrated hour and a half lesson named "Setting of the breakfast, lunch, dinner table". The participants of the lesson were grade 7 students. Students, working in groups, had a practical table set workshop. The sudents were using tablet computers to find cultery and crockery names in Russian. Having taken pictures of breakfast, lunch, dinner table settings the students prepared presentations. The students of each group identified the rules of the etiquette that they are already aware of and discovered new rules while watching a movie about the Russian speaking animated bear Pooh's Pooh. A 7th grade student who is very good at Russian helped her classmates with some Russian phrase translation to Lithuanian. Using a Classroom Management Console tool the members of each working group evaluated their efforts, and finally they were tested, the results of which showed a large amount of progress made in the lesson. When the students reflected on the lesson, they shared their feelings about the integrated class and, while watching a movie about Mr. Bean's adventures at the restaurant, they easily identified and commented his etiquette drawbacks.

Appendix 3

A cycle of integrated geography and information technology (IT) lessons conducted using the ArcGIS a cloud-based mapping platform
Grade: 6

Teachers: Geography teacher methodologist and IT teacher.

Aim: to develop students' geographic cognition and analytical thinking through the medium of geo-informative technologies(GIS).

Geography and IT lesson cycle:

1. Geography lesson: the lesson takes plase in non-traditional environment in the town of Dubingiai located   in Molėtai district in Lithuania. Students take pictures of famous natural and social objects of Dubingiai.

2. IT lesson: students upload and select the best photos taken during the field trip.

3. IT, geography: students develop their working with the MS Word editing program skills: text about the objects seen in Dubingiai preparation and typing.

4. IT lesson: students develop their working with the MS Word editing program skills working on the topic "Objects recorded in Dubingiai" (copy, paste; inserting a table; search information search, search result analysis, URL address concept).

5. Geography, IT; students log in a a cloud-based mapping platform ArcGIS, they get to know the system which lets students store, retrieve, manage, display, and analyse all types of geographic and spatial data; produce maps and other graphic displays of geographic information for analysis and presentation (https://www.arcgis.com/features/index.html).

6. Geography, IT: tasks in the ArcGIS platform; students mark and describe objects, create maps, and upload photos into their created maps.

7. Geography, IT: tasks in the ArcGIS platform; students make a tourist route of famous places discovered in Dubingiai on an interactive map.

1. STRONG SPORTS TRADITIONS
2. INNOVATIVE EDUCATIONAL SPACES, MODERN IT AND CLOUD COMPUTING TECHNOLOGIES, AND THE APPLICATION OF MODERN DIGITAL METHODS IN EDUCATION
3. COHERENT STUDENT ASSESSMENT SYSTEM

School / Setting:	**Molėtų progimnazija**
Website:	https://www.progimnazija.moletai.lm.lt/
Principal / Headteacher:	Kazimieras Karalius
Type of school:	Progymnasium
Children age-range:	11 – 14
Context	Number of students: 385 Number of teachers: 45 Established in: 1923

DETAILS OF CASE STUDY

1. The school has spectacular sports traditions, with ten years of sporting success, making the school amoung the best schools for sport in Lithuania. Students, their parents and teachers are actively involved in sporting events, competitions and festivals. Many activities are focussed around being outside; these include the school Olympic Games, weekly movement actions, outdoor exercise, hiking and skiing. Teachers' creativity, initiatives, equipment variation and their targeted use during sports classes and sports events raise students' interest in sporting activities and their desire to succeed. The school year is full of sporting events (see Appendix 1).

2. The school is investing into the modernization of educational spaces to be technologically advanced. In partnership with the Molėtai District Municipality, a natural science education area, a modern culinary class, and an IT class with virtual workplaces have been established recently. To develop students' creativity, the school uses micro:bit microcomputers. A micro:bit programming competition for grade 5 students is organized in the final week of each month.

3. The progymnasium leadership team have created an effective student achievement monitoring system in order to observe the progress of each pupil (the system of student progress monitoring has been created using Google cloud technology). Students academic and cognitive achievements are measured twice a year. These results are analysed and discussed in meetings of parents, pupils and teachers. (see Appendix 2)

The school is proud that students show steadily good (above the average of Lithuania) results in all subjects.

http://moletaiprogimnazija.blogspot.lt/2015/05/mokyklos-standartizuotu-testu-ataskaita.html

Appendix 1

Sport events

No.	Events	Date
1	Autumn Cross Race	October
2	European Movement Week run	October
3	Sprint Competition	October
4	Interclass squares for boys and girls competition for grade 5 and 6	October, November
5	Student photography contest on the theme of sports	November
6	Christmas Basketball Tournament 3x3 for grades 5-6 and 7-8 boys and girls	November, December
7	XVII Christmas Tournament (Parents, Teachers, Students)	December
8	Collection and award of the fifth generation of the most popular school athletes	December
9	Discussion of the contest "Olympic bonfire for every heart".	December.
10	Running around Lake Želva	January
11	Darts Competition	January
12	Shooting competition	January
13	"Courageous, strong, vigorous" competitions for grades 5-6	January
14	Shakhty Tournament for grades 5-10	February
15	February- the month of health	February
16	Ski sledging	February

17	Basketball Tournament for grade 5-8 boys and girls	March
18	Easter family basketball tournament 3x3	April
19	Olympic Table Tennis Tournament	March, April
20	Drawing contest "Extreme sports"	April
21	Football matches	April
22	Student test physical preparation and sport related knowledge by taking tests for the Lithuanian Physical Education Mark program.	May
23	Lithuanian Football Championship "Hedhehog Goal" (Ežio golas)	May
24	Cycling competition	May
25	Participation in the "Sport for All" festival in Palanga town	May
26	Sports Event for grade 5 students	May
27	Sports and healthy lifestyle promotion event for grade 6-8 students	June
28	Olympic Day in Vingis Park, trip to the capital city Vilnius	June
29	Competition "Sport and Environment"	June

Appendix 2

Student progress monitoring templates

EFFECTIVE CIVIC EDUCATION – THE RESULT OF PROACTIVE LEADERSHIP AND GOOD TEAMWORK

School / Setting:	**Utena Dauniškis Gymnasium**
Website:	https://www.dauniskis.utena.lm.lt/
Principal / Headteacher:	Asta Skeirienė
Type of school:	Gymnasium
Children age-range:	15 – 18
Context	Number of students: 412
	Number of educators: 44
	Established in : 1980

DETAILS OF CASE STUDY

Utena Dauniškis Gymnasium has a strong basis of civic education. The school leaders encourage teachers to **consecutively plan and integrate civic education into the curricular and extra curricular activities. Through doing this,** the school shares methods that contribute to making civic education more effective and attractive to the school community.

Involvement into the project "Schools - Ambassadors of the European Parliament"

Utena Dauniškis Gymnasium participates in the project led by the Lithuanian Information Office of the European Parliament that implements the program "Schools - Ambassadors of the European Parliament". The aim of the program is to promote an active interest of young people in the decision making and current issues of the European Union, and, in particular, the role of the European Parliament in European democracy. The "Schools - Ambassadors of the European Parliament" program is integrated into the formal and informal education curriculum. Lessons focus around the EU and the EP, European events, debates, projects on the theme of the EP and the EU and their dissemination.

The school representatives participated in seminars organized by the program organizers and curators. The geography teacher of Utena Dauniškis Gymnasium, senior ambassador L. Pelikšienė, the school Deputy Director for Education K. Skorochodovaite and five students who were elected as young ambassadors were active participants of these seminars. That Utena Dauniškis Gymnasium is worthy to have a title of a School Ambassador is indicated by the fact that on February 2, 2017 the gymnasium team participated in the Euroscola event in Strasbourg, where they represented Lithuania among the 21 EU countries.

E. Kavoliūnaitė-Ragauskienė and V. Pajaujis, who are representatives of the Lithuanian Institute of Law, conducted lessons on the topic of political groups, human rights and the competences a person must have to be a valuable member of the European Parliament. M. Lankauskas, a researcher at the Legal Institute of the Lithuanian Law Institute, taught the values of the European Union.

Student civic knowledge competition

On March 17, 2017 Mykolas Romeris University hosted a pupils' civic knowledge contest. In this, students deepened their knowledge about the activities of the EU and the EP, which further united the school team. The teacher L. Pelikšienė was very proud of the gymnasium team, who willingly prepared for the competition through researching and summarising information diligently after their classes.

Success at the photo competition "I Create the Future of Europe "

On the occasion of the European Day, B. Ropė, a member of the European Parliament, initiated a drawing and photography contest "I Create the Future of Europe " where a school student won the 1st prize.

European Information Center

In May 2, 2017 the European Information Center was set up at the gymnasium. It provides the community members with information about the European Union. The centre displays informative educational posters made by the school young ambassadors. They actively work with a team of students named the "Strasbourg Class 2017". Young Ambassadors and the Gymnasium Student Council organise activity breaks, create crosswords and organize quizzes, all with an EU theme.

Communication and collaboration

The IT teacher G. Sudniutė not only organized the European Exam but also carried out other creative initiatives. The school leaders, teachers and students sent electronic greetings to members of the European Parlament to greet them on European Day. The school community received a warm letter from the EU parliament member Laima Andrikienė, and they were very pleased to receive a greeting on Europe Day from the President of the European Parliament, Antonio Tajani,

A week of Europe

On May 8-12, 2017 a week of activities devoted to Europe took place; Topics of the European Union and the European Parliament were creatively included into different subject lessons. Students' feedback about the integrated lessons was very positive, and the use of interdisciplinary integration was also well evaluated by teachers, lecturers and the school guests. On the occasion of the European Week, the members of the Seimas political scientist Laurynas Kasciunas, Ambassador Dr. Žygimantas Pavilionis and Edmundas were invited to the gymnasium to share their insights and experiences and to answer the questions prepared by the school community members. All students attending these lessons, to share learning and development throughout the school community.

Brainstorm competition "We are Europeans"

The European Week event was completed with the brainstorm competition "We are Europeans". Teams consisted of students from different grades (1a + 2d; 1b + 2c; 1c + 2b; 1d + 2a). Students tested their knowledge that was gained in integrated lessons of EU and geography, history, citizenship, economics, biology, English, ethics, and math lessons.

Lessons about Europe were held by members of the Seimas of the Republic of Lithuania and the Municipality of Utena

Members of the Utena District Municipal Council were in charge of the citizenship lessons "Politicians in the state" for the 2nd (17-year-olds) grade students. The lessons were held in the form of a discussion. The pupils were actively involved in activities and were very interested in discovering the responsibilities that the politicians of the Utena District and Lithuania hold.

Concert dedicated to Day of Europe

The gymnasius has an annual tradition, which is to organise choir competitions. Each class prepares a performance on a given topic. On May 9th 2017, the content winners and the school group of modern dance shared energy with the town community, demonstrated their talents and exchanged their experiences with other high school students in the concert organized by the Utena Cultural Center on the occasion of the Day of Europe.

1. MATHEMATICS TEACHING STRATEGIES
2. COLLABORATIVE WORK BETWEEN SCHOOL LIBRARIANS AND SUBJECT TEACHERS

School / Setting:	Utena Adolfas Šapoka Gymnasium
Website:	https://www.asg.utena.lm.lt
Principal / Headteacher:	Saulius Brasiūnas
Type of school:	Gymnasium
Children age-range:	15 – 19
Context	Number of students: 483 Number of teachers: 48 Established in: 1994

DETAILS OF CASE STUDY

1. DEVELOPMENT OF MATHEMATICS ACHIEVEMENT IN UTENA ADOLFAS ŠAPOKA GYMNASIUM

Utena Adolfas Šapoka Gymnasium has a long-term track record of achieving high results in mathematics. According to PUPP (verification of students' achievements in basic education stage) benchmarking, the development of students' mathematical skills is one of the strongest teaching areas in the gymnasium. To achieve good results in Maths the gymnasium carries out the following activities:

- Maths teachers prepare tasks relating to curriculum content for students with different skills and achievement levels. Students are provided with differentiated tasks that make it possible to assess the abilities of each student and objectively ascertain whether they are in line with the expected achievements (OR: expectations?) described in the General Education Programmes.

- Maths teachers have developed a clear assessment system that helps ensure an equal assessment of all pupils, provides teachers and pupils with better quality feedback, and enables a proper evaluation of students' progress.

- Mathematicians promote a holistic approach to general education. They integrate maths teaching into the teaching of other subjects by organizing cross-curricular projects to make maths teaching more interesting and related to a real life practice.

- Encourage students to take ownership and be independent in their studies as much as possible.

- Make conditions for individualized learning (s): ICT-based learning (active lessons www.aktyviklase.lt), work with higher level skills students).

- Gymnasium teachers share their best teaching practices and the newly developed system with our district, country educators and disseminate experiences to their foreign partners during international projects (gymnasium website https://www.asg.utena.lm.lt Administrative information → Activity Report 2016 → 1.1 New Generation - New Lesson Ideas.) Teachers actively participate in subject seminars to deepen their knowledge and are eager to gain new skills.

2. COLLABORATIVE WORK OF SCHOOL LIBRARIANS AND SUBJECT TEACHERS

The gymnasium librarians have a professional involvement in the learning and teaching programme of the school by intensive and very successful collaboration with school teachers through the organisation of integrated interdisciplinary and cultural activities inside and outside the school. Educational trips are much enjoyed and valued by students. Before each trip, educators prepare their students by developing their visual literacy, and by integrating the trip activities into the curriculum. (**see Appendix 1**)

The case presents some more examples of librarians and teachers' joint activities:

- Integrated lesson „Commemoration of the 75th birth anniversary of prosaist Broniaus (Bronius?) Radzevičiaus".
  Participants: 11-12 grade students,
  Integrated subjects: Lithuanian, History, Library.

- Literary event "An Hour with Shakespeare". The event was dedicated to the Year of the Library.

  Participants: 11-12 grade students

  Integrated subjects: Lithuanian, English, Music, Library.

- Event "I read, I write, I am," for reading promotion. A special guest A. Augustaitienė, Director of the Children's Department of the National M. Mazvydas Library was invited to the event.

  Participants: 9-10 grade students

  Integrated subjects: Lithuanian, Technology, Music, Library.

Appendix 1

EDUCATIONAL TRIP TO SWEDEN

As part of the programme

"FOOTPRINTS OF LITHUANIA IN EUROPEAN COUNTRIES"

to commemorate the 100th anniversary of Lithuanian independence

Goal:

Participating in a lesson on board a ferry, visiting the museum, listening to the stories of teachers and guides, performing received tasks, to find Lithuanian footprints in Europe.

Objectives:

- To deepen knowledge about Swedish culture, history and nature.
- Find the traces of Lithuanians in Sweden and discover the relationship of a famous Lithuanian historian Adolfas Šapoka with Stockholm.

Participants: Utena Adolfas Šapoka Gymnasium students, teachers and Utena monastery sisters.

Organizer: Utena Adolfas Šapoka gymnasium history teachers J. Baltuškienė and D. Dūdėnienė, librarian V. Gudelienė, Utena monastery sisters Dominyka (V. Slepikaitė) and Paulina (J. Bačauskaitė).

Duration: November 20-22, 2017

Route: Utena – Riga – Stockholm - Riga – Utena

Sightseeing places: The Vase Ship Museum, National Museum of Sweden, Old Town of Stockholm, Old Town of Riga.

No.	Activity	Programme coordinators
1.	20-11-2017 educational activities in the ferry conference hall:	
	"Why it is worth travelling to Sweden?" Lithuanian conference held in Stockholm in 1917	History teacher J. Baltuškienė
	Brain battle - "Sweden– culture, history, nature. Sweden interfaces with Lithuania ".	History teacher D. Dūdėnienė
	"Travel is an opportunity to get to know yourself". Discussion about the St. Jacob's Way.	Sister Dominyka (V. Slepikaitė)
	The book of Swedish writers which students can find in the gymnasium library presentation.	Librarian V. Gudelienė
	The Roman Catholic Church and the Lutheran Evangelical Church: religious and historical contact points in Lithuania, Latvia and Sweden.	Sister Paulina (J. Bačauskaitė)
2.	21– 11–2017 Educational trips to Waza Ship Museum, National Museum of Stockholm, the Royal Palace, Stockholm Grand Hotel (where the Lithuanian conference was held in 1917), Stockholm Old Town.	Guides
3.	21– 11–2017 Arrival to Rigą. Riga Old Town sightseeing.	Guide

POLAND

POLAND EDUCATION SYSTEM

The education system in Poland includes public and non-public kindergartens, primary schools, gymnasia, secondary schools, postsecondary schools and art schools, along with special schools and educational and social care centres.

There is an obligation in Poland to attend and graduate from 8-year primary school (until 2019, known as gymnasium) and for compulsory education until the age of 18. Learning in public schools is free. While parents can choose non-public schools for their children, they must have the same qualification as public schools, which means that they must meet certain provisions of the *Education Law Act.* By definition, primary schools must be public.

A reform of education has been implemented in Poland. The school system - from the system of 6-year primary school, 3-year gymnasium, 3-year secondary school of general education, 4-year secondary technical school, 3-year vocational school and post-secondary school, has been transformed into the system as presented below. At present, the structure of the educational system includes:

- 8-year primary school
- 4-year secondary school of general education
- 5-year secondary technical school
- 3-year first-cycle vocational school
- 2-year second-cycle vocational school
- 3-year special vocational school
- post-secondary school

Kindergarten

Kindergartens are attended by children three to six years of age. Six-year-old children are taught in compulsory pre-school that lasts one year. In addition to kindergartens, there are also pre-school departments in primary schools and other forms of pre-school education.

Primary school

Children start primary school education at the age of 7. Six-year-old children may start education upon the consent of parents and after obtaining a psychological and pedagogical opinion.

Teachers implement the didactic and educational process in accordance with the applicable essential curriculum as well as the educational and preventive programme developed in each school. The books are bought for pupils through a special grant from the state. At the end of primary school (currently - gymnasium), there will be an 8th-class exam (at present, a gymnasium exam). It is a written external exam and is conducted by the Central Examination Board, although organised by eight regional examination boards. The 8th-class exam will cover three subjects – Polish language, mathematics, and a modern foreign language. The exam does not have and will not have a specific pass mark. The results will allow for the determination of the level of competencies of pupils graduating from primary school and will not affect the graduation from the school but will only be one of the criteria for recruitment to secondary schools.

Gymnasium

There was no recruitment in the 2017/2018 school year for the first year of gymnasium, which is the beginning of the closure of this type of school. Gymnasiums will cease to function following the 2018/2019 school year.

Secondary education

After graduation from gymnasium (or primary school from 2019 onwards), pupils have to continue their education in a chosen school. In the education system there are: secondary schools of general education, secondary technical schools, and first-cycle vocational schools. The present 3-year secondary schools of general education will become a 4-year secondary school of general education from September 1, 2019. The 4-year secondary technical school will also add an additional year.

Matura exam

The graduates of the secondary school of general education and secondary technical schools can take the Matura exam. This exam is not compulsory, however it is a major step in the recruitment process for higher education. The Matura exam has three main functions:

1) To set the level of fulfilment by the examinees of curriculum requirements in terms of subjects covered by the exam.

2) To certify the level of knowledge and skills of the examinees that is required by law in the fields of Polish language, mathematics, and selected foreign language – in the case of passing all compulsory exams in the written part (at the basic level) and oral part (without defining the level).

3) To replace the entrance exam to higher education institutions. These institutions will now use the results of the Matura exam from a certain subject or subjects - in particular, at the extended level - as criteria in the recruitment process.

All tasks in the examination sheets check to what extent the examinee meets the requirements specified for each subject in the curriculum of general education. This document defines the scope of knowledge and skills which must be included in the teaching and learning process, and they are also checked in the exam tasks.

Professional qualification exam

The graduates of secondary technical schools and vocational schools may take this exam. This exam assesses the level of knowledge and skills of the examinee in the field of one qualification in their profession. The scope of knowledge and skills for each qualification has been defined in the curriculum for vocational education. The Central Examination Board has published information on examinations confirming professional qualifications, including exemplary questions and tasks.

Assessing and classifying students of all school types

Annual (semester - adult schools) classification subject grades, starting from the 4th class of primary school are as follows: excellent - 6, very good - 5, good - 4, satisfactory - 3, acceptable – 2, and unsatisfactory - 1. The annual classification grades for behaviour are: exemplary, very good, good, satisfactory, unsatisfactory, and reprehensible. In class I - III of primary school and

in special schools for pupils with moderate impairment, the classification grades are descriptive. The method for ongoing assessment in subjects and of behaviour is specified in the statute of each school.

Special schools

In the Polish education system, pupils with mild and moderate learning difficulties as well as with other disabilities, including cumulative impairment, may fulfil the compulsory educational obligation through integration in mainstream schools or at special schools. Pupils with severe mental disability can only fulfil the compulsory education obligation at special schools.

Schools can be public, non-public with the status of a public school, and non-public, other establishments of the system of education are public or private.

Public schools

A public school is an educational institution, established on the basis of charter by an administration entity or a local self-governing body (gmina, powiat, voivodship) or other legal or private persons. It guarantees free schooling and implements programmes set by the minister responsible for national education, and applies the principles of assessing and classifying pupils set by the minister.

Non-public schools

A non-public school is an educational institution run by legal or private persons on the basis of a record in the register of establishments and non-public schools made in the department of education of a proper authority. Non-public schools include social schools, denominational schools, and private schools. They can be financed from the tuition fee paid by the student's parents and they can also receive funds from other sources. Non-public schools in Poland have the same rights as public schools and are entitled to an educational subsidy grant for each student, the amount of which is equal to 100% of the average cost of the student's education in a public school. These schools have the right to issue school reports recognised by public schools and higher education institutions.

Statistics

Data of the Central Statistical Office in the 2016/2017 school year.

In all types of schools: primary, gymnasiums and secondary schools, 5.0 million children, youth and adults were educated, which accounted for 12.9% of the country's population. There were 13,517 primary schools, 7,706 gymnasiums (with 1 million pupils attending). In addition, there were 8,000 secondary schools (including 3,818 comprehensive schools). In Silesian Voivodship there were 1,171 schools with a total of 254,115 students

Full-time and part-time teachers by type of school and voivodships - total in Poland 49,832,835 (in Silesian Voivodship – 5,595,699).

More details: https://stat.gov.pl/obszary-tematyczne/edukacja/

Administering schools and institutions

Local self-governing units are the authorities, which administer schools. Municipalities are tasked with administering kindergartens. Primary schools are also administered by municipal self-governments. Self-governing counties administer secondary schools and special schools. The regional schools and institutions are administered by the self-governing voivodship. Pedagogical supervision over schools is carried out by education superintendents.

Governance of school education reflects the territorial organisation of the Polish state. Poland is divided into 16 provinces or regions (województwo), 379 districts 12 (powiat), and 2,478 communes (gmina). The head of the province (wojewoda) represents the Council of Ministers in a given region. The regional education authorities (kuratorium oświaty) are included in the regional administration and are responsible for pedagogical supervision over schools. The local authorities take part in exercising public authority (levels of powiat and gmina).

The central level Responsibility for the administration of the school education system rests with the Minister of National Education.

In 2016 public expenditure for all the national system of formal education amounted to 67.6 billion PLN, which was equal to 3.7% GDP. Educational part of the general subsidy transferred to schools via self-government units, amounted to 41.5 billion PLN, moreover apart from the subsidies, the national budget allocated 4.1 billion PLN for education and educational care. The school education component of the general subvention from the state budget is the main source of funding for the school education sector in Poland. The amount of the general

subvention for all local government units is defined annually in the Budgetary Act, and then the Minister of National Education establishes the algorithm for the distribution of these funds among the relevant local government units. According to the Act on Revenues of Local Government Units, the authorities of these units decide on the use of funds received as part of the general subvention. This means that local government units decide on the amount of the total expenditure on school education and on its allocation, taking into consideration their own income. As school governing bodies, they are responsible, in particular, for the preparation of income and expenditure (financial) plans for all educational institutions supervised. Local government units also establish regulations for teacher remuneration and for the provision of financial support for welfare-related purposes. They are responsible for educational investments, and define the rules for obtaining and using private funds by schools. The funds defined in the financial plan, which is presented to the school authorities for consultation are disbursed by the school head who is responsible for their proper use.

SYSTEM OF TEACHER DEVELOPMENT IN POLAND

The legislation regulates initial teacher training for school education teachers, thus defining training models or paths which lead to qualifications required to practice the teaching profession.

Initial training of teachers is provided within two sectors of the education system: within the higher education sector: degree programmes, including first-, second- and long-cycle programmes. As part of degree programmes in individual fields of study at HEIs, students may choose a teacher specialisation track, which means that they can undertake teacher professional training (pedagogical training) as part of their degree programmes, in parallel to their general subject-specific training. Those who have not taken a teacher specialisation track and choose the teaching profession later may obtain a teaching qualification upon the completion of a non-degree postgraduate programme or a qualification course. Teachers employed in pre-primary and primary schools ought to have as minimum qualifications a Bachelor's degree, whereas teachers employed in lower-secondary and upper-secondary schools as well as basic vocational schools ought to hold, at the minimum, a Master's degree or equivalent.

According to SIO data, the number of teaching posts in Poland was - 673,232 in 2017.

Professional promotion of teachers

Polish teachers may achieve the following professional promotion levels:

- Trainee teacher
- Contractual teacher
- Appointed teacher
- Chartered teacher

Chartered teachers may apply for the title of Professor of Education. The headteacher/principal employs a teacher with the required qualifications who starts work at school for one year. On the first day of employment at the school, the teacher becomes a trainee teacher. The headmaster assigns the trainee to a tutor, which can be a contractual teacher selected from among the appointed or chartered teachers. This tutor is responsible for assisting and supporting the trainee teacher in the implementation of his tasks and obligations. A trainee teacher develops and implements the professional development plan that fulfils the requirements to achieve a certain degree of promotion. The trainee period ends with an interview or exam, depending on the degree of promotion to which the teacher aspires. A trainee teacher develops and implements the professional development plan that includes the requirements for achieving a certain promotion degree. The trainee period ends with an interview or exam, depending on the promotion degree to which the teacher aspires.

The issue of creating teacher development centres is specified in Article 77 of the Education System Act, one of the most significant legal acts concerning education in Poland. This inclusion demonstrates the importance of teacher development, which is considered an essential aspect of improving education quality in Poland. According to the Act, the main objective of the centres is the implementation of state educational policy and the undertaking of actions aimed at improving the quality of education. The development centres are established and administered by territorial self-governing units or legal and natural persons. Methodological advisers, who are distinguished teachers entrusted with this function, are also responsible for the development of teachers. Another act specifying the organisation of teacher development is the Teachers' Charter which determines, among others, the method of its financing.

Teacher professional development is conducted on three levels. The first of them, the central level, are the facilities administered by competent ministers: the Minister of National Education, the Minister of Culture and National Heritage, and the Minister of Agriculture. These facilities include: Centre for Education Development, Centre for the Development of Polish Education Abroad, Centre for Artistic Education, and Centre for Agricultural Education in Brwinów. Among the tasks and objectives of the facilities mentioned above, the following should be mentioned: supporting public development centres, psychological and pedagogical counselling centres, including specialist centres, pedagogical libraries, methodological advisers, the creation and coordination of networks of cooperation and self-education for teachers and headteachers of schools and institutions, as well development and publication of information and methodological materials.

Another level of teacher development is the regional level, including institutions created by self-governing units or natural persons. These are public and non-public voivodship teacher development centres, and their main objective is to implement training programs addressed directly to the teachers in a certain region. At present, there are 40 such centres, including 5 in the Silesian Region.

They are accredited by the education superintendent, which guarantees high quality training. Pursuant to the Regulation of the Minister of Education on the teacher development institutions, their task is to organise and provide development resulting from the directions of the state education policy as well as changes in the educational system. The most important area of activity is the implementation of essential curriculum and development of curricula. Teacher development centres also provide trainings in many areas - e.g. concerning the needs of pupils and students, individualisation of the teaching process, and improvement of the quality of the education process at schools. An analysis of the results obtained in combination with the analysis of external exam results allow for proper planning of the forms and content of teacher development. The next group of development forms is addressed to the headteachers - its scope is also based on the determination of needs. Within these areas, the teacher development centres are running cooperation and self-education networks. The centres also organise school support, which includes assistance in diagnosing the needs of the

school or institution, establishing the procedures aimed at meeting its needs, planning the forms of support and their implementation, as well as joint assessment of the effects and development of conclusions.

The forms of teacher professional development include, in particular: postgraduate studies leading to qualifications, postgraduate studies continuing professional development (postgraduate studies are provided by higher education facilities), qualifying courses (leading to qualifications, but carried out in development centres) and continuing professional development courses. In long forms of educational development, i.e. postgraduate studies and professional development courses, about 4% of all teachers participate. The most popular are short forms of development of up to 20 hours - nearly 90% of teachers complete them every year.

In conclusion, it should be noted that the teacher development system is conducted at three levels: central, regional and local. The development centres that operate at each level have specific tasks resulting from applicable acts and regulations issued by competent ministers.

The forms of development for teachers are diverse: from first-cycle studies to short professional development courses, workshops, and training. Creating a development system that meets the needs of the educational environment is a continuous process, and includes upgrading qualifications by the teacher-consultants working in the development centres as well as searching for optimal solutions in terms of organising modern forms of development and gaining supplemental education.

SCHOOLS AND EDUCATION INSTITUTIONS VISITED DURING SHORT TRAINING EVENT IN POLAND

- RODN WOM, ul. Wyszyńskiego 7, Katowice, http://www.womkat.edu.pl/
- Silesian Planetarium, Al. Planetarium 4, Chorzów, http://www.planetarium.edu.pl/
- Silesian Ethnographic Museum, Al. Parkowa 25, Chorzów, http://muzeumgpe-chorzow.pl/pl/
- Pałac Młodzieży, Mikołowska 26, Katowice, http://pm.katowice.pl/
- ZSO nr 5, ul. Piłsudskiego 29, Zabrze, http://zso5.zabrze.pl/

- Zabrzańskie Towarzystwo Rodziców, Opiekunów i Przyjaciół Dzieci Specjalnej Troski, ul. Wyciska 5, Zabrze, http://ztr.zabrze.pl/

- the Scientific Information Centre and Academic Library, CINIBA, ul. Bankowa 11 a, Katowice, http://www.ciniba.edu.pl/index.php?lang=en

- Muzeum Śląskie, ul. Dobrowolskiego 1, Katowice, https://muzeumslaskie.pl/pl/

- Complex of Silesian International Schools, Katowice, Witosa 18

- Powiatowy Zespół Szkół, Bieruń, Granitowa 130, http://pzsbierun.pl/

- Museum of Katowice History, ul. Rymarska 4, Katowice, http://www.mhk.katowice.pl/index.php

- Przedszkole nr 21, ul. Ryszki 33, Chorzów, https://przedszkole21chorzow.edupage.org/

- Zespół Szkół Sportowych nr 1, ul. Ryszki 55, Chorzów, http://nowastrona.sp5.chorzow.pl/

- Przedszkole nr 19, ul. Karpacka 15, Chorzów, http://przedszkole19chorzow.pl/stronawww/

- Akademicki Zespół Szkół Ogólnokształcących nr 2, ul. Farna 5-7, Chorzów, https://3lo.edu.pl/

- Silesian Centre for Education and Interdisciplinary Research, l. 75 Pułku Piechoty 1, Chorzów, *http://www.smcebi.us.edu.pl*

- National Symphonic Orchestra of Polish Radio, plac Wojciecha Kilara 1, Katowice, http://www.nospr.org.pl/en/

- Contemporary Art Gallery, aleja Wojciecha Korfantego 6, Katowice, http://www.bwa.katowice.pl//

- Educational House of Silesian Library, ul. Francuska 12, Katowice, http://www.bs.katowice.pl/pl/dla_czytelnikow/dom_oswiatowy

THE ACADEMIC SECONDARY SCHOOL NO. 2, WHICH ENTAILS VARIOUS TYPES OF COOPERATION WITH UNIVERSITIES

School / Setting:	**Academic Secondary School No. 2**
Website:	www.3lo.edu.pl
Principal / Headteacher:	Katarzyna Sikora
Type of school:	Secondary School
Phase (age-range):	15 – 19
Other background information relating to this strand of professional development	The results achieved by pupils of another, previously set up in Chorzów Academic Secondary School, on external examinations and a high position on ranking lists in Poland confirm the legitimacy of creating Academic School cooperating with universities and benefiting from their support in developing special abilities and interests of students.

DETAILS OF CASE STUDY

In 2005 Chorzów city authorities established the Academic Secondary School No. 2 expecting that the school will undertake various initiatives and activities aimed at developing students' talents and achieving such high academic results that the school should stand out not only in the city, but also in province and in the country. Confirmation of the school's achievements should be the high results of students on the matriculation examination and the place of school on the ranking lists in Poland. The idea was that school graduates should be distinguished by studying, after high school, at various universities. After graduation, they should easily find a job in the learned profession, fulfilling in it and having successes at work.

The academic character of the school is manifested first of all in the preparation of a special educational offer every year for new high school students.

Created in the following school years, new first classes in the in the Academic Secondary School No. 2 implement obligatory subjects resulting from the framework teaching plan and cover the scope of the national core curriculum (at the elementary and extended level) as well as supplementary subjects to which the curriculum is created by teachers. These programs are original and largely innovative. As part of the extended and supplementary subjects, students from the first grade in the third year of the school are to a certain extent oriented to teaching selected groups of subjects, which entails the class name given by the school. And so in the 2017/2018 school year, in the school, 6 first classes were created:

- legal and linguistic class 1a,
- media and theatre class 1b,
- mathematics class 1 c with extended English language,
- 1d sport and recreational class with extended English language,
- medical class 1e,
- media and social class 1f.

Each class is supported by the university on the basis of an agreement signed by the headteacher and the rector of the university. This support consists in free of charge special lectures or workshops for students, or inviting students to participate in classes at the university. Students use very well equipped laboratories at the university, university library and the knowledge and experience of researchers. The class teacher remains in contact with the designated academic staff of the university, diagnoses the needs of pupils with him and sets out proposals for the university's activities as a patron of the class.

For example, the legal-linguistic class is under the care of the Faculty of Law of the University of Silesia. During each of the three years of students' stay in the school there are several lectures, eg in the field of civil law, criminal law, labor law, etc. Students meet with judges, lawyers, prosecutors, etc., getting to know the specificity of these professions. They participate in court hearings or selected classes at the university, some of which are conducted in English.

Each class participates once a year in a week science camp. For example, mathematical classes go to Wrocław, where they take part in special classes at the Wrocław University of Technology or Krakow, where they participate in classes at the AGH University of Science and Technology.

During 5 days they listen to lectures, implement knowledge learned during workshops, for example from programming or robotics, and then pass exams and receive a special certificate of completion of the course. In turn, the media and theatre class goes, for example, to the Węgajty Terrain Village Theater. It is an atypical rural theater, in the village of Węgajty in the region of Warmia and Mazury in Poland, introducing elements of a new "rural" trend in Polish theatre. The Węgajty Theatre, conducting educational activities, inspires our students to develop and take innovative actions, which often results in our graduates choosing acting or directing studies.

Highly talented students in Poland have the opportunity to pursue an Individual Learning Course (ITN). This requires meeting a number of formal requirements, among others predisposition tests in the Psychological and Pedagogical Outpatient Clinic, however, it enables the student to develop in a higher than average level. For example, one of the current students of our school realizes ITN in biology, chemistry and mathematics. He uses additional lessons financed by the city authorities and from the care of the Silesian Medical University in the form of classes at the Medical University of the High School.

Once a year, usually in June, the school organizes Academic Days. Within 2-3 days at the school there are lectures of scientists from various universities. These lectures extend students' knowledge, but also familiarize with the offer of universities, enabling the choice of further education.

Cooperation with universities is free for students. The school depends on the support of the university in developing students' talents and universities on gaining particularly talented students.

Our school in cooperation with universities implements various projects, for example in 2017 it completed the 3-year project "Computing in high school science education - iCSE4school" as a partner institution of the University of Silesia in Katowice. Students of mathematical classes obtained Python programming skills during additional classes within the project.

The school has over 20 years of tradition in awarding the prize - the Honorary Batory Statuette - to outstanding graduates who, thanks to their professional achievements, praise the school's

name. This award is often given to graduates who are the university professors. Meetings of current students with laureates of the Honorary Batory Statuette on the day of the school's patron is an additional encouragement for work and development for students.

The activities undertaken by the school bring positive results. Students learning in an "academic" school do not only obtain professional qualifications, to broaden their knowledge and develop their interests. According to graduates, they are well equipped with knowledge and prepared for higher education. The results achieved by the students of our Academic Secondary School No. 2 on external examinations and the high school position on the ranking lists in Poland confirm the high level of education, which open students' career path and is a pride for the residents of Chorzów.

AUSTRIAN DAYS

German language teachers take part in seminars called "Austrian Days" organized in cooperation with the Ministry of Education of Austria in which they learn about the country, the nuances of the language and about Austrian culture: literature, music, film, painting, sport, etc. The participants use the acquired skills and knowledge during their own German language lessons.

School / Setting:	**Regional Teacher Development Centre "WOM" in Katowice**
Website:	www.womkat.edu.pl
E-mail:	sekr@womkat.edu.pl
Principal / Headteacher:	Anna Zakrzewska-Zamora
Type of school:	Teacher training centre with provincial coverage
Phase (age-range):	German language teachers teaching in public schools
Context	The mission of the Centre is to support the continuing professional development of teachers and educational staff in accordance with the educational needs of the region according to European standards.
Other background information relating to this strand of professional development	The aim of the organization of "Austrian Days" is to give the teachers the possibility of gaining knowledge about Austrian culture, developing methodological skills and improving the quality of German language teaching through the application of this knowledge and skills in teaching.

DETAILS OF CASE STUDY

"Austrian Days" at the Regional Teacher Development Centre "WOM" in Katowice take the form of a two-day seminar for German language teachers of the Silesian Voivodeship in cooperation with the Austrian Ministry of Education. The Ministry of Culture operates Referat Kultur und Sprache (Department of Culture and Language), which for over 20 years has been involved in popularizing the language and culture of Austria. Their rich offer of various training is addressed to German enthusiasts and German language teachers around the world. The motto of the activities is: to cooperate, to learn from one another, to take care of the quality of German language teaching, and thus to deepen the intercultural understanding.

"Austrian Days" have been organized in the Regional Teacher Development Centre "WOM" since 2007 and have constantly aroused great interest among German teachers. Every year, we host two experts from Vienna who for two days conduct methodological workshops, broaden the participants' knowledge about the country, the nuances of the language and about culture, especially Austrian literature, music, art, film, sport and everyday life. Each participant receives didactic materials prepared by the presenters which they can later use during their classes to teach German while promoting Austrian culture among their students and developing language skills and a friendly attitude to Austrian culture, which, in turn, positively affects the learning of German. Every year, dozens of people participate in our undertaking.

The event is accompanied by less formal meetings with teachers, for example, singing carols together, making music, meeting in museums, baking Apfelstrudel, tasting Polish cuisine, participating in concerts of classical music. On the teacher's initiative, the Austrian experts are invited to schools where they meet with teachers in order to make them familiar with the education system in Austria.

The aim of "Austrian Days" is to enable the German language teachers to learn about Austrian culture, develop methodological skills and improve the quality of German language teaching by applying this knowledge and skills in their teaching.

The evaluation carried out after the completion of the training indicates the considerable usefulness and educational value of this undertaking. The participants learn practical teaching

techniques, receive interesting authentic materials which prove extremely useful during language lessons. The teachers particularly emphasized the professionalism of the Austrian experts and the wide spectrum of methods they used. They also appreciated the very nice atmosphere which was conducive to learning and gaining new experience, as well as the fact that experts spoke in their native German language, which is particularly desirable for a philologist.

Those teachers who are especially interested in culture and language have established further cooperation with the Referat Kultur und Sprache and benefited from longer training courses organized in Austria.

It should be noted that participation in a two-day seminar is free of charge for teachers. The costs of the undertaking are borne by both the Austrian party, ensuring the participation of experts and materials, as well as the Regional Teacher Development Centre "WOM" which deals with the organization. "Austrian Days" are therefore widely available to all teachers.

Taking into account all the positive effects of this project, as well as the numerous requests of teachers, the Regional Teacher Development Centre "WOM" continues cooperation with the Austrian Ministry of Education, providing their beneficiaries with highest quality training.

RAISING TEACHER STAFF QUALIFICATIONS IN COMPLEX OF PRIVATE SCHOOLS IN KATOWICE AND SPREADING KNOWLEDGE

How does the teacher and coordinating staff of Complex of Private Schools in Katowice raise their qualifications and spread the gained knowledge?

School / Setting:	**Complex of Private Schools**
Website:	https://www.nasze-szkoly.edu.pl
Principal / Headteacher:	Jolanta Kałuża
Type of school:	Complex of Private Schools, which includes: Private Nursery School "Domowe Przedszkole" Private Primary School "Szkoła Jak Dom" Private Junior High School „Amicus" Melchior Wańkowicz Private High School with IB Programme Complex of Silesian International Schools
Phase (age-range):	Teachers, administration workers
Context	• The overall number of teachers-over130 • All with academic degree and confirmed professional qualifications • Teachers of various nationalities, of different cultural and religious background, including native speakers • Schools with Polish curricula, confirmed by the Ministry of Education, by Cambridge, and by International Baccalaureate

Other background information relating to this strand of professional development	The profession of a teacher is characterised by the necessity of updating the gathered knowledge, gaining new competences and information. Every teacher should be focused on constant enrichment of their qualifications and personality. The competitive job market modifies the requirements for the teachers and the school. Also, the system of professional advancement motivates the teachers to raise their skills, which influences raising the quality of work in the school.

DETAILS OF CASE STUDY

Complex of Private Schools in Katowice is a conglomerate of schools of different educational levels, and also of different cultures, thanks to the international departments which associate students from all over the world. The decision about introducing teaching in English, the IB Programme, and Cambridge curricula demanded preparations and trainings from the teachers and administration workers. The employees participated and still participate in trainings over the years of activity of all our schools. Raising one's own qualifications and gathering new knowledge is motivated by the internal need of every good teacher, but it is also a reaction to the changing reality, enriched with modern technology, modern approaches to teaching, the increasing meaning of non-formal education, and the demand for individuals equipped with 21st century competences on the job market. The Headmistress, Ms Jolanta Kałuża, presented a modern idea when she created the first Private Primary School "Szkoła jak dom" 25 years ago. She still follows her assumption to being open for new initiatives, constantly creating excellent conditions for development for all teachers.

The system of raising the qualifications of the teacher staff is an elastic structure which responses to the needs of the teachers, interesting offers or new trends, although some constant elements can be spotted, which are enforced for instance by the governing authorities (IBO, professional advancement, external exams such as Polish matura, junior high school exam, final primary school exam), or by the internal school schedule.

International Baccalaureate	Trainings in the field of subjects encompassed by the IB Programme are compulsory for IB Teachers. Along with the change of curriculum, which happens every 7 years, all teachers are obliged to undergo a follow-up training according to the IBO rules: http://www.ibo.org/professional-development/workshop-categories-and-types/ In our high school, the essential IB trainings were completed personally by teachers, while the follow-up trainings were completed online. In both cases, the teacher receives a certificate to confirm their qualifications.
Cambridge Programme	Similarly to IBO, the international Cambridge Programme requires suitable preparations and certificates, which are in possession of our staff and which are renewed while necessary, depending on the offer. The principles of personal development are stated at: http://www.cambridgeinternational.org/cambridge-professional-development/ Follow-up trainings are not mandatory, but our staff may request them or they are appointed by the Headmistress. Currently, many trainings are available at Cambridge website as online resources. Voluntary participation is highly appreciated by the Headmistress and written in the so-called "teacher's achievements". The non-standard activity of teachers and extramural activity is always noticed and appreciated by the Headmistress. Many times, our teachers are invited as experts in their study areas, sharing their knowledge with teachers from other schools and the local community.
Professional advancement	In Poland, the path of professional advancement is clearly stated by the Ministry of Education (http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20130000393) and it encompasses the particular stages, which are defined in terms of duration. In our school, the advancement is not mandatory, but it is a motivation for teachers to raise their qualifications, including the following

	stages of professional advancement, which is also a result of the internal need of some teachers to self-develop.
External exams (after primary school, junior high school, and matura)	Teachers who decided to become examiners on any education stage are obliged to participate in mandatory trainings organized by Local Examination Centres. This also applies for any follow-up trainings resulting from changes in the structure of exams. Examiners and candidates for examiners are encouraged to be up to date with all changes, not to lose their license for checking external exams.
Holiday trainings	One of the constant points on the training map for teachers and administration employees are holiday meetings which begin 14 days before the official commencement of each school year. Participating in interesting workshops has already become a tradition of Complex of Private Schools. They are the answer to suggestions of teachers gathered on the last conference of the school year. Since the teachers are employed in a few schools and their absence would complicate the functioning of schools, trainings, workshops, courses and other forms of development are organised in the period free from lessons. The typical feature of trainings is their universal character concerning problems present in all schools, like neuro-didactics, non-formal education, project-based learning, applying modern technologies in teaching, new trends in education all over the world, etc. Then, we use the knowledge of the invited experts in various areas. We also share the knowledge between us (peer-to-peer), for instance knowledge gathered during the Erasmus+ courses.
Erasmus +	Since 2016, our high school benefits from Erasmus+ projects, which are a perfect opportunity to participate in trainings. Their context is strictly conditioned by the project written beforehand, on the topic which is currently significant for the school. Those who benefit directly are the participating teachers, but the condition for participating is being obliged to share the knowledge after returning. It may happen during the

	aforementioned holiday meetings or, from time to time, during the school year. The materials may also be uploaded on the web page of the project, and shall be read before the agreed deadline. The aforementioned actions are not mandatory and are mostly dedicated for interested people. However, in our case, most trainings are universal and concern e.g. working with migrants, managing projects, creating education resources for the school, modern forms of spreading results, experiences and knowledge, etc. Thus, they are a fabulous source of knowledge for all teachers, regardless of the type of school where they work. In our high school, currently there are three active Erasmus+ projects. KA-1 is the EUROCYBERTEACHER action (https://sites.google.com/site/eurocyberteacher/), and the freshly started STOP COPY-PASTE (https://stop-copy-paste.weebly.com). KA-2 action is the MIGRANT project (Many Immigrants Go and/or Return to/from Another National Territory), (http://my-migrant.org), which also broadens the horizons especially in terms of intercultural tolerance, which is vital for our international schools, and it is also a stimulus to develop linguistic skills, the 21st century competences, ICT, etc.
Mid-year trainings	During the school year, teachers sometimes travel to attend some training, if the offer agrees with the direction chosen by the school or if they are compulsory trainings, e.g. examiner's trainings, follow-up trainings, etc. More often such trainings concern the coordinating staff – the Headmasters, coordinators and other employees willing to raise their qualifications, for instance in human resource management in the school environment, new trends in education, or see the examples of good practices at work in different areas, and exchange experiences. That does not mean that no teacher learns during the school year, but then classes take place before or after lessons, not to disturb the functioning of the school.

Forms of non-formal education	Individual forms of raising qualifications are becoming more and more popular. They are offered by a number of institutions, schools, training centres or even universities. It would be impossible to participate in all of them personally, so online trainings come in handy. One of the more interesting offers is the offer of Teacher Academy (https://www.schooleducationgateway.eu/en/pub/teacher_academy.htm) with their wide selection of trainings which enable the participants to exchange the experiences with the whole world. These are the examples of Course Diaries of one of the participants, published on the web pages and Facebook pages of the projects: 1. https://spark.adobe.com/page/sjx66MGtnM5HJ/ 2. https://spark.adobe.com/page/TclNckR8NAJpl/ 3. https://spark.adobe.com/page/CFUv9UlyZXuu9/ Teachers are warmly encouraged to see the proposals of School Education Gateway and share their knowledge there and among peers at school.
New functions of the school	Complex of Private Schools, apart from the educational purpose, is a unit which is governed by an active member of the Polish Board of Non-Public Education, promoting modern approaches to education, and cooperating with interesting education centres. Conferences and workshops are organized every year, being a priceless source of experiences, gathering new ones, and looking for possibilities how to improve the model of education in our schools. Hence, they are not only teachers who improve their skills, but also the administration employees, who train themselves in terms of e.g. establishing new functions of the school. Our schools are certified training centres (Cambridge Exams-FCE, FCE for School, UCAS, PSNJN, LIBRATUS). This would not be possible without the teachers' suitable qualifications and entitlements. For sure, those go far beyond the level of an average teacher.

Dissemination of gathered knowledge	According to the modern approach to education, knowledge is to be shared, so all trainings, be it team workshops, individual or organised ones, result in further actions. Teachers engage in peer-to-peer service, upload materials on-line to make them accessible, etc.
	One of the more interesting forms of spreading knowledge are trainings accompanying extramural competitions. Obviously, participants attend contests with caretakers, who waste their time waiting for children if they have nothing to do. In our school, such guests are offered trainings lead by our employees and teachers, if the topic of the training is new for the guests. It is a perfect occasion for teamwork, perfecting the 21st century competences, including communication, management, giving tasks, etc. The initiative of organising trainings for teachers during contests has been warmly received by guest teachers.

Complex of Private Schools is a conglomerate of modern schools which create wonderful conditions for development in an international community for all teachers, among colleagues and students from all over the world. This generates a situation where not only students are the receivers of knowledge, but also teachers learn the rules of building a multicultural community, based on mutual tolerance and respect for different nations and cultures. It is not an easy task for any of the sides, especially considering the world's migration crisis of nations which are strange and remote for us. But the mission of our schools is creating healthy interpersonal relations regardless of the skin colour, religious belief, or social class. Hence, we constantly need to look for new solutions, to meet the demands of representatives of many cultures. Raising our qualifications, broadening our knowledge and horizons help us in this process. The dynamically developing Complex of Private Schools has significantly broadened its educational offer over the years, has gained even more international character through the participation in a number of projects, and has gained popularity and attractiveness on the market of widely understood education.

CONTINUOUS PROFESSIONAL DEVELOPMENT
IN COUNTY COMPLEX OF SCHOOLS

Improving the skills and qualifications of teachers to help support and develop the quality of teaching in schools.

School / Setting:	Powiatowy Zespół Szkół in Bieruń (County Complex of Schools)
Website:	http://pzsbierun.pl/
Principal / Headteacher:	Teresa Horst
Good practice example prepared by:	Sławomir Binek
Type of school:	Secondary School
Phase (age-range):	15 – 19
Context	At different stages of a teacher's career, a different level of support is needed because the challenges vary significantly.
Other background information relating to this strand of professional development	To meet these expectations, many solutions (changes?) have been introduced to the law which governs schools' duties.

DETAILS OF CASE STUDY

When determining budget plans, the executive management bodies of all schools and kindergartens are obliged to identify specific resources to support the professional

development of teachers. The resources are equal to 1% of annual resources assigned to salaries.

These resources for professional training and development of teachers can be spent on:

1) Organising training workshops and producing methodological guidance for teachers
2) Arranging training courses, seminars and conferences for teachers, including those in leadership and management positions
3) Preparing training and information material
4) Professional training of teachers and members of the school board
5) Transport, accommodation and board costs for teachers who are delegated by the Principal to take part in different forms of professional training,

The financial resources can be used to provide funding for different forms of training. This takes into account the current qualifications of teachers and their need to raise them. It is also important to assess the suitability of the training for their work and for completing doing particular tasks to ensure that the Educational Policy of the State is followed.

By 30th November each year, the Principal submits an applications for funding to the executive management body outlining proposals about teacher training. The application is informed by an annual plan of professional training for teachers. The plan developed and presented by the Principal should take into account the following:

1. The school development plan (including all staff matters)
2. The personal professional development plans of teachers
3. Professional training proposals written by the teachers

These annual proposals are submitted by teachers and this is done by them filling an appropriate survey. Within the survey, teachers are able to identify the areas where they need extra support and what this extra support would be. For example the support could be in the form of workshops, conferences or longer-term forms such as postgraduate studies. Teachers are also expected to list their strongest skills and abilities so they can be utilised to help other teachers. This allows teachers share their experiences and good practice. In the case of teachers of vocational education it sometimes happens that there is no longer need of teachers

of some professions . This happens because schools have a duty to meet the demands of the labour market so they are therefore forced to change their offer constantly . In this case, the Principal has to consider reskilling the teacher through appropriate graduate studies.

One of the essential elements for professional development of a teacher is so-called Career Progression. Its detailed rules are defined under the appropriate procedure that a teacher has to follow to secure promotion to a higher level of professional development status Within the procedure a teacher is obliged to fulfil certain goals and to document them correctly. In the case of teachers at the start of their professional career, the Principal assigns an experienced teacher to help them. The requirements that a teacher needs to attain a promotion include:

- Taking part in educational and pastoral responsibilities across the school with due regard to local challenges.

- Supporting the school's programme.

- Developing their own professional skills.

- Preparing and introducing projects and programmes to help improve personal skills and

- to raise the quality of school's work.

- Showing the ability to share their knowledge and experience with others.

- Organising and improving their own work.

- Evaluating and assessing their work, making amends if necessary.

An example of good practice to help improve the quality of teachers' work is the collaboration with different organisations external to the school In the case of vocational education, one of the most important elements is the cooperation with local employers. On the other hand, when looking at general, more universal education, cooperation with scientific bodies, especially universities, seems to be essential This cooperation works at two levels. The first one is being directly involved in the activities carried out by universities. This involves taking part in lectures, joint projects and classes in professional labs. The second one is teachers' support which can be through lectures but also help in brokering cooperation with more schools.

This cooperation is a reciprocal professional relationship with mutual benefits. Firstly, the standard of education at schools will improve. Secondly, the universities have greater chances

of recruiting students to their institutions. Furthermore, schools often become a field of scientific research. A good example is the introduction of interactive personal response systems introduced into schools. This was made possible by the technical and educational support of the university. Subsequently, it was possible to conduct research on the effectiveness of the tool. The detailed description of the research and its results were published in European Journal of Physics.

AN EDUCATIONAL EXPERIMENT

Students were requested to participate in this educational experiment. The experiment followed students from their last year in kindergarten until they completed the 6th grade of the primary school.

School / Setting:	Kindergarten No 21 Primary School No 5
Website:	https://przedszkole21chorzow.edupage.org/ http://nowastrona.sp5.chorzow.pl/
Principal / Headteacher:	Maria Modras Wojciech Niezgoda
Good practice example prepared by:	Katarzyna Sikora
Type of school:	Kindergarten Primary School
Phase (age-range):	Kindergarten: 3-6 Primary School: 7-15
Context	The city authorities allocate a large amount of money to education in the city. They hope that this would translate into the development of appropriate skills of the pupils, including improvements in pupils' achievements in mathematics.

| Other background information relating to this strand of professional development | The results obtained by the students of the Chorzów schools on the external exams testify to the high level of teaching in the city in comparison with the neighbouring cities. |

DETAILS OF CASE STUDY

Since 1st September 2012, a pedagogical experiment has been implemented in Chorzow. This was preceded by a pedagogical innovation "Experimental class with an extended programme of mathematical and art education designed to support children in the development of mathematical talents".

The aim of the experiment is to rapidly improve the mathematical skills of a group of relatively average-ability children. This could then be used as an example method to help develop a model of teaching supporting the development of mathematical talents in children of all abilities.

The expected outcome is to be achieved through the implementation of mathematical teaching methods described in Prof. Edyta Gruszczyk-Kolczyńska's publication "The programme of developing the mathematical abilities of children in the last year of pre-school education and in the first year of schooling" and also using the methods and tools used to diagnose mathematical talents, also included in the aforementioned program. Assessment of children in the experiment takes place after each year of its implementation, and the achievements of children are monitored and reflected, in order to adapt the learning process to the actual mental capacity of children.

The experiment involves a group of children who, starting from the zero grade in kindergarten (Kindergarten No. 21), then grades 1 - 6 in elementary school (Primary School No. 5), are taught in unchanged composition. Children in this kindergarten group were not selected in any particular way. The only condition for the participation of the children in the experiment was the consent of their parents and their agreement that the child would continue to study together with the whole group. Parents are also willing to cooperate with the school.

Teachers involved in the programme participated in specially organized workshops and conferences and were trained by Prof. Gruszczyk-Kolczyńska and her co-worker Ewa Zielińska in terms of conducting classes based on the book by Prof. Edyta Gruszczyk-Kolczyńska.

The experiment is done during scheduled activities with the students. It does not require additional financial resources, only the careful preparation of each lesson by the teacher and systematic self-improvement based on the Prof. Gruszczyk-Kolczyńska's book "Support of mental development and mathematical education of children in the last year of pre-school education and in the first year of school education". Professor Edyta Gruszczyk-Kolczyńska claims that it is guaranteed that children - the participants of the experiment will improve far faster than their peers. The success of the experiment will also depend on the extent to which parents will cooperate with the teacher in its implementation.

The pedagogical experiment as an innovative form of teaching requires the consent of the Minister of National Education and the supervision of the university. The content of the experiment is prof. Edyta Gruszczyk - Kolczyńska from the Academy of Special Pedagogy named Maria Grzegorzewska in Warsaw and dr hab. Grażyna Rygał, Professor of the Academy of Jan Dlugosz in Czestochowa. Professor Edyta Gruszczyk - Kolczyńska was responsible for the first two years of the project, and later members of the Association of Teachers of Mathematics of the Silesian Branch together with dr hab. Grażyna Rygał, in agreement with Prof. Edyta Gruszczyk - Kolczyńska. At the end of the experiment, its effectiveness will be carried out by Prof. Edyta Gruszczyk - Kolczyńska and dr hab. Grażyna Rygał.

Professor Edyta Gruszczyk-Kolczyńska, on the basis of the results of the research conducted with pre-school and early childhood children, concluded: "Even a very talented (mathematically) child without developmental support and poorly taught mathematical education loses what he or she has been endowed with."

"Programme for developing mathematical talents of children in the last year of pre-school education and in the first year of schooling" assumes that children will be helped in the development of mathematical talents early (whilst in kindergarten) and according to their age, ability and need. It is necessary to organize the learning process (to adapt to the area of the closest development) so that the child acquires the experience needed to construct the

intellectual schema, then direct the internal processes of these experiences (their inattention) so that the child can independently transfer them from the external plan to the internal plan, mentally, and eventually create occasions (situations) in which the child will only use the constructed schema. To accomplish these tasks are simple teaching aids through which children manipulate learning, and parents can help teachers with the process at no cost. These are multicolored and include such things as buttonholes, sticks, tailor's meters, watering vessels, plastic bags, strings, materials such as pasta, salt and many more. Teaching is largely based on the organization of problem situations in which mathematically gifted children can demonstrate their mental abilities.

Training and materials in the experiment are financed by the municipality of Chorzów. The methodological supervisor of mathematics and then the chairman of the Association of Teachers of Mathematics of the Silesian Branch was the supervisor and coordinator. He coordinated preparing the further part of the teaching programme for grades 2 – 6 also.

Since the overall progress of the students participating in the experiment has been so successful, the other kindergartens and primary schools in Chorzów are now following the experiences of Kindergarten No. 21 and Primary School No. 5 and have implemented a programme of similar experiments in the form of pedagogical innovations.

Part of the experience has been described in educational publications as well as presented systematically during methodological conferences throughout Poland as a form of sharing examples of good practice.

EDUCATIONAL FESTIVAL "NEW INSPIRATIONS"

Students were requested to participate in this educational experiment. The experiment followed students from their last year in kindergarten until they completed the 6th grade of the primary school.

School / Setting:	Regional Teacher Development Centre "WOM" in Katowice / Regionalny Ośrodek Doskonalenia Nauczycieli "WOM" w Katowicach

The Regional Teacher Development Centre "WOM" in Katowice is one of the largest and oldest development centres in Poland.

The mission of the Centre is to support the continuing professional development of teachers and educational staff in accordance with the educational needs of the region according to European standards. The proof of the high quality performance of the Centre is the accreditation awarded by the Silesian Superintendent of Education.

The Centre brings together a group of experts and trainers in the fields of, inter alia, education management, subject didactics, foreign languages, vocational and continuing education, library studies, regional and cultural education, social competences, special education, information and communication technologies, teaching and learning, health education, pre-school and early-school education. It organizes and conducts qualifying and professional development

courses as well as other forms of teacher training, responding to the current needs of the educational environment. At present a popular form of activity offered by the Centre is also the comprehensive support of schools in their pro-quality(development. The Regional Teacher Development Centre "WOM" in Katowice offers this kind of support to several dozen schools and institutions in the Silesian Voivodeship. What should also be emphasised is the fact that the Centre cooperates with 70 methodological advisers of various subjects.

Moreover, the fact that the Centre runs its own publishing house is particularly noteworthy. Its publications provide the latest methodological solutions for teachers in their daily work. "Teachers' Forum", published quarterly, is a magazine in which teachers and consultants of the Centre can share their knowledge and experience by posting their own articles. The updated website of the Centre www.womkat.edu.pl is a popular and effective form of contact with teachers. Our customers can also get information about our activities and express their expectations and opinions on our Facebook fan page (www.facebook.com/rodnwomkatowice).

An annual fair of school textbook publishers called "Publisher's Fair" is a spectacular event which has been successfully organized by the Centre for over 20 years. 4 years ago it was transformed into the Educational Festival "New Inspirations". This change made it possible to enrich the formula of the event with interesting workshops for teachers, presentations of students' achievements and examples of good practice. The festival is an opportunity to exchange teachers' experience and learn new ideas for further work.

An important task carried out jointly with the Silesian Education Superintendent in Katowice is the organization and conduct of subject competitions in history, social studies, biology and English. In this way, the value of education and the effects of working with gifted students are promoted.

The Centre also cooperates with many partner institutions, striving for comprehensive development of its activity and enrichment of its professional development offer. It undertakes many joint initiatives with the Education Development Centre, the Regional Examination Commission, the University of Silesia, the Higher School of Banking (the WSB University), the Police School, the Publico Institute, the Upper Silesian Union and many bodies that run schools and educational institutions.

The Regional Teacher Development Centre "WOM" in Katowice implements and participates in projects of a regional, national and international character.

In recent years 5 system projects have been implemented, the aim being to increase the qualifications and competence of teachers in our province.

The Centre invites teachers of various subjects and types of schools to take advantage of a rich and varied educational offer. It is a leading educational institution on the market, meeting the expectations of customers in a wide range of educational services. Every year, our offer attracts over 30,000 teachers and school principals. Our employees are comprehensively educated, experienced and energetic people - high class experts who collectively form a highly effective and cohesive team). Everyone who knows the Centre's activities wants to come back to it many times.

Website:	www.womkat.edu.pl
E-mail:	sekr@womkat.edu.pl
Principal / Headteacher:	Anna Zakrzewska-Zamora
Type of school:	Teacher training Centre with provincial coverage
Phase (age-range):	Teachers of all types of schools
Other background information relating to this strand of professional development	Context - Expanding the educational offer of the Centre, supporting schools in the implementation of the state's education policy and adapting their work to changes in education, establishing cooperation between institutions run by the Marshall's Office in Katowice. The assumption behind the organization of the Educational Festival "New Inspirations" is to provide teachers of all types of schools with a comprehensive, diverse and up-to-date training opportunity to exchange experience, as well as to enable contacts with other institutions useful at school work.

DETAILS OF CASE STUDY

The annually organized Educational Festival "New Inspirations" is the largest event at Regional Teacher Development Centre "WOM" in Katowice. One aspect of its work is the Publishers' Fair, which has run for 21 years, which was the answer to the creation of the publishing market in Poland after the political transformation. The multiplicity of the publishing houses established at that time resulted in textbook chaos on the market in which people involved in the educational sector got completely lost (. The Publishers' Fair organised at that time was an attempt to present the new publishing market and the opportunities it gave. Over time, this aspect has become less important. As a consequence we have expanded the scope and form of the event and the Publishers' Fair has now become just one aspect of a much bigger event, namely the Educational Festival. Since 2017 the University of Silesia has become the patron of the event, which raised its rank. We are trying to make the festival a fiesta of education of our region, responding to the needs of teachers which every year are quite specific) and contribute

to the implementation of the state's educational policy. The recent reform of education has imposed new duties on schools, introduced new core curricula, and thus new textbooks, new thematic areas (e.g. computer programming, chess, and an emphasis on the importance of career counselling). We offer teachers of all disciplines and educational levels methodological workshops conducted by consultants of the Centre and by invited specialists (including lecturers from the University of Silesia. These comprise classes aiming at personality development, meetings with authors, exhibitions of various institutions cooperating with the Centre, such as a number of museums, cinemas, cultural institutions, associations and others. Such actions are a part of the recommendations of the Marshall's Office regarding the necessity of cooperation of institutions which it supervises. The contacts established during the festival often result in further joint initiatives. During the event it is not only the publishing companies who present their offer of textbooks and educational books, but there are also displays featuring the offers of companies dealing with teaching aids of various types, including educational toys, materials for manual work, technical equipment (3D printers were last year's hit), IT equipment (popular presentations of the possibilities of interactive boards), equipment for various types of laboratories (e.g. specialized equipment in classes for car mechanics) as well as other companies offering services useful in schools, such as a photo studio. Teachers have the opportunity to learn about technical solutions, technical means which in other circumstances may not be available to them and which can help them in their daily work.

Last year we offered 55 free workshops to teachers, the subject of which concerned both didactics and innovative methodological solutions. The participants had the opportunity, for example, to analyse the use of YouTube resources in Polish language classes, find out whether the Internet and mobile devices draw readers away from traditional books, learn how to conduct mid-lesson exercises with music, and interesting ways of working with an integration group. In addition, they learned to use sensory games in pre-school education, to lead artistic and construction games. A psychologist showed how to work with a difficult class, a film expert told the participants about visions of the future presented in films, and a dog therapist spoke on how the dog can support the child's psychomotor development. As expected, extremely busy workshops were those relating to programming at early school level, a new element in

the curriculum that is being implemented. There were also workshops for teachers conducting school activities for students applying for a cycling license.

Teachers participated in the presentation evening of students of the Karol Szymanowski State Music Secondary School, in demonstrations of the preparation of non-alcoholic cocktails from various parts of the world presented by the Gastronomic Schools Complex and the final of the competition for making natural flower compositions aimed primarily at students of vocational schools in the horticultural industry. The aspect of cooperation with schools, especially all vocational schools, is very important. It is primarily a question of the ennoblement of this type of education: on the one hand, students have the opportunity to present their achievements to a wide audience, on the other, teachers of other types of schools have the opportunity to verify their opinions on the subject. In the history of Educational Festivals one can also find fashion shows, hairstyle shows, cosmetics and gastronomic shows of various kinds (preparation of cocktails and desserts, making coffee, making salads). All of them were prepared by vocational school students. The students of uniformed services schools were responsible for keeping order, among others, by directing traffic in the car park and in the local area. Students of journalism classes conducted interviews with participants during the festival.

A strong emphasis of the festivals is regionalism — last year the participants of the event had a choice of workshops on mining in art, regional education based on the example of an exhibition at the Katowice History Museum, folk demonology or a lecture about how hygiene was treated in the past. Regionalism is also a subject highly exposed in the documents of the supervising authority i.e. The Marshall's Office, therefore it is present in almost all editions of the festival. In this respect we cooperate with museums, regional associations, as well as recognized authors of books devoted to this subject. This cooperation is often continued in the form of articles posted in "Teacher's Forum", a magazine published by Regional Teacher Development Centre "WOM" in Katowice on a quarterly basis.

The festival inspires teachers which is confirmed by their evaluation of the event every year. The teachers appreciate creative workshops, versatility of the offer, unusual solutions presented and willingly participate in the project which every year expands its educational and organizational formula.

MUSEUM LESSON - "LEGENDS ABOUT MILLS AND WINDMILLS"

Museum lesson – "Legends about watermills and windmills" is addressed to school-age students, as an addition to knowledge in the field of regional education on traditional milling

School / Setting:	**Museum "Upper Silesian Ethnographic Park in Chorzow"**
Website:	http://muzeumgpe-chorzow.pl/en/
Director	Andrzej Sośnierz
Department of Education and Popularization	Joanna Skorupska-Badura (Head of Department), Sabina Waszut, Przemysław Badura, Paweł Roszak-Kwiatek, Katarzyna Stolarska
Good practice example prepared by:	Paweł Roszak-Kwiatek
Phase (age-range):	Primary school (7-15)
Context	The lesson is designed to educate children about the cultural heritage of the region and the old milling traditions, both in material and non-material terms. Through various activities in the lesson, the historical awareness of children is developed in relation to the regional identity and the environment in which children live.
Other background information relating to this strand of professional development	As a result of these classes, participants learn about alternative, more traditional ways of food production, and also learn to understand the importance of protecting historic buildings. They also learn about various elements of folklore. The direct effect on the class is not quantifiable, but perhaps some children will decide to develop their interests in these areas. In the future, some of these children may find this information useful if they decide to work in the conservation and protection of historic buildings sector, running agritourism farms, promoting history or producing healthy food.

DETAILS OF CASE STUDY

Introduction

The history of the Museum "Upper Silesian Ethnographic Park in Chorzów" dates back to the 1930s, when thanks to the initiative of PhD. (Dr. ?) Tadeusz Dobrowolski, a director of the Silesian Museum and voivodeship conservator officer at the time, efforts were made to create an open-air museum in the Kościuszko Park in Katowice. Unfortunately, the outbreak of World War II interrupted the completion of this initiative. The idea returned at the end of the 1950s, when during the XXVII General Assembly of the Polish Society for Folklore in Katowice, a decision was made to start the construction of the Upper Silesian Village Museum in the south-western part of the Voivodeship Park of Culture and Recreation in Chorzów. In the 1960s, the acquisition of objects that were to be exhibited at the Museum began. The oldest, moved in 1964, were a windmill from Grzawa and a granary from Warszowice. At the opening of the Museum in 1975, 33 historic objects from the Upper Silesia and the Dąbrowa Basin were opened to visitors, which were located on a 22 hectare site. At the present time, the area of the open-air museum has grown significantly to amount of 33 hectares, on which there are nearly 80 historic buildings. The newest of these is the Protestant church from Bytom Bobrek, put into use in September 2017.

The Museum has been repeatedly presented with awards by the Marshal of the Silesian Voivodeship in the competition "Museum Event of the Year" and also received a distinction in the Sybilla competition organized by the National Heritage Institute, for the project about the revitalization of rural industry facilities.

The museum is very popular with visitors, whose number are systematically increasing. In 2017, the Museum had 97,000 visitors (compared to, for example, 67,000 in 2013, 78,000 in 2014 and 2015 and 82,000 in 2016). This is due to the attractiveness and growing number of events and a wide range of educational activities.

Education

The Department of Education and Popularization is responsible in the Museum for the implementation of activities that aim to maintain knowledge about the region's cultural history,

centred around the old rural traditions. Through numerous museum lessons, workshops and other activities carried out by Museum staff, children and adolescents have the opportunity to broaden their knowledge on the subject, related to various works performed in the former villages, and learn about the elements of spirituality and folklore of the inhabitants of the Upper Silesia and Zagłębie Dąbrowski villages.

Among the lessons that are highly appreciated, are those associated with celebrating holidays associated with different seasons. The classes "Marzanna and gaik", which start this series, focus on the traditional ways of saying goodbye to winter. During the classes, children learn what the winter and spring looked like in the life of village inhabitants. During the lesson, the participants also prepare "Marzanna" - a straw puppet symbolizing winter and "gaik", a green branch, which is supposed to be an image of life and the coming of spring. Then, "Marzanna" is burned in a bonfire, and children with the "gaik" walk around the area of the open-air museum, singing traditional folk songs, which have been previously taught by employees.

Another lesson that is associated with annual holidays, are classes depicting Easter customs. In this lesson, children prepare their own Easter eggs using the "batik" technique, whereby using a needle and melted beeswax, different patterns are applied to the previously cooked eggs, which are then dyed in different colors. After drying and removing the wax, the pattern that the children have created earlier is revealed. Participants take their Easter eggs home. The workshop part is preceded by a conversation about current customs related to Easter and a presentation of how this period looked like in the past. Other lessons included in the series "Four seasons in the open-air museum" are those related to traditional St. Andrew's games, during which children play in predicting the future, and Christmas activities, during which participants make Christmas tree decorations from straw. Of course, in both cases, a part of these classes is devoted to the presentation of various substantive issues related to history, tradition and belief, but the common part of all museum lessons is the active involvement of participants through the workshop part. It is necessary to maintain the attention of children, and to a large extent this allows participants to remember better what they've been taught.

Other noteworthy classes include the museum lesson "In the old school". During the lesson, children learn how formerly kids were taught in the countryside, and also have the opportunity

to try writing on stone tablets using stylus, and on paper, using pen and ink. In addition, they find out what punishments were prepared for naughty students, such as kneeling on a bag filled with raw peas.

The educational offer also includes "Little ethnographer" classes, during which participants learn about the old rural culture and discover various secrets related to everyday use equipment from old times. During the classes, children are divided into groups, and then in a chosen cottage, each group has to find such equipment as a fridge, baby walker, butter churn, etc. The culmination of their efforts are commemorative graduation diplomas.

The activities described above are not the only ones that have been prepared and developed essentially by employees of the Department of Education and Popularization. The offer includes lessons and workshops for all age categories, so that each group of visitors to the museum will find something for themselves. A measurable effect of the popularity of the educational offer is the fact that the number of school groups coming to the Museum is constantly growing each year.

Case study

The classes "Legends about watermill and windmill" were introduced to the educational offer in 2014. The reason for their introduction was the growing demand for this type of lesson, related to the objects of the traditional rural industry. In the same year the revitalization of the windmill from Grzawa and the water mill from Imielin was completed in the museum and the mills were made available to the public. It is worth noting that at the present time, the windmill is probably the only object of this type in Poland, which is able to function with the use of wind as the main power supply. For the project related to the revitalization of these objects, the Museum received in 2015 the award of the Marshal of the Silesian Voivodship for the "Museum Event 2014" and the Sybilla prize, awarded by the National Heritage Institute.

The "Legends about the mill and windmill" lesson begins at the exhibition devoted to traditional milling, which is located in one of the buildings located at the exposition - a granary from Warszowice. The exhibition prepared by Paweł Roszak-Kwiatek and Damian Adamczak was directed mainly at children and adolescents. The main idea of the exhibition is its interactivity,

breaking with the rule prevailing in most museums that state that it is forbidden to touch museum exhibits. In this case, all the devices on display are adapted to allow children to touch and move them easily, and to try to operate them.

After entering the granary, children first stop at the picture showing the field. They are asked a question about what is visible in this picture? When they answer the question correctly, further questions are asked - what is the period, when is the corn is harvested from the field (harvest time), and by what devices it is done today (eg. combine-harvester), and how it was done earlier (sickle, scythe). At this point, children also learn about basic types of corn, such as rye, wheat, barley, oats. Examples of grain are placed in glass containers. Then the children try to answer what is the use of each of them (rye - rye flour, used, for example, as sourdough or for baking bread; wheat - wheat flour, used, for example, for baking bread, rolls, cakes; barley - for production of groats; oat - from which oatmeal is made, it was formerly used as horse feed). Another puzzle they have to deal with, is how you can extract grain from the ears of corn (threshing). Flails are also shown, to present how this was performed in the past. The next question is how the grains were separated from the pollutants. The children stand next to a large corn box, in which the "wiejaczki" shovels are placed. At this point, the employee presents how this process used to take place - with the use of shovels, the grain is thrown upwards, which as the heaviest falls down first, and the pollutants a moment later. The employee explains that in the past this process was carried out in the wind, which naturally removed these impurities. Next, the group approaches the winnower, that is the device that was also used to clean the grain, but it was already a more advanced and faster method used for this process. Later, children are introduced to mortar-like devices, which were used for crushing grain and the production of groats. The next elements of the exhibition are querns used for grinding grain into flour and various types of weights that were used in milling for weighing grain and flour. The whole exhibition is supplemented with boards with various curiosities and information, written in accessible and understandable language to the visitors.

After the demonstration of all devices, children are encouraged to play and try their hand at grinding grain on querns, cleaning grains or weighing pre-prepared packages with flour.

Milling exhibition in the granary from Warszowice

After approximately 10 mins, the group goes to the mill from Imielin, which is nearby the granary. Outside, the employee explains what the water wheel was used for, and also tells one of the legends related to the mills. The miller's role in the old rural community was so important that folklore abounds in various stories related to mills, millers, as well as people from folk demonology such as water sprites, devils and others. As a result, legends told during the lessons can change, to make classes more attractive or to respond to the age of the participants. Flexibility and adaptation of activities to a specific age group is very important.

After the story is finished, the group enters the interior of the mill. There, the employee demonstrates devices used for milling brought into motion by means of water, such as millstones, as well as others, driven by electric motors (previously steam and diesel engines), such as grinder mill or roller mill. Children get acquainted with the construction of these

devices, and can also directly observe the process of flour production on these devices. Each participant also gets to hold some flour in their hand, after which everyone tries to find the difference between ground flour and traditional methods, and the one sold in stores. All information is enriched by presenting the historical role of the miller, as well as describing the equipment of his house, because there is also a residential part in the Imielin mill.

Watermill from Imielin

Another element of the course is the transition to the windmill from Grzawa. The employee presents the differences between the watermill and windmill, as well as between types of windmills (postmill, paltrok, Dutch type). Later, just like in the mill from Imielin, the legend associated with the windmill is told. Children are also made aware that each windmill could be turned around to face the wind and, depending on the age of the participants, there is an attempt to turn the entire building around its own axis, using a long wooden drawbar located at the back of the windmill. After this attempt is finished, the group enters the windmill. On the

second floor, the participants learn about the various mechanisms, such as the brake, windshaft, wallower and how they function. They also learn where grain was poured in, how it was ground and what happened to the flour. Then the participants go downstairs. Here they try to guess why there is a bed in the windmill (the miller had to wait a long time for favourable wind). They also learn what the flour box was for. Then the whole group goes outside the windmill. From a safe distance, all participants have the opportunity to see how the sails are turning. At this time, the classes are over.

Windmill from Grzawa

Summing up, thanks to the museum lesson "Legends about the mill and windmill", the students have the unique opportunity to learn about the old milling traditions and learn about how objects such as a water mill or windmill work, which are less and less present in the modern landscape.

THE FIELDS OF VIEW OF A BOOK

The objective of this project is to animate reading through various different activities. A series of activities are organised in collaboration with public libraries, partner organisations and animators. The series includes workshops, tours and urban games which all relate to the chosen literature. The literary texts are then brought to life by utilizing different tools. These tools help by connecting the literature to history, architecture, visual art and music.

School / Setting:	The participants include readers of all ages and all levels. All the organised activities had an inclusive character. The activities took place across several locations: - House of Education in the Silesian Library (Katowice) - Public libraries in Katowice - A school library in Bytom - A bookstore called Bookszpan in Katowice - In the historic settlement of Nikiszowiec in Katowice - Public libraries in Świątki, Barcin and Łomża - Public library in Odense (Denmark) - The Polish department in a public library in Karvina (Czech Republic)
Website:	https://www.facebook.com/DomOswiatowyBibliotekiSlaskiej/ http://www.bs.katowice.pl/
Principal / Headteacher:	Director of Silesian Library: Jan Malicki Head of House of Education: Ewa Kokot
Good practice example prepared by:	Anastazja Hadyna Ewa Kokot
Type of school:	The House of Education is based in the Institution of Culture, Silesian Library

Phase (age-range):	The participants in the project represented different age groups: • Primary school students • Junior High School Students (gymnasium) • University students • Adults
Context	The project promotes the idea of the library, which activates stimulates its readers and engages them in a creative relationship with literature. Through activities realized in urban spaces, the literature will take place in an unusual and intriguing way. The animation activities will help the participants of workshops and urban actions to develop greater understanding for a book, showing the diversity of its functions, themes, as well as exploring ways of creating a book and book interpretation.

DETAILS OF CASE STUDY

In 2017 the House of Education of the Silesian Library launched a new project called "The Fields of View of a Book". The project, which was a joint venture between the Silesian Library, the Municipal Public Library in Katowice and other partner organizations and animators, comprised a series of activities designed to animating reading. The project involved the organization of workshops, urban actions and tours, all based on the theme of literature. All the activities were based on the creative interpretation of literary through the perspective of visual arts, music, history or architecture.

INAUGURATION (CONCERT)

The project was started by the band "Collected Fairy Tales". Their compositions are influenced by fairy tales and music from a variety of different cultures. The musicians draw on from folk music elements, while at the same time preserving their individual character in both the

instrumental and the textual layers. In the compositions you can hear instruments from all over the world, for example, the Celtic harp, classical and bass guitars, flutes, didgeridoo, and percussion instruments. The band encompasses multi-instrumentalists Beata Buszta, Michał Koziełło, Tomasz Jaworski, and Tomasz Kara-Sajek. The authors of lyrics (Adam "Beret" Mańczuk, Mateusz Świstak).

SERIES OF WORKSHOPS:

1. Literature / dance
Ethno-Dance workshops linked to relevant literature
Hosted by: Jakub Fedak / Concept: Iga Fedak

Participants during this workshop were able to see how folk culture is represented in the literature. It helped to broaden their knowledge of Polish dances and folk music and provided an opportunity to listen to relevant instruments. Participants were encouraged to work with the texts, images and excerpts of films which accompanied the practical lessons of dance and singing.

2. Literature / language
Literary workshops with creative writing
Hosted by: Agnieszka Dąbrowska

Participants in this workshop had the opportunity to expand their knowledge about the literature and were given the opportunity to write their own piece. The workshop aimed to help participant to release their personal creative expression, improve their writing skills and helped them to develop their communication skills.

3. Literature / fairy tale
Literary workshops related to fairy tales
Hosted by: Mateusz Świstak

These workshops were devoted to the rediscovery of the world of fairy tales. The chosen literary was a tale by the Grimm brothers and alongside this the participants had to write a tale. Participants spent a period of time analysing and interpreting the tales and they examined the

archetypes. These workshops were also an opportunity for participants to place their personal symbols in the world of fairy tales by using the literary and artistic tools.

4. Literature / travel

Literary workshops relating to the travel books

Hosted by: Mateusz Świstak

The aim of these workshops was meeting a group of recipients in Alfred Szklarski and the workshop was based in a room named after the writer. The participants had an opportunity to deepen their interest in the writer's work and be inspired by subject of travel and anthropological research.

5. Literature / sign

Literary workshops based on a function and understanding of a sign

Hosted by: Małgorzata Jabłońska

These workshops concerned two visual languages. (1) Pictography (the language of pictorial drawings) and (2) typography (literal and nonliteral language). The classes combined theoretical elements and practical ones (artistic activities).

6. Literature / graphic

Literary and graphic workshops

Hosted by: Krzysztof Rumin

These workshops highlighted how graphics can help a book during its preparation process. The participants created their own ex-libris. They learned new techniques of linocut and drypoint, and at the end they made (by press) gravure and convex prints.

7. Literature / theatre

Literary and theatrical workshops

Hosted by: Daria Sobik

Participants of these literary and theatrical workshops were students from a Creative Activity Class from Rev. J. Szafranek Secondary School No. 1. (Gimnazjum nr. 1 im. Ks. J. Szafranka) in Bytom. The purpose of the workshops was to familiarize young people theatre and literature.

Workshops included working closely with the text, its movement and gesture, game and improvisation; they helped to develop imagination and creativity.

At the end of the workshops, the students set up their own production of "Lieutenant KAT or I Wanted to Eat Cereal that Day", directed by: Daria Sobik, drama: Mariusz Gołosz, coordination: Katarzyna Michalska

8. Literature / art

Literary workshops on the role of art in Literature

Hosted by: Irena Imańska

These workshops were devoted to fine literature which directly related to the field of art. It included photography, visual arts, film, animation, music and design. Participants set up an exhibition which was presented in the Intimate Gallery at the House of Education. The workshops helped to foster creativity and expression of participants, as well as a creative attitude of educators and teachers.

URBAN ACTIONS:

1. Words in the city

Actions were prepared by the participants of workshops which were organized by Irena Imańska. Participants used their own experiences from the workshops and created their own artistic realizations. This encouraged people to read more books. The ideas, realization and performing belonged to the participants and the action space was Art Gallery BWA, as well as urban spaces in Katowice.

2. Fairy tale in a bookshop

In the *Bookszpan* in Katowice the participants presented a recording of a fairy tale written by them at a workshop hosted by Mateusz Świstak. The literary material was recorded at Radio Katowice and with contributions from guest speakers. The recoding was then played in the bookstore. Speakers were set up outside the shop, this meant that the recording was heard by those inside the shop and by people passing on the street.

3. Fairytale dances in the city

During Industriada (an annual event promoting the Industrial Monuments Route of Silesia, held on the market square in the historic Katowice Nikiszowiec estate), a dance workshop and a concert of traditional music was organised. Alongside this, melodies were presented in the form of old folk songs and ballads from Silesia. Participants in these workshops learned Dance from Upper Silesia and Polish. Everyone involved listened to ballads performed by traditional bands.

4. Alchemy of words

This is artistic action involving the work of the literary group OuLiPo and consisted of the creation of an installation which was presented at the bookshop "Bookszpan" in Katowice. Quotes from world literature were placed in the 'lottery drawing machine'. The quotes were then selected by participants and the host of literary workshops within the project 'Fields of View of a Book. The accidental presentation of texts was a form of fun, citations and encouraged people to get acquainted with the project

5. City tours

A series of workshops on the books of Alfred Szklarski concluded with an urban tour following Szklarski's significant places. The outcome of the tour was the creation of a map created by the participants. The participants also produced a guidebook for all those interested in the life of Alfred Szlarski.

MOBILE EXHIBITION

Alongside the workshops and activities, a production of the mobile exhibition was also produced. It presented various ways of working with literature. The intention of the authors of this project was to establish a partnerships with institutions which conduct cultural activities. That's why the exhibition was presented in several libraries across Poland and Europe. The exhibition was presented in:

- Public Library in Świątki
- public library in Łomża
- public library in Barcin
- Public library in Odense (Denmark)
- Public library with collaboration of the polish department in Karvina (Czech Republic).

COMPUTING IN HIGH SCHOOL SCIENCE EDUCATION - ICSE4SCHOOL

The importance of improving the skills and qualifications of teachers to increase the effectiveness and quality of education in schools.

School / Setting:	University of Silesia / Silesian Centre of Education and Interdisciplinary Research
Website:	http://www.smcebi.edu.pl
Principal / Headteacher:	Marian Paluch
Type of school:	University in cooperation with secondary schools
Phase (age-range):	Secondary (15-19)
Context	The project was implemented with international and cross-sectoral cooperation within the Erasmus+ Strategic Partnerships framework. The project partners were: - three higher education institutions: University of Silesia (lead organisation), Augsburg University, SIMULA, Norway); - two secondary schools: 117 ZS in Warsaw and 2AZSO in Chorzów - one non-governmental organization related to the education sector (EDU-RES Foundation). The project took place from 01.09.2014 to 31.08.2017.
Other background information relating to	The main objective was to develop a methodology of integrating computer science into the teaching of mathematics and physics in secondary schools. To achieve this

| this strand of professional development | goal, programming in Python / SAGE environment was introduced into mathematics, physics and computer science lessons. |

DETAILS OF CASE STUDY

The main objective of the project was to develop a methodology which would integrate computer science with mathematics and physics in secondary schools through a pilot program. This was achieved by introducing innovative teaching methods in mathematics, physics and computer science using Python / SAGE programming. The implementation of the project was partly based on the exchange of good transnational practices in education and the use of peer learning and learning by doing methods. A key aspect of the project was the incorporation of computer science within the physics and mathematics curriculum to enhance students' knowledge and skills in the field of computational perspectives - for example: methods of visualization such as f (x) planning, numerical methods, computer algebra, data processing. Unlike many other educational computerization solutions, the project uses interactive learning (Python and SageMath). Results of intellectual work:

O1 - Teaching materials for over 20 lessons in mathematics and physics which cover a range of integrated thematic issues. These were developed by teachers and evaluated by an external academic. In addition, the materials contained a set of matriculation tasks that can be solved with Sage.

O2 - Report: Methodology for integrating computer methods with science teaching. This includes the results of the work and observation of the classes conducted in partner schools, methodological guidelines and teacher materials The results are available, among others, on the VALOR dissemination platform on http://visual.icse.us.edu.pl/methodology. Worksheets (including the published work of teachers and students) which may also be valuable material for other teachers are available on the server: https://sage01.icse.us.edu.pl/pub/. The results were worked out in Polish and English and are the response to the need for target groups identified at the project preparation stage. At the planning stage of the project it was agreed

that all materials would be published under the CC-BY-SA license, allowing them to be further developed. Creative Commons licenses allow authors to preserve their own rights and share their creativity with others. This approach is in line with the Erasmus + programme's policy of open, accessible access to materials, documents and media for learning, teaching, training and youth work. Both the Lead Organisation and the project partners are obliged to publish the results of the project in digital form, available free of charge via the Internet. All teaching materials have been tested in partner schools. Consultations were also conducted with other teachers of subjects: mathematics, physics, computer science, chemistry, as well as methodological consultants. On the basis of these experiences, a final report on the methodology involved was written and disseminated.

"YES - YOUNG EXPLORERS" - PROJECT METHOD IN PRESCHOOL

Arousing children's curiosity and satisfying a child's natural need to explore the world through experience, using the project method.

Main idea:
I hear and I forget
I see and I remember
I do and I understand

School / Setting:	"YeS - Young ExplorerS" Private Preschool
Website:	http://www.yesmlodziodkrywcy.pl/
E-mail:	yes.odkrywcy@gmail.com
Principal / Headteacher:	Joanna Brown
Good example practice prepared by:	Ewa Smolańska- Gierek
Type of school:	Preschool
Phase (age-range):	2.5 - 6 year olds
Context	The preschool consists of three age groups: the Voyagers' group (2.5-3 years old children), the group of Adventurers (4 years old) and the group of Explorers (5 to 6 year old). Their rooms are organized to support the child's holistic development, divided into thematic zones, in which there are toys and learning resources appropriate to the age and stage of development of the children. Children are encouraged to experiment with various textures and media, and to make independent choices while having fun.

	An important part of our preschool experience is the large garden surrounding the building, which consists of a large, colourful playground, bike path, an arbour and a small wooded area with a nature trail and view point.
Other background information relating to this strand of professional development	**Who is a Young Explorer?** The Young Explorer is an every child, regardless of its background and culture and language. Curiosity of the world, exploration of even the smallest object or deep concentration in the most surprising moment comes naturally to every child from an early stage of life. The Young Explorer needs a stimulating environment and experiences of new situations to develop their interests and skills. Therefore we do appreciate their individuality and allow them to "travel" independently and we support them when they encounters obstacles.

DETAILS OF CASE STUDY

The main assumption of the project method is that pupils independently devise, map out, strive to implement and finally evaluate the actions taken in accordance of their interests. The role of the teacher in this method is to accompany the pupils in this process, supporting through discreet management and raising the child's initiative. The learning process takes place through research activity, it is active learning. The source of the project is a certain fragment of reality that triggers the children's cognitive interest. The main value of the project method lies in the fact that the child on their own initiative undertakes research efforts, strives to solve the problem situation, experiments, and therefore independently creates knowledge, instead of passively digesting it. The child becomes a young researcher and explorer.

Why do we use the project method?

- educational content is in accordance with the interests of the children;

- the method supports the natural cognitive predispositions of every child, children are born as researchers;

- enables children to formulate questions and seek answers as well as to use the help of experts as a source of information;

- children can feel the joy of independent learning;

- the intellect and emotions are involved, children learn through admiration;

- the method takes into account the subjectivity of children; giving them the right to choose tasks to undertake, search for solutions, evaluate the results, all of which increases their sense of achievement;

- it creates the opportunity for social learning, develops communication skills and team work;

- in consequence, the sense of children's responsibility for their own activities increases, including the learning process as evidenced by the research results.

How do we implement the project method in our preschool?

Stage I

In the first stage of the project, the topic to which the project will apply is selected. Older children give their own suggestions. When there are too many suggestions the choice is made by draw, but at a later time the teachers try to implement other topics that might arouse the interest of children. In the younger group, however, the theme of the project emerges from the teacher's observation of the activities that children undertake during their free play time. When the topic is selected, the teacher's task is to analyse the availability of materials, the opportunity to invite experts and conduct field activities. Then the teacher introduces the topic, defining the basics of knowledge that children have at a given stage. The end of this stage is to create an up-to-date map of concepts and to prepare a list of questions related to the subject of the young explorers research (What do we know? → What do we want to know?).

Stage II

It's a kind of exploration journey...

At this stage, there is a thorough exploration of the subject, during which young researchers are looking for answers to the questions formulated in the first stage and sometimes it happens

that, along with the increase in knowledge, more and more penetrating questions appear. The research process takes place through:

- field activities during which children have the opportunity to learn about a place or object, take a closer look at the devices and materials that are there, talk to people they meet and record their experiences using sketches, notes or photographs;

- expert visits - a conversation with an invited guest who is an expert on a given topic;

- looking through magazines, books and catalogues related to the subject, which often are brought in by children from home;

- building structures related to the subject of the project using a variety of materials (e.g. a carton ship or a fire engine made of blocks etc);

- organization of their room in such way to include extra items or equipment related to the project;

- direct observation of objects, experimenting with the use of various materials;

- role play, pretend play, art works, music games;

- free play;

- and other types of activities that result from the research on a given topic.

At this stage, we also invite parents to cooperate with us, asking them to provide materials that they will consider helpful during the implementation of the project, or to propose an expert visit or site for field activities.

When the young researchers seem to be tired of the subject, when their curiosity has been satisfied and they do not take up discussions about the project so willingly, when they visit the project corner less often, it is a sign for the teacher that should go to stage III.

Stage III

This is the most important phase of the project in which the acquired knowledge is summarised. The task of young researchers is to determine what they have learned, what information they would like to share with others and in what form and to make a chosen type of presentation (e.g. exhibition of art work and photographs, etc). The teacher conducts a summarising discussion with the children and analyses the project in the light of programme requirements and evaluates it. The final product of the project is a step by step report on how the project

was carried out, what activities were undertaken and what knowledge was acquired by the children. The report is supplemented by photographs taken during the activities. The report is then send out to parents.

AN EXAMPLE OF THE IMPLEMENTATION OF THE PROJECT METHOD

How did the research process take place in the
example of the "Birds" project - Adventurers Group

- first of all the children were looking for information regarding the shapes of birds and for this purpose they were watching photo albums and books and using an interactive programme;

- young explorers were particularly interested in the appearance of seagulls, their search ended with an art work "Seagull"; also interesting in terms of shape was the peacock - after collecting information about this bird, children attempted 3-D art work;

- with the help of the teachers, children also found interesting information in albums and books about what birds eat and why they need beaks;

- children went to preschool's little forest and worked as young ornithologists, watching the birds living there: sparrows, magpies and titmice;

- young researchers were also interested in birds' homes, so that they could find out about bird nests. They looked through albums and watched short nature films and as part of a summary of the knowledge, they participated in a task aimed at combining a photo of a chosen bird with a photo of its house nest or a hole in a tree:

- to help children find the answer to the question "what do birds need feathers for?"- the teacher conducted an experiment in which three feathers were immersed in three containers: with water, oil and detergent. By explaining the result of the experiment, the teacher explained to the children why the feathers of birds do not absorb water, also touching the subject of pollution that may be found in rivers, seas or oceans and the resulting dangers for the life of birds. Children during this conversation showed great sensitivity to ecological threats;

- teachers invited an expert to cooperate – an ornithologist, who conducted a display of birds of prey. The expert presented the birds at close range and in flight, paying

attention to their shape, behaviour, as well as introducing the pupils to the issue of their protection;

- to make sure that all the areas of curriculum were covered by the project, teachers conducted mathematical games involving counting the pictures of birds on the tree model and practising children's spatial awareness: above and below;

- teachers also initiated sound-imitating games during which children imitated the songs of various birds;

- children participated in movement and music games that referred to the life of birds;

- to finalise the project, children and teachers prepared a gallery of art work that was produced during the project.

TOPICS OF PROJECTS THAT WE HAVE COMPLETED SO FAR

The Voyagers group:

- "Diggers"
- "Cow"
- "Ambulance"
- "Family"
- "Trains"
- "Party"
- "Lions"
- "Professions"
- "Plants"
- "Dinosaurs"
- "Computer"

The Adventurers group:

- "Frozen"
- "Dinosaurs"
- "The Birds"
- "Lego bricks"
- "Winnie the Pooh"

The Explorers group:

- "Flowers"
- "Space"
- "Horses"
- "Carnival"
- "School"
- "Food"
- "Horses"
- "Gold prospectors"
- "Arctic travels"
- "Winter world"
- "Fish and sharks"
- "Lizards and snakes"
- "Theatre"

And further projects are still ahead of us, because children's curiosity knows no borders...

SUPERBELFRZY RP ONLINE

A group of teachers collaborate through social media to create new space for learning from each other, to inspire other teachers and participate in international educational events. Working together online and offline.

School / Setting:	**Polish internet, email address: closed facebook group Superbelfrzy RP**
Good practice example prepared by:	Izabela Wyppich
Website:	**Open places** Open facebook fanpages: https://www.facebook.com/superbelfrzy/ Group blogs: • main http://www.superbelfrzy.edu.pl/ • for primary teachers http://www.zamiastkserowki.edu.pl/ • for maths teachers http://www.kostkinamatmie.edu.pl/ Group history timeline:https://www.sutori.com/story/oto-historia-grupy-niezwyklych-ludzi YouTube channel: https://www.youtube.com/user/superbelfrzy Members' map: http://bit.ly/2OqNnwx

	Pinterest with tutorials: https://pl.pinterest.com/bilusz/superbelfrzy-rp-samouczki/ Press articles: https://issuu.com/superbelfrzyrp Some of members edublogs: http://www.superbelfrzy.edu.pl/o-blogu/blogi-prowadzone-przez-superbelfrow/ Padlet with recommended links: https://padlet.com/Superbelfrzy/rwzut4q2koip
Who is involved?	This involves an informal group of circa 150 teachers from school of all levels from kindergarten to college. It is a democratic group, moderated by ten administrators – members of the group, according to group code of practice.
Context	Teachers can learn together through the many possibilities of social media, and ICT tools. Grassroots facebook groups can complete official teacher education and respond to the needs of teachers.
Other background information relating to this strand of professional development	Grassroots, in some cases also underground activity of Polish teachers interested in ICT, innovative educational methods and now also soft skills development. It is non profit-making. The group's philosophy is to share knowledge and experience with group members and also with other teachers outside the group. All contents and materials are available CC BY SA. Superbelfrzy RP facebook group is independent and not associated with business and state systems.

DETAILS OF CASE STUDY

Activity

In the beginning, group activity was concentrated on internet groups, later expanded in many different ways: offline, international meeting, peer to peer learning and MOOC education, webinars.

The most interesting group activities are:

- Publishing inspirations, tips, experience, ICT tools description on group blogs and fanpage
- Shared project implementation like Edumoconline (marathon of education webinars lead by members of the group) and superbelfers by night, evening webinars about new education trends and ICT tools.
- promoting and implementing international education projects (such as International Dot Day, Code Week, Week of Global Education)
- preparing every year's action for International Teacher Day
- leading group for primary school teachers
- organizing the annual group meeting "Qńwent" including workshops for members, discussions and integration of group
- organizing local "coffee meetings" for members and their guests
- organizing Educamp for teachers

Outcome:

The most important outcome is the development of cooperation between teachers, and promoting new method of learning. The groups serves as a support for teachers from the whole of Poland. Members of the group become leaders of innovation in their own schools and in their local education environment. Most of them also started cooperating with many Polish and international education organization like CEO - Centre of citizenship education, Etwinnig, Erasmus+,Master of Coding, Foundation for Modern Poland etc.

Benefits:

Most of the members have started to teach in more innovative ways. Each member leads their own education projects and inspiring colleges. They are also involved in national and international projects. Most of them have now started using innovative methods of teaching. In this moment group is focused on such topic as:

- Coding on every subject
- Robots and VR in education
- Significance of relation in education

- Gamification in education

- The implementation of ICT tools with education models like SAMR

- using sketchnoting in education

- learning outside school

- learning by teaching

Development:

To take this further, the group is going to:

- keep expanding, working with new groups of teachers

- develop further through the implementation of new projects like EduCamps and regional teacher meetings

- keep promoting the idea of exchange and sharing between teachers and learners

Why this is adopted?

Every social media group can evolve from discussions and social group to the support group and cooperation network. It is important to establish the rule group and non-profit activity. This kind of group can evolve from informal discussion in a local group to a much bigger group that has a real impact on the local and even national education system. Members of the group can spread the philosophy of sharing and can become ambassadors for positive change.

How this has helped improve teaching and learning?

Thanks to the group, teachers can find new methods and inspiration for learning. They can also change their thinking about their own style of learning. It is a practical connectivity method of teaching and learning. Exchange between teachers give them a chance to get to know various education tools, methods, programmes, education strategies, individual ways of solving problems etc. It gives great opportunities to improve teaching and learning every day.

ESTONIA

H. Kukemelk, P. Luik, M. Taimalu, K. Uibu

ESTONIAN EDUCATIONAL SYSTEM

Estonia is a small country (having about the same territory as Denmark) with the population of 1.3 million inhabitants (Estonian Statistics, 2018). About 70% of these are Estonians and with the remaining 30% comprising representatives of many different nationalities (mostly different Slavonic nationalities). This creates the situation where the majority of students go to Estonian comprehensive schools, but where there is a number of Russian schools and, in addition, a few other schools of different nationalities in the country. Comprehensive schools are generally under the jurisdiction of municipalities who take responsibility for the planning and oversight of kindergartens and schools. But there is also a small number of private schools and state schools (mostly for SEN students or for upper secondary education) in the educational market. The majority of the funding for schools comes from the state budget to municipalities who divide it between different schools (if there is more than one school in the municipality). Those finances are calculated on the basis of funding per head but also applying certain compensation mechanisms to smaller schools. Municipalities supplement that core amount with some minor funds for improvement work and keeping up schools' physical environment generally.

The current Estonian school system was developed from the Soviet Union school system and has been reformed several times since 1992. This means that there are still several teachers (and school principals) working in schools who were trained during the Soviet system. That keeps a certain "Soviet shadow" on the teacher's profession, on teachers' every-day behaviour and decision making in schools. See figure 1 Estonian Education Tree.

There are 530 comprehensive schools (Eesti Hariduse …, 2018) in Estonia today with almost 148 thousand students. There are also 628 pre-school institutions educating 67 000 children from age 1.5 to 6 years old, 38 vocational schools with a student body of 24 000 and 19 higher education institutions with 46 000 students in the country. The birth-rate collapsed from more than 20 000 babies per year (late 1980s) to 12 000 (late1990s) and this has gone a little up again (to about 15000) during last decade in Estonia and that has led to an urgent need to merge schools and restructure the whole educational system to provide at the same time good

options for every child to be educated. Additionally there is a tendency for young adults to move to regional centres or abroad and that causes a big challenge for municipalities in rural area to find enough students to keep schools viable (Kukemelk & Ginter, 2016). The total teacher body is 24 000 teachers of whom 15 000 are in comprehensive schools, 7 000 in kindergartens and 2 000 in vocational schools (Eesti Hariduse …, 2018). All school teachers are expected to have Masters level education in Estonia (an exception is made in kindergartens and vocational schools where bachelor level education is also accepted) (Õpetajate Koolituse Raamnõuded, 2015).

Initial qualifications for teachers is built up in main stream schooling by the universities that run teacher education courses. Additional ways to become a teacher are available through options offered by the "Teach for All" (Noored kooli) programme or by compiling different (in-service) training courses and applying for the teacher's profession through the Estonian Teachers Association (Eesti Õpetajate Liidu kutsete andmise kord, 2018). Every school is responsible for updating teachers' professional development. For that purpose, schools have some funding in their school budget (1% of teachers' salary budget) and spending is based on school level decision making. Many schools still follow the previous rule that every teacher should participate in different courses for 160 hours over a five year period.

Children start their schooling at the age of 6 or 7 and they have to attend school up to the end of grade 9 or when reaching the age of 17 in the country (Põhikooli ja Gümnaasiumi seadus). More than 95% of children progress to school from kindergartens (Haridus- ja teadusministeerium …, 2018). Those coming straight from homes have a duty to visit 0-class activities in schools (once a month) during the last year before compulsory schooling.

The Estonian educational system is built up in a traditional way (see Estonian education tree) – six years for primary education, plus three years for lower secondary education (compulsory for every child) and an additional three years for upper secondary education (optional). At primary level class teachers are usually employed and at secondary level subject teachers. It has been the tradition from Soviet period that, in major settlements, schools were from grade 1 till 12 (all levels together in the same institution). The last changes made into the School Act (Põhikooli ja Gümnaasiumi seadus, 2017) in recent years created legislative reasons to split the

upper secondary part of comprehensive schools to create separate major gymnasiums (often owned by the state). Therefore several state gymnasiums have opened in the last few years, with more to follow in the coming years. That changes the proportion of schools' ownership – the number of state schools is rising and the number of municipality schools is decreasing in the country.

Economic and demographic processes have led to families moving to major places in the country and it creates a situation where the population of rural municipalities is decreasing and therefore the number of children needed a school place is decreasing there. Therefore annually several schools have been closed down or reorganized. This has led to the creation of a new type of educational institutions – kindergarten and primary school together (or even kindergarten and lower secondary school together) in the same institution.

There can be listed several challenges in the current educational system:

- Schools' compulsory self-evaluation since 2006 (when the national system of school inspection was stopped and new principles of self-evaluation were defined and established).

- Building up the teachers' profession nationally. Teachers were part of the state ideological tool in Soviet times. Some people are still suspicious about teachers' intent and pedagogical activities in schools. Teachers as educational shareholders don't behave as a strong professional group in society and the number and quality of candidates applying for teacher training courses in the universities is not the best.

- The reorganization of the current school system taking into account economical, demographical, etc. trends in the country. Schools in rural area have problems in recruiting qualified teachers, to meet the requirements for the learning environment and to manage with a limited budget. This creates the situation where the quality of compulsory education in different schools is not equal.

- New legislative acts which started in January 2013 provide schools with new frameworks to account for teachers' work-load and to pay them an appropriate salary. 20% of the school salary budget is meant for the teachers' performance bonuses

(decided by the school leadership team). That is a completely new approach to teachers' workload and salary systems in schools.

- The contingent of students in Russian schools is becoming more problematic from year to year; because of successful Slavonic families mostly putting their children into Estonian schools. That raises different pedagogical, political and economic issues to be resolved in Russian schools.

- The closing down (or merging together of different schools at gymnasium level) of small rural gymnasiums creates a number of problems for local municipalities (and families) relating to teenagers' further education, school transportation, the availability of students' homes, some local social issues, etc.

SCHOOLS

Project partners in Estonia visited the following schools: Tartu Hiie School, Tartu Karlova Lower Secondary School, Herbert Masingu School, Tartu Veeriku Lower Secondary School, Tartu Peetri School, Tartu Catholic School, Tartu Annelinna Gymnasium, Tartu Poska Gymnasium and Põlva State Gymnasium. Tartu Catholic School and Tartu Peetri School are private schools operated by different churches. Tartu Hiie School and Herbert Masingu School cater for students with special needs. Annelinna Gymnasium is a Russian minority's municipal school covering grades 1-12, which is quite unusual today. The other two gymnasiums are for students aged 16-19 providing upper secondary education for entrance to higher education institutions or vocational schools. Veeriku and Karlova lower secondary schools are ordinary schools whose student population comes mainly from a particular area of Tartu.

Tartu Hiie School http://www.hiiekool.ee/?id=1&lang=eng caters mainly for children who have hearing problems or serious speech problems. Therefore inclusion is one of the most important values that school staff follow in their day-to-day work. The school has several speech therapists and also other special needs experts in the staff team. The school is sharing that expertise to other schools and teachers in the region as a centre of excellence.

There are 304 students in the 2017/18 academic year who are distributed into 29 learning groups (classes). Because of special needs, the learning groups are small. It is a lower secondary school educating children aged (6)7-16 (grades 1-9).[1]

The school is owned and financed by the state. The staff team comprises 49 teachers and 13 support staff.

[1]*All statistical data about schools and kindergartens are taken from Estonian National Database Haridussilm (https://www.haridussilm.ee/).*

Herbert Masing School http://masing.tartu.ee/ caters for children with serious mental and somatic diseases, but also for physically handicapped students. The school's values are simplicity, openness, flexibility and systematism. The school has several special needs experts among the staff and structurally it has distributed into four units: Learning centre, Hobby

centre, Rehabilitation centre and Centre of Excellence. The Centre of Excellence is sharing expertise with other schools, students, parents and teachers in the region.

There are 297 students in the 2017/18 academic year who are distributed into 48 learning groups plus a few extra groups. Because of various special needs, learning groups are small. The school educates children aged (6)7-19 (grades 1-12) and there are also 29 preschool children undertaking activities at the school.

The school is owned by the municipality but most of the finance comes from the state budget via the municipality. The school has 80 teachers and 14 support staff within the overall staff team.

Tartu Karlova School https://www.karlova.tartu.ee/eng/ is an ordinary lower secondary school which has a fixed catchment area determined by the municipality and therefore only educates those children living there. The school's values are learning, collaboration and a strong school culture within a modern, developing and secure learning environment. The school has a long tradition of music activities – this is supported by six music teachers employed by the school. In recent years, the school has paid much attention to the use of ICT in learning.

There are 686 students in the 2017/18 academic year and those are distributed into 29 classes (mostly three parallel, with a few cases of four parallel). The school educates children aged (6)7-16 (grades 1-9).

The school is owned by the municipality but most of the finance comes from the state budget via the municipality. The school has 55 teachers and 3 support staff members (school psychologist, social worker and a special needs specialist) in the staff team.

Tartu Veeriku School http://www.veeriku.tartu.ee/en/ is an ordinary lower secondary school which has a fixed catchment area determined by the municipality and therefore only educates those children living there. The school's vision is: "Veeriku School is a learning organisation and an open, secure and creative school where every learner is motivated to obtain knowledge and skills for life-long learning according to their abilities". The school has a history of teaching English from grade 1 and focuses lessons more towards nature and the environment.

There are 688 students in the 2017/18 school year who are distributed into 30 classes (recent years' intakes are larger (5 parallel classes) whereas older students learn in 2 parallel classes). The school educates children aged (6)7-16 (grades 1-9).

The school is owned by municipality but most of its finances come from the state budget via the municipality. The school has 49 teachers and 4 support staff (school psychologist, social worker and 2 special needs specialists) in the staff team.

St Peter's Lutheran School of Tartu http://www.luterlik.edu.ee/eng/ is a private school owned by NGO Tartu Luterlik Peetri Kool. The school's vision stresses the importance of Christian ethos and Estonian national culture. The school's values are: respect (to God, nature and family), caring (to be a warm forgiving person and considering that relationships are important), thankfulness and responsibility. The school delivers education supported by Lutheran ethics and friendly coexistence.

There are 70 students in the 2017/18 school year and those are distributed into 5 classes (the school is rising every year by one class up to the 9th grade). The school will eventually educate children aged (6)7-16 (grades 1-9), currently only students aged 7-12 attend the school.

School financing is supported by the government who provide (additional) funding per student in private schools. That NGO has also three kindergartens catering for preschool education and preparing children for school. The school has 14 teachers and one support staff member (a special needs specialist) in the staff team. That person is responsible for special needs at both the school and kindergartens.

Tartu Catholic Educational Centre (School) http://www.katoliku.edu.ee//esileht is a private school owned by NGO Tartu Catholic Educational Centre. The school's vision is based on Christian understanding of the world, educating students and supporting families based on those understandings and values. The school tries to combine elements of the learning environment, the child's home, the educational centre and the church as sources which provide an ethical base for a child development.

There are 428 students in the 2017/18 school year and those are distributed into 18 classes (two groups in every year group). The school educates children aged (6)7-16 (grades 1-9).

School financing is supported by the government who provide (additional) funding per student in private schools. That NGO also has a kindergarten catering for preschool education and preparing children for the school. The school has 42 teachers and 7 support staff members (4 special needs specialists, 2 social workers and 1 school psychologist) in the staff team.

Tartu Annelinna Gymnasium http://www.tag.ee/ is a Tartu municipality school for Russian speaking minority students. It is the only gymnasium for Russian speaking students in South – Estonia and this was the school, where the Estonian-Russian bilingual education model was created at the early 1990s – a first in the history of Estonian education. The school has stated in its vision that it provides the best learning options for non-Estonian students.

There are 1010 students in school, mostly Russian speaking children, divided into 43 classes. The school educates children aged (6)7-19 (grades 1-12).

The school is owned by the municipality but most of finances are coming from the state budget via the municipality. The school has 90 teachers and 3 support staff members (2 social workers and 1 school psychologist) in the staff team. Most members of staff are Estonian-Russian bilingual people. The school runs several models of bilingual studies – early total and early partial; late total and late partial language immersion; content and language integrated learning. The Russian language is taught as a mother tongue, the Estonian language as a second language.

Tartu Jaan Poska Gymnasium http://jpg.tartu.ee/#/ is a Tartu municipality upper secondary school focusing on three areas of education: social and environment studies, humanitarian and art studies and natural sciences studies. The school is focused on creating independent self-directed learners, offering to all learners multiple choices for personal development and achieving excellent academic results.

There are 525 students in school divided into 15 classes. The school educates students aged 16-19 (grades 10-12). The school has an annual students' studies conference called "Poska Akadeemia".

The school is owned by the municipality but most of finances come from the state budget via the municipality. The school has 51 teachers and 1 support staff member (a school psychologist) in the staff team.

Põlva Gymnasium http://pg.edu.ee/ is an upper secondary school focusing on next areas of education: natural sciences, art and culture, social studies and sport. The school states that its curricula priorities are maths, mother tongue and English. The school pedagogy is built on the trust of student to teacher and vice versa, student's sense of responsibility, ability to communicate and communication skills, thinking skills. The school was established in 2016.

There are 217 students in school divided into 9 classes. The school educates students aged 16-19 (grades 10-12).

The school is owned by the state and it is fully financed by the state budget. The school has 22 teachers and 1 support staff member (a school psychologist) in the staff team.

THE SOCIAL LEARNING ENVIRONMENT IN SCHOOLS

A safe and supportive learning environment is needed for a student to be successful and able to develop and learn. The learning environment can be defined in several ways - for example, Kello (2005) discusses the *learning environment* as any environment in which learning is based on a national curriculum, but can be also seen more narrowly as the school environment, which is the part of learning environment. Therefore, according to this broader view, the learning environment can be seen as school (institution) with people learning and teaching there (the social environment being developed by them), as well as study materials and resources in school, students' learning experiences outside school, their home environment, while dealing with homework assignments, etc.

Both the Basic Schools and Upper Secondary Schools Act (PGS, 2010) and the Basic School National Curriculum (PRÕK, 2011) talk about the school learning environment, emphasizing that "*The function of basic schools is to provide students with a learning and teaching environment that corresponds to the age of students, is secure, has a positive impact and develops students, supports the development of their interest in learning, learning skills, self-reflection, critical thinking, knowledge and will-based characteristics, their creative self-expression and the development of their social and cultural identity.*"(PGS, § 4, Section 2).

The learning environment can be divided into three parts: intellectual, social, and physical (PRÕK, 2011, § 6). **Social learning environment** includes the relationships and the atmosphere of the classroom, how students feel in the classroom (and of course, the teacher). The main task of a school is to create environment which encourages learning.

The important strengths of the Estonian school system is the attention paid to the formation of a good social learning environment, to ensure that students are engaged in learning, taking into account the needs of other students (including individual characteristics), and the achievement of good academic results. In the last few years, more attention has been paid to students' happiness and satisfaction with school.

The Estonian educational system is developed today by The Estonian Lifelong Learning Strategy (ELLS) 2020 (ELLS, 2014), which highlights the active participation and responsibility of the learner; cooperation; consideration of the specific needs of learners; and emphasizes the responsibility of all parties to support learning - learner's responsibility and conscious charting of their own education path; parental support, and teacher designing learning and supportive learning environment.

ELLS (2014) states that the role of the school leader is crucial for creating school culture (also the social environment in it) because "*... the learning environment depends first and foremost on the headteacher –whether they value, motivate and support a learner and their developmental potential, whether they support the development of teachers and other school staff members, and whether the school works well with the community and families.*" (Section 2.3.)

The teacher is one of the key factors in the formation of a social learning environment in the classroom. The Basic School National Curriculum (PRÕK, 2011) states that the entire school family is involved in shaping the social environment. The document also highlights the following aspects for creating a social learning environment:

- Mutually respectful relationships between all parties (students, parents, teachers, school leadership, etc.),
- Unbiased, fair and equal treatment of students,
- Effort is recognized (not only a good result);
- Avoid violence and bullying among pupils;
- It is also important to give students a leading role by providing initiative-taking opportunities and possibilities for decision making (i.e. learners are involved, their opinion counts! They help to design their own learning environment, not adults designing it for them);
- Emphasize social skills (helpfulness, supporting each other in difficulties),
- Trusting relationships, friendliness, goodwill,
- Human rights and democracy
- Supporting good ideas and positive innovations;

- National, racial, gender, etc. equal treatment, gender equality (PRÕK, 2011).

Estonian education has changed significantly during the last decade because of a **change in learning approach.** The new approach is **focusing to learner** to support the learner's learning process and it has been included as compulsory part into all pre-service teachers' curricula by the universities (ELLS, 2014). Changes to assessment and evaluation principles and a transition to a formative (supporting learning and personal development) assessment system keeps the learner in the focus.   ELLS (2014) also emphasizes cooperation in all its forms as a key to the success of the education system, stating: *"... it is very important to have cooperation with teachers and educational institutions, the school and parents, but also between the school and the local government and the local private sector." (*Section 1.4.)

These days, the school environment isn't the only place to where the younger generation acquire their education. Possibilities are sought to integrate hobby education with formal education and conduct some lessons outside the school (ELLS, section 1.4.), which will make learning more interesting, more fulfilling and better meets learners' needs. In addition to teacher autonomy, **learner's autonomy** and self-directedness are highlighted by ELLS (2014), which should support learning motivation and consider the needs of learners, and increase students' school satisfaction. There are several public initiatives (e.g. *Interesting School, Back to School*, etc) in Estonia for that purpose. Rebane (2014) stresses that support to student's autonomy should be one of the central tasks in education, because we want to develop a person who can take responsibility for his work now (as a student) and in the future (as an employee).

ELLS (2014, Section 1.3) states that the main objective of school heads and teachers training system is *"...rethinking the role of the Head of a school as well as that of the teachers, so that they would be able to create an atmosphere in which attention would be paid to the development of each learner, to the development of their potential, and to valuing individual differences."*

Schools are looking for their specialty and shape their directions accordingly, striving to create an interesting and motivating learning environment for the learner. It is not possible to build every lesson on excitement and fun; however, school days can be enriched differently, for

example, learning from outside the classroom, inviting guests, active lessons or organizing a whole school day as an "active learning day" (or e-learning days, for example). Barkala (2015) emphasizes that creating variability, organizing lessons in different ways (or whole days) is very important for maintaining learning motivation and school satisfaction.

The initiative of the Estonian Ministry of Education and Research, *Interesting School*, seeks to involve all stakeholders in developing the future of Estonian education and making each school interesting for students, teachers, parents, and other supporters. Public debates are conducted, where parents, teachers, school leaders, students, entrepreneurs, NGOs, etc. have been involved. For example, in nation-wide think-tanks at the beginning of 2014, the concept of an interesting school was defined; objectives were set, and thoughts about how to assess school satisfaction and how different stakeholders can make schools more interesting. *Interesting School* includes four very important interrelated areas in general education: community engagement, a professional teacher, an optimal curriculum and a supportive external evaluation (https://www.hm.ee/et/huvitav-kool).

The National Curriculum for the Basic School (PRÕK, 2011, § 3, Section 3) states that "*The main task of a school is to create for students an age-appropriate, safe, positive, and developing learning environment ...*" A safe learning environment should also ensure supportive social environment without bullying and violence. Each school strives to resist bullying, one of the more popular anti-bullying programmes in Estonian schools is *KiVa* (Kiusamisvaba Kool – *Bullying-free School*), founded in Finland by Turku University with the support of the Finnish Ministry of Education and Culture. Half of all comprehensive schools in Finland implement the KiVa program, which has shown its effectiveness in studies. Since the 2013/14 academic year in Estonia, currently 46 schools have implemented the programme, and 9 schools are in the preparatory stage (http://www.kivaprogram.net/estonia). About half of Estonian kindergartens are running a similar programme developed for 3-10 years old children.

Many Estonian teachers use exercises for attention, peace of mind and mindfulness in order to have a better learning environment in classrooms, to generate the conditions for learners to concentrate on learning and consciously learn to think. Those type of exercises are called *Vaikuseminutid* (**Minutes of Silence**). Those minutes help learner to tune into work and be

consciously focused on the activities in order to achieve better results. These minutes also help students to see what is happening within and around them and to be more caring about themselves and others, creating a joyful and calmer mood (http://vaikuseminutid.ee/mis-on-vaikuseminutid). All this helps to focus on learning, to recognize the needs of other people, and in summary supports the development of a better social learning environment.

The Estonian educational system places great importance on students' **happiness and satisfaction with school**. School is not just a place of "getting" knowledge, but the student should be also happy there, have a will and wish to go to school, only then can the particular school provide a supportive learning environment. According to the PISA study results (Täht, 2016), Estonian PISA 2015 students were quite satisfied with their lives (average assessment 7.5 on the 10 points scale): three students in four were satisfied and only less than 10% were not. Student life satisfaction was the most closely related to sense of belonging, test-anxiety and bullying. Therefore schools should think about factors that could enhance students' sense of belonging and create a friendly and peaceful atmosphere. It must also be ensured that there is less bullying in the school.

PHYSICAL LEARNING ENVIRONMENT

The role of teachers', headteachers' and administrators' in creating and developing the learning environment including physical learning environment, should not be underestimated. According to the Estonian Lifelong Learning Strategy 2020 (ELLS, 2014) teachers are professionals, who should create motivating and supporting learning environment, which supports each learner's individual and social development. "*The role of a school leader in creating a school's culture is of crucial significance, because the learning environment depends first and foremost on the headteacher – whether they value, motivate and support a learner and their developmental potential, whether they support the development of teachers and other school staff members, and whether the school works well with the community and families*" (ELLS, 2014, p. 11). Therefore creating and developing the learning environment is also part of the CPD of school owners, headteachers and senior leaders (Digiajastu haridusjuht, 2014).

The concept of the physical learning environment covers spaces, equipment, and tools within and outside the school, where students can take part in the learning process both directly and virtually (Kuuskorpi & González, 2011). Changes in pedagogical approaches, teachers' roles and the development of information communication technology (ICT) have led to changes in the physical learning environment. The physical learning environment could be seen as a prerequisite for providing learners with digital skills and the means to apply modern approaches to learning, but also to strengthen the physical activity of learners (Luik, 2015). In the following we will discuss these three aspects of the physical learning environment.

Physical learning environment as prerequisite for providing learners with digital skills

Among the five main strategic goals for 2020 (ELLS, 2014) is a digital focus on lifelong learning, which means that all educational institutions in Estonia should have modern ICT equipment. Students in Estonia should access digital technology not only in computer labs but also using personal digital devices such as smartphones and tablet computers. Teachers should have the knowledge, how to use BYOD (**B**ring **Y**our **O**wn **D**evice) model in lesson and headteachers should know, what organizational problems this entails.

The informatics syllabus contains coding, programming, and 3D modeling, which means that robotic equipment and 3D printers are needed in schools. With the help of Information Technology Foundation for Education (HITSA), the digital literacy of schools and kindergartens has been enhanced to develop the digital competence of students and teachers and to support the integration of the learning process of digital culture. As the solutions for IT technologies in schools are becoming more complex and expensive, several educational institutions in Estonia rent or lease IT equipment. In addition to cost savings, it provides opportunuity for students and teachers to use the latest and most up-to-date technology.

Picture 1, Hiie School robotics class

Physical learning environment as the means to apply modern approaches to the learning environment. The learning process is becoming more co-operative, changing the teacher into a partner or mentor, which means that classroom arrangement should enhance social interactions among students and provide for easy access by the teacher, but also open up the central section at the front of the room for oral presentations. Teachers should be aware which physical learning environment could stimulate students to engage in the learning process and how it influences the behaviour of students.

Picture 2, Classroom furniture and interactive board in Mäetaguse Lower Secondary School

Picture 3. Classroom furniture in Hiie School and Jõhvi Gymnasium

Open spaces in schools could be used for integrating different subjects, putting several classes to learn together under the guidance of several teachers. These spaces may also be separated if necessary. For separation sliding doors could be used, which can also be used as whiteboards.

Picture 4, Open spaces in Tartu Hansa School

Open spaces could also be used for group-work preparation. For example, if the task is to present a roleplay, groups could find places to prepare it so that they don't distract each other.

Picture 5. Student "corners" in Jõhvi Gymnasium

The physical learning environment as a means to strengthen the physical activity of learners

The lack of physical activity of children is a world-wide problem. According to statistics, there are roughly 14% of schoolchildren aged 11-15 in Estonia who are moderately physically active for at least 60 minutes per day (Eesti toitumis ja liikumissoovitused 2015, 2017). Therefore, physical environment in schools should also ~~support~~ the learners' physical activity. Teachers, headteachers and administrators should have the knowledge about how physical learning environment influences learners behaviour and activities and they therefore have to encourage learners to move during the lesson breaks.

Picture 6. Jumping box and play-ground in Hiie School and Peedu School

Picture 7. Corridors in Hiie School

School corridors are equipped with places to play with peers, to run and jump in Estonian school buildings. Since the weather is not the best outside for most of the school year in Estonia and there is little daylight, indoor health trails have been created in schools and kindergartens, where children and teachers can have activities without taking into account weather conditions and time.

Picture 8. Plan of the school health track in Valga School and

the start of the health track in Tartu Kesklinna School

DigiMirror

Digital innovation is fostered in schools with a huge amount of teacher training being used for that (HITSA, 2017), but HITSA also focuses on the school as a unit of innovation (http://digijuht.hitsa.ee/). DigiMirror, a tool created by Tallinn University and financially

supported by the Ministry of Education and Science, focuses on the school as the whole. DigiMirror is an online self- and peer-assessment tool for measuring the maturity of the Digital Shift in school. Using this tool, administrators, headteachers, teachers and other school partners could give self-evaluations on three dimensions of digital maturity in school:

1) Pedagogical innovation (learning environment & resources, roles),

2) Change management (whole school policies, learning organization) and

3) Digital infrastructure (e.g. 1:1 computing, BYOD, Wifi, support).

A 5-point assessment scale is used for that:

A - Exchange: teaching approach is not changed

B - Enrich: technology supports differentiated learning

C - Enhance: teaching and learning are re-designed

D - Extend: ubiquitous technology, learner takes control

E - Empower: beyond institutional boundaries, learner as co-author

Picture 9. Picture of DigiMirror of one Estonian school

The self-assessment levels presented above are hierarchical, i.e. the third, or C-level location, implies the achievement of the A and B levels by default. By using DigiMirror, schools define both the current situation and the goal to be achieved. When schools are setting the goal, they also need to explain how they plan to reach the desired level.

The DigiMirror is a very good internal assessment tool for the school. The DigiMirror framework provides the headteacher and school owner with an overview of the level at which the school is located compared to other schools.

Picture 10. Comparison of DigiMirror image of a particular school

with Tartu schools' average image (internal line)

NOVEL INSTRUCTIONAL MODELS AND APPROACHES IN ESTONIAN SCHOOLS

Estonian teachers must be able to plan instructional activities that support the development of students according to the professional standard of teachers (Estonian Qualifications Authority, 2013). Good results achieved by Estonian students in international surveys, e.g., the Programme for International Student Assessment (PISA), have confirmed the effectiveness of work conducted by Estonian teachers (OECD, 2016). A comparison with the European average results indicates that Estonian teachers are well prepared in terms of subject knowledge (European Commission/ EACEA/ Eurydice, 2015). Many of them prioritise goals related mainly to students' cognitive development in order to ensure successful performance in academic testing (OECD, 2014), but underestimate the development of students' social skills (Loogma, Tafel-Viia, & Ümarik 2013; Uibu et al., 2017). However, several novel models and approaches are already being implemented in Estonian schools.

The LP model – Learning Environment and Pedagogical Analysis

The Learning Environment and Pedagogical Analysis (LP) model has been funded by the Norwegian Directorate for Education and Training based on world-wide educational research results. The LP methodology involves a systematic approach to pedagogical analysis and reflection, together with the development of appropriate measures and evaluation (Nordahl, Jahnsen, Stoen, & Tinnesand, 2016). The aim is to establish a good learning environment which ensures that all students acquire subject knowledge and social skills. The core of the LP-model is the theory of social systems, i.e., the permanent communication and interaction between people that takes place in different communities and the way in which people generate changes to each other in the environment. Teachers collaborate in groups according to specific principles according to LP-model. This model is also used to indicate relationships between students' activities and different aspects of the learning environment.

The structure of LP-model consists of two parts.

1. **Systematic analysis:** definition and formulation of the problem; definition of the goal; obtaining information and analysing; self-reflection, i.e., description of the elements of a problem.

2. **Strategies and measures:** elaboration of strategies and measures; implementation of strategies; evaluation of processes and results; renegotiation of strategies.
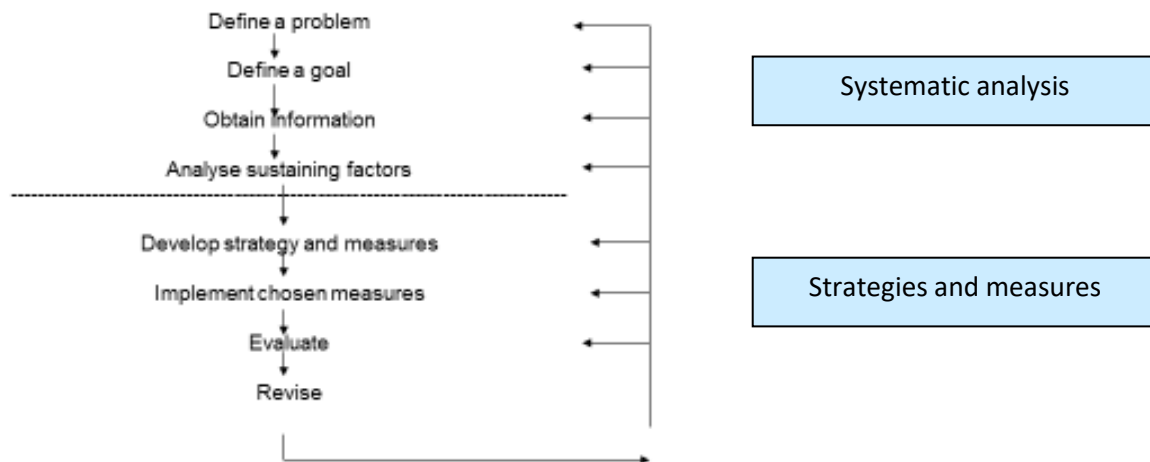

Figure 1. Plan of LP model

The evaluation of the LP-model in different schools indicated that this model ensures the development of a school culture which is characterised by a shared vision and goal-settings, stronger collaboration in between teachers and shared pedagogical principles. Applying the LP-model in school improves the atmosphere between students in a positive way. Students in these schools gain better social skills and self-control; they adjust better to the norms of the schools. They have less behavioural problems, there are less incidences of bullying and a more learning-oriented atmosphere in lessons in school is more common. In addition, relationships between students and teachers have been improved and parents are generally happy with the information they get from the school.

Implementation of LP-model in Estonian schools

The LP-model has implemented by the project "The Evidence-Based New Approach – A New School Culture in Estonia". Approximately 200 teachers and 2000 students from several schools and kindergartens (e.g., Tartu Annelinna Gymnasium, Tartu Hansa School, Tartu Kivilinna

Gymnasium, kindergarten "Pääsupesa") participated in this project. The LP-model could be implemented differently – e.g. in Tartu Annelinna Gymnasium the pedagogical staff is divided into different LP-groups (7-8 members in each group). These groups are maximally heterogeneous (male – female; different subjects and different school stages; younger-older teachers etc.). Every Thursday the LP-groups have meetings (appr. 1.5 hours). The group members raise different topics and problems, which are analysed according to LP-model during the meetings. The complementary information is then collected and different strategies are implemented in accordance with different occasions which may run over a few weeks or over several months depending on the context. All group members are involved in the investigation and problem solving process. It was found that the teachers who use the LP-model spend more time on their duties. In addition, people (e.g., school leaders, different specialists, parents) outside the certain LP-group may be involved to solve problems. Typical topics for discussion in the LP-groups of Tartu Annelinna Gymnasium are students' behavioural and learning problems, relationships between students and conflicts with teachers and parents.

CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL)

Content and Language Integrated Learning (CLIL) is considered as a major innovation in Estonian education. It is an educational approach that could be mutually beneficial for both - subjects' content and language. It aims to increase learner motivation, to develop learners' first language, cognitive skills and intercultural understanding (Eurydice, 2006). Historically the most common reason for introducing CLIL programmes has been to improve learners' overall target language competence, whereas currently numerous other goals linked to learning and development have emerged.

The most widely known conceptual anchor for CLIL is the 4Cs framework, which focuses on the interrelationship between content (subject matter), communication (language), cognition (learning and thinking), and culture (developing intercultural understanding) (Coyle, Hood, & March, 2010). The intercultural aspect of CLIL together with cognitive and content aims is adding the first language development to the other language goals. Thus, CLIL promises significant results for all its stakeholders.

Implementation of CLIL

The official state language in Estonia is Estonian. Use of Estonian as the second language of instruction became mandatory in all schools from the first school year for all students from non-Estonian families. To support students whose language spoken at home differs from their instructional language at school, different formal system models and strategies have been implemented (Uibu & Tropp, 2013). Although CLIL is still not a fully established educational model, there is a longstanding tradition of CLIL in Estonia. Different forms of CLIL are implemented into education, most notably bilingual studies, subject teaching in the target language and language immersion. Many CLIL programmes are based on the Estonian language, some of them on a foreign language (e.g., English language).

A typical form of CLIL in Estonia is immersion (e.g. early immersion or late immersion) which is referred to the teaching and learning of Estonian language in schools, in which Russian is the language of instruction, e.g., in Tartu Annelinna Gymnasium, Kiviõli 1st Secondary School. Nevertheless, immersion does not refer to learning and instruction in a subject in a foreign

language in schools in which Estonian is the normal language of instruction (Eurydice, 2006). Since 2013 the immersion in Estonian schools has been coordinated by the **foundation „Innove".** Numerous methodological materials have been published to promote Russian speaking students' competence in the Estonian language. However, one the most demanding fields, related to CLIL in Estonia, is teacher education. Without appropriate teacher education programmes, the full potential of CLIL is unlikely to be realised and the approach unsustainable. The studies, conducted in Estonia, have indicated that the principles applied in the CLIL lessons were effective regarding the acquisition of CLIL-related content (see Lehtse, 2012).

HORIZONTAL AND VERTICAL INTEGRATION IN GROUP WORK

Students need opportunities for active learning, e.g. searching and constructing new strategies and ways of problem solving. To develop students' social skills, interpersonal relationships and values, Estonian teachers use several progressive methods. Some of them, e.g. role play, games and simulations, are ideal for improving students' social skills, since they are based on daily problems and situations. Other cooperative methods (e.g. pair and group work) have been suggested for enhancing students' social competences. There are two forms of integration, i.e. horizontal integration and vertical integration, which are implemented by teachers in group-work. The horizontal integration is used to combine similar subjects and activities to expand students' knowledge and competences at the same level. The vertical integration in group-work is used to engage various subjects and competences at different levels. Those are both used extensively in upper secondary education in Estonian schools.

USE OF ROBOTICS IN EDUCATION

Robotics in education is a growing trend in Estonian schools and kindergartens. There are some programmes and projects (e.g., Robotics for Schools), which involve the introduction of a robot's capabilities and robotic equipment as well as manual application (Altin & Pedaste, 2013). There are schools and kindergartens all over Estonia which are involved in these projects (e.g., Tartu Veeriku School, Gustav Adolf Grammar School). In using robotics (e.g., LEGO WeDo) the children construct and program different models with motors and sensors. Through the interactive activities they have the opportunity to integrate subject knowledge with technological, engineering and math competences and to develop their communication skills. Teachers often offer students the possibility of using robotics in group work. Those activities and the development of the required environment (see physical environment) are financially supported by the HITSA foundation.

SUPPORTING SYSTEM FOR NQTS
(NEWLY QUALIFIED TEACHERS) - MENTORING

Description of the issue: NQTs often have difficulties in becoming established as strong members of the school teaching team. Therefore newly qualified teachers often leave the teaching profession during their first years of teaching.

System used to solve the issue: During the first working week in school, the leadership team chooses from qualified mentors an experienced teacher to be a mentor for the NQT. The mentor will previously have been qualified for mentoring (having passed a special in-service training course of mentoring or MA programme on mentoring). The mentor supports the NQT by providing any feedback and consultancy needed in relation to questions about the teacher's work during the NQT's first year in school. The mentor involves the NQT in the social life of the school, introduces school traditions and culture and supports them in overcoming problems that arise during teaching activities. The mentor is a colleague who supports, but they are not involved in the formal assessment of the NQT. The mentor's main task is to support the NQT's continuous professional development (CPD) during the mentoring period. Mentors claim that the system raises their self-confidence and provides new knowledge and methods that support and maintain NQTs after graduating from the university. Both professionals – NQT and mentor - improve their teaching qualification during the mentoring period.

Tool used: Estonian elementary, lower secondary and upper secondary schools, vocational schools and universities. Some kindergartens use it too.

HEAD'S VISION ABOUT THE SCHOOL, SCHOOL AUTONOMY

Description of the issue: Schools don't very often have a vision about their future and leadership teams are often waiting for instructions instead of acting to determine their direction.

System used to solve the issue: Estonia started to run models of excellence in education in 2006 as a compulsory management principle in schools and kindergartens. According to the guidance/remit of that approach, every school should define their vision about their future and mission in the local community. To fulfil those goals it has been stated at the highest level that the state trusts the schools (and kindergartens) as professional institutions and no external inspection of institutions are carried out. Schools are self-improving in terms of learning and the environment and families are happy with the institution. This approach makes the school head directly responsible for the students' learning outcomes (amongst other things) and directs the institution to improve its every-day routines and environment (both, physical and social). According to the school vision (and mission), every institution develops its own development plan that is revised annually. Under the framework of the school budget, the school head is the final decision maker in the buying of materials and services for the school and discusses and signs teachers' working contracts (minimum standards should be met). That makes state schools become similar to private enterprises that can develop their own working culture, internal standards and routines (under the legislative framework) and specific focusses (foci) for every-day learning activities. The school board is the mediator between the educational institution and the local community.

Tool used: All Estonian kindergartens, elementary, lower secondary and upper secondary schools, vocational schools and universities.

CHOOSING THE TEACHERS

Description of the issue: Schools complain that they cannot recruit the best teachers available.

System used to solve the issue: When a school has a teaching vacancy, the institution has the freedom to apply for the candidates to cover the vacancy. It is up to the school what kind tests it asks from applicants (starting from just references from previous working places (if any) up to the observations of lessons before signing the contract). The most proactive schools like to collaborate with universities having teacher education programmes to invite students for teaching practice into particular schools. Contractual proposals to the graduating students could be made after final pedagogical practice assessment by the school head. If a school didn't achieve the desired outcome through the practice system, then generally schools invite qualified candidates to apply through media and then every school can decide what qualities of candidates are the most important and what kind applicant should be invited for contractual discussions. Usually a representative of the school board is involved in the selection process. If the chosen candidate is formally qualified the final decision will be made at school management team level and they will sign the contract. No additional consultations are needed with the school owner or educational authorities. Full responsibility for the final decision lies at school level.

Tool used: All Estonian kindergartens, elementary, lower secondary and upper secondary schools, vocational schools and universities.

SYSTEM OF INNOVATION SCHOOLS

Description of the issue: Universities are too removed from schools' every-day life and therefore academic teacher education outcomes and school needs do not match. Also universities don't understand educational institutions' every-day life and needs – that makes collaboration between institutions clumsy.

System used to solve the issue: The University of Tartu invited schools and kindergartens to apply for the status of "school of innovation" or "friend of innovation". As a result 22 educational institutions are today listed as schools/kindergartens of innovation and more than 90 as friends of innovation. By signing a specific agreement between the educational institution and the university, the main principles of tight collaboration in the fields of teacher education and school development were identified and conditions decided. The University knows what the strongest qualities in the institutions are for the teacher education students' practice and schools know the best way to get immediate consultancies and in-service trainings from university academic units. This system leads to the development of best school practice in institutions, using the latest scientific results in teaching and learning practice and to receive the best pedagogical skills by teacher education students from schools. University and institutions build up that type of collaboration on bilateral agreements on an annual basis.

Tool used: All Estonian kindergartens, elementary, lower secondary, upper secondary and vocational schools.

TEACHERS' PROFESSIONAL IN-SERVICE TRAINING SYSTEM

Description of the issue: Teachers' professional skills need continuous development throughout their teaching career.

System used to solve the issue: In Estonia it is compulsory that every educational institution spends 3% of the teachers' salary budget on teachers' professional improvement. Every institution develops (on an annual basis) a plan for teachers' professional development and funds are then spent accordingly. Decisions related to the course content and which personnel are to be sent on the courses are made at school level. Schools often prefer to send staff members to "free courses" (price covered by any Estonian public body or European Social Fund), but those courses are very popular and not so easy to sign up for. There are also some very specific bodies offering courses (e.g. HITSA – offering very different courses related to ICT usage and educational programmes). According to teachers' professional standards it is expected that every teachers undertakes 160 hours in-service training during a 5-year period.

Schools are free to choose the courses and the timing of those and even to decide to have, for example, educational annual conferences to educate all staff. If the school owner is able to provide additional finances then even more resources could be spent on teachers' professional development.

Tool used: All Estonian kindergartens, elementary, lower secondary, upper secondary and vocational schools.

LANGUAGE IMMERSION MODELS IN
TARTU ANNELINNA GYMNASIUM (TAG)

Description of the issue: Students whose mother tongue is not Estonian don't obtain Estonian language at the same level as students having Estonian as their mother tongue (because they want to learn also their mother tongue).

System used to solve the issue: To solve the problem Tartu Annelinna Gymnasium has two types of language immersion programs: **early partial language immersion** and **early total language immersion**.

According to the programme of early partial language immersion, 40% of instruction is carried out in students' mother tongue (Russian language in TAG), another 40% of instruction is carried out in the Estonian state language and first foreign language for students) and about 20% of instruction is carried out in English (the second foreign language).

According to the programme of early total language immersion, all instruction is provided during the first 1.5 schooling years in Estonian. After that Russian language instruction is added and then some subjects during the next school year in Russian will be added into the programme. Both the programmes follow the Estonian National Curriculum requirements and expected outputs and students' compulsory weekly workload framework.

By comparing the learning outcomes achieved by students, the school can state that, after the third grade, early total language immersion students have a better knowledge of Estonian language and they are on the same level with other students in Russian (or even better). Teaching classes in a language other than the mother tongue haven't met any serious obstacles and teachers have really good results using CLIL methods and different modern teaching practices (ICT, outdoor instruction, collaborative learning, etc.) supporting students' understanding of the subject content.

At the end of their schooling, students passing the language immersion programme achieve an Estonian language level that is close to Estonian mother tongue speakers (in both oral and written forms). It is important that students' mother tongue still has an important role to build

up their balanced personalities and it is a significant part of school instruction and it is developed in school. Experiences of handling many problems in the state language (in Estonian) provides a strong enough foundation for later success in society as an adult. Students will have natural bilingualism and the understanding that knowing several languages is the norm.

Tool used: In most Estonian schools having significant number of students from minority language groups.

KINDERGARTENS

Tartu Kindergarten Klaabu http://www.tartu.ee/klaabu/ was built with the support of the European Regional Development Fund in 2009 and was opened in January 2010. The name Klaabu (created by Avo Paistik) comes from a children's book and cartoon creature, whose character is very friendly, adventurous and also curious.

There are 26 employees in the kindergarten: leadership team (2), teachers (16), assistant teachers (6) and support staff (2). There are 6 groups of children in the kindergarten and one of the five is an adaptation group. 130 children aged three to seven currently attend the kindergarten.

Modern furnished rooms support the children's development. The contemporary creativity-room and health-room are supporting the development of creativity and health promotion. The kindergarten educational programme focussed on health, nature and social environment.

Teaching is built up through games (integrated lessons) and the teaching fields (aspects?) are: Me and the? Environment, Language and speech, Mathematics, Art, Music, Physical education. We use elements of the Montessori education system, which support children's individual development and independence. Klaabu values children's social and emotional development as a bullying-free kindergarten. The kindergarten also promotes healthy lifestyles and behaviours.

Children can choose between seven hobby activities. There are English and German languages, football, judo, art and gymnastics. Parents pay an extra fee for hobby activities.

Tartu kindergarten Lotte http://www.lottela.ee/Tartu_Lasteaed_Lotte was opened in January 2008. The kindergarten got its name from the children's book "Lotte's journey to the South" by Andrus Kivirähk. Lotte – the main character in the book – is a lovely puppy girl who is often getting in unexpected situations because of her restlessness and curious mind.

There are 26 employees in the kindergarten: leadership team (2), teachers (15), assistant teachers (6) and support staff (3). They all meet the qualification criteria for their positions. 133 children aged two to seven currently attend the kindergarten.

It was actually the first kindergarten in the Tartu region planned by architects specifically for today's learning and living conditions. The kindergarten has won several prizes for the learning environment and teaching quality. The priorities of the kindergarten are creativity, national culture, health, safety and empathy in human relationships.

Kindergarten Lotte mostly uses Step-by Step methodology ideas:

a. Supporting the child's individuality

b. Cooperating with parents

c. Developing consistently teacher's skills and knowledge.

Lotte has joined the anti-bullying movement. All the kindergarten groups are applying the method of bullying-free kindergartens in their everyday work. This means:

a. "Bullying free!" that is a preventative method aiming to create a considering atmosphere between the children. Children are tolerant, respectful, caring, and in the case of any bullying, they interrupt and defend the ones who can't defend themselves.

b. We also use purple teddy-bears in the learning process.

The kindergarten provides families with the option to learn the German language starting at age 4 (for which they pay a fee).

Lotte belongs to a national network of health supporting kindergartens learning environment.

DESCRIPTION OF THE ISSUE: APPLYING FOR ADDITIONAL FUNDS FOR WRITING PROJECTS.

System used to address the issue:

The kindergarten is supporting the writing of project applications to the local municipality, different national foundations and European foundations by teachers and the leadership team. Both mental and financial support is provided

Examples of national and municipality projects:

- Project on raising children's knowledge of the natural environment by supporting kindergarten learning assignments and thematic trips to nature centres financed by the Environment Investment Foundation.
- Project "Lego and Robotics" financed by Tartu city government to buy equipment, train teachers and upgrade learning facilities in the kindergarten.
- Health projects during the last three years financed by the Estonian Agricultural Databases and Information Agency (PRIA) "Local Fruits and Vegetables on our Table". It provided children with the opportunity to participate in growing plants (green areas for every group) and to visit farms during the spring season.

Examples of international projects:

- Comenius learning mobility projects to participate in international courses outside the country.
- Erasmus+ (K2) projects to initiate collaboration between educational institutions of different countries and improve teachers' English language and professional knowledge and skills to widen children's eyesight, language skills and knowledge.
- Erasmus+ (K1) learning mobility projects to participate in different courses, shadow teachers in different countries and develop teachers' professional knowledge and skills.

Tool used: All different level educational institutions.

DESCRIPTION OF THE ISSUE: TO IMPROVE THE INVOLVEMENT OF PARENTS IN DECISION MAKING AND EVERY-DAY ACTIVITIES.

System used to solve the issue:

Parents are involved in kindergarten decision making and every-day activities on two levels:

Institution level:

- Participation in kindergarten Board activities;
- Confirming kindergarten menu in collaboration with parents;
- Inclusion of parents in the organisation of kindergarten events: Mihkli Fair for charity, kindergarten Olympics, maintenance works in the yard, etc. The kindergarten organises different events for parents to provide consultancies and information to support child development, e.g. "Sleep Class" to share knowledge about the need for children to sleep and about sleep itself. The kindergarten also has "Health Seminars" which includes presentations made by teachers (e.g. good bearing, emotional health), parents and other experts in different fields (e.g. dentist).
- Institutional health improving projects which direct families with children to be more active in outdoor activities (e.g. "Klaabu walks fast", "Klaabu walks here and there, you try to participate", "Raadi Health Days" Healthy food (growing herbs, presenting parents with vegetables plants, collecting families' favourite recipes and sharing those in learning groups), etc.
- Including parents in project activities: e.g. under the Erasmus+ project framework, carrying out the day of rules by parents as a common event and filling in the questionnaires.

Group level:

- Parents make proposals to improve the group annual activity plan and therefore participate in planning the educational process of the kindergarten.
- Participation in learning activities – according to the weekly theme, parents take interesting items and photos to widen children's understanding of the world around then and sharing their experiences.

- Parents as teachers in kindergarten – they carry out different learning assignments (e.g. cooking a meal, wood work, clay modelling, sewing, playing bank, introducing different fields of sport, visit of therapy dog, etc.). These activities are usually related to parents' jobs or hobbies. Sometimes parents take children to their places of work.

- Parents organize (or help to organize) group trips, parties and events, sometimes providing financial support (such as organising free transportation, buying different products, providing a picnic basket for the trip, creating a group acting centre, doing sewing and other jobs that are needed).

Tool used: Kindergartens, partly elementary and lower secondary schools.

DESCRIPTION OF THE ISSUE: COLLABORATION WITH THE UNIVERSITY IN TEACHER PRE-SERVICE AND IN-SERVICE EDUCATION.

System used to solve the problem:

The kindergarten provides opportunities to the University for Teacher Education on the premises and that collaboration provides two 'quick wins' for the kindergarten: the chance to choose new members of staff based on their personal and professional qualities and to update kindergarten teachers' professional knowledge by the newest approaches used in the university teacher education department.

Activities undertaken:

- Students regularly participate in the every-day activities of the kindergarten.
- Open learning activities offered by kindergarten teachers to students and reflection on those.
- Teachers supervise students during different practices and that improves teachers' mentoring and collaboration skills.
- Teachers are involved in teacher education classes (both pre-service and in-service teacher education classes) at the university and that improves their pedagogical knowledge.

Tool used: Kindergartens, lower secondary schools and vocational schools.

DESCRIPTION OF THE ISSUE: INTERNATIONAL LEARNING MOBILITY.

System used to solve the problem:

Usage of learning mobility provides students with the opportunity to obtain skills and knowledge about how to teach (and learn) in a foreign language and in another culture. That educates not only students but also teachers from the receiving kindergarten – both to learn a foreign language, to experience educational management in another country and to make connections between theory and real life. It also supports a better understanding of your own educational system.

Tartu kindergarten Klaabu participated in an international Leonardo da Vinci project "Mobilität-Interkulturelles Lernen in der Erzieherinnenausbildung" in 2011-2013. Two German students from Hamburg (Germany) undertook teaching practice in the kindergarten for four months every project year (six students in total). The collaboration continued after the end of the project with the Tartu German Culture Institute and the Estonian Goethe Institute when two German students had teacher education practice for two months in the kindergarten in 2016 (Regionales Berufsbildungszentrum Plön, financed by ERASMUS internship programme).

Students also visited the other kindergartens participating in the project during the practice, when they had the chance to see the other German students' practice conditions and to reflect together. Their reflections were an eye opener for teachers and the kindergarten leadership team – several new issues were set on the stage.

The children found the German students exciting people – they had to communicate through body language and emotions as they did not know each other's language. The few children who knew German or English had the chance to improve their language skills. All the children learned a lot about Germany and German culture.

The German students were motivated and they participated in the every-day activities of the kindergarten and they also learned some phrases of Estonian language. That provided more possibilities to communicate with the children verbally. The feedback of the German students to the practice was positive.

Tool used: kindergartens, primary and secondary schools, vocational schools.

DESCRIPTION OF THE ISSUE: LEARNING ENGLISH AND GERMAN LANGUAGES IN KINDERGARTENS.

System used to solve the problem:

Kindergarten children have the option to participate in an English "lesson" once per week for 30 minutes. Mostly participants are 5-7 years old, but sometimes even younger children join in. One learning group has up to 14 children and usually takes place in the kindergarten creativity room. In those "lessons" active learning strategies through play are used: language games, singing songs, short stories, different activities and interesting pictures on different themes (e.g. expressions, numbers, colours, family, food, weather, body parts etc.). Parents are charged extra for these activities and they have to apply for that. The English teacher has pedagogical higher education and is qualified to teach English.

The teacher uses the learning materials "Cookie and Friends" and "First Friends", and, in addition, word pictures, posters, picture stories, work sheets, glove dolls, CD player and blackboard.

Children also have the possibility to participate in similar "lessons" in German. Those lessons are developed in collaboration with the Estonian German Institute and the Estonian Goethe Institute who cover some of the costs. The teacher is a qualified German language teacher. The learning methodology is similar to the English lessons and carried out through different activities. Focus is paid to oral presentation but nobody is forced to talk in foreign language. Children are taken into the German language environment during the lesson. Those lessons are offered up to twice per week for a maximum of 30 minutes per day.

Tool used: To teach elementary English/German language to kindergarten children on a voluntary basis. Provides children with their first knowledge of a foreign language and prepares them better for further schooling.

DESCRIPTION OF THE ISSUE: ROBOTICS IN KINDERGARTEN LEARNING ACTIVITIES.

System used to solve the problem:

The kindergarten applied for additional finance in 2016 from Tartu City government Department of Education and HITSA (Estonian Information Technology Foundation for Education) to modernise the environment for children's learning and play. Both of these applications were successful and the kindergarten received robotics equipment called BeeBot 14 and WeDo 2.0 (both two sets). The kindergarten incorporated the robotics in groups of children who are 4 and 5 years old. To ensure that this equipment was integrated successfully into children's learning, two teacher training days were organised.

The robotics sets helped to develop:

- Social and self-sufficiency skills;
- Development of collaboration and common activities skills;
- Entrepreneurship, courage to present and self-reliance.

Building robots provides a fantastic opportunity to increase collaboration between team members, which teaches children to gain a better understanding of themselves and their peers. These common activities teach children to communicate more effectively with each other, take into account the wishes of their peers and interests and explain their own interests and ideas to their peers.

BeeBot and WeDo 2.0 toolboxes are used for such activities. In many cases, those toolboxes are used for work in pairs. Some children can be supervisors for the others when they're building robots.

Robotics activities support children's independence – they have to plan their activities, find a partner and to build a working model. WeDo 2.0 toolbox works efficiently with iPads, which provides further opportunities to learn and improve skills.

Children are keen to demonstrate their skills to parents, teachers and kindergarten guests. This develops them in the fields of communication, self-explanation and provides opportunities for them to seek assistance. Children also develop their discussion skills.

DESCRIPTION OF THE ISSUE: LEARNING ENVIRONMENT AND PEDAGOGICAL ANALYSIS (LP) MODEL.

System used to address the issue:

The learning environment and pedagogical analysis model provides a working method in which teachers collaborate in groups according to specific principles. The aim is to establish a good learning environment, which ensures that all children acquire social skills and learn to understand their environment and improve basic knowledge. These group meetings for teachers are organized regularly and there they can discuss different themes related to the school learning environment – starting with the physical and social environment and then moving on to discussing teachers' activities carried out with children and the support they might need for those activities. In this way the LP method provides a high level of co-ordination between teachers of activities that take place inside the kindergarten. It also enables the sharing of teachers' bright ideas on the learning environment and associated activities.

DESCRIPTION OF THE ISSUE: CHILDREN IN THE FAIRY-TALE.

System used to solve the problem:

Lotte, a kindergarten in Tartu, got its name by the children fairy-tale book by Andrus Kivirähk "Lotte's journey to the South". Lotte is the main character in the book – she is a lovely puppy girl who is getting often in unexpected situations because of her restlessness and curious mind. That very popular fairy-tale provides all the names for the various class groups in the kindergarten: the Briskest Cats, the Jolly Dogs, the Good Peanut Bunnies, the Colourful Birds, the Blue Elephants, the Tireless Centipedes/Worms, and the Cheerful Penguins.

The staff members in the kindergarten (including the head) are named by the book's characters. In the team they have: Paula the Musician, Susumu the Spicy, Friendly Sofi, Skilful Oskar (the handyman), Careful Helmi, the Masters of Sand Cake, the Grandmother of All Birds, Lotte's mother Anna, and the Meddling Julia. Those staff members try to emulate the characteristics of the identity and values of the particular character in the fairy-tale. This approach creates for children a fairy-tale environment and many of their activities are also related to that fairy-tale Children and parents very much appreciate that approach.

DESCRIPTION OF THE ISSUE: DEVELOPING CHILDREN PATRIOTIC APPROACH AND SOCIAL SKILLS.

System used to solve the problem:

The kindergarten uses a lot of national symbols to decorate the building: there are pictures of the national corn flower on the walls, flying swallows on strands hanging from the ceiling, different items from old traditional houses to lead children to their national roots, different national patterns used in clothes or paintings on the walls. In this way, children are constantly reminded by the environment about where they belong and about their national values. That environment also contributes to the development of their social skills and knowledge.

In addition, there are some activities in the kindergarten designed to improve children's social skills (such as the election of a kindergarten president). It is organized like a real election in the country – a child is identified as a candidate for the position of president, then over a few weeks they carry out an election campaign to be a president and then finally the election itself between candidates (all children can vote). These types of activities provide children at a very early stage with an understanding of what is actually going on in society and how those social and political systems are functioning.

REFERENCES

Altin, H., & Pedaste, M. (2013). Learning approaches to applying robotics in science education. *Journal of Baltic Science Education, 12*(3), 365–377.

Barkala, E. (2015). Huvitav koolipäev. Õpetajate Leht.

http://opleht.ee/2015/03/huvitav-koolipaev/

Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and Language Integrated Learning.* Cambridge: Cambridge University Press.

Digiajastu haridusjuht (2014). Training program for headmasters from the Information Technology Foundation for Education. Available at: http://digijuht.hitsa.ee/

Eesti Hariduse Infosüsteem (EHIS), 2018. http://qlikview-pub.hm.ee/QvAJAXZfc/opendoc_hm.htm?document=htm_avalik.qvw&host=QVS@qlikview-pub&anonymous=true

Eesti toitumis ja liikumissoovitused 2015 (2017). Publication of the National Institute for Health Development. Available at https://intra.tai.ee//images/prints/documents/149019033869_eesti%20toitumis-%20ja%20liikumissoovitused.pdf

Eesti Õpetajate Liidu kutsete andmise kord, 2018. https://www.kutsekoda.ee/et/kutsesysteem

ELLS, (2014). The Estonian Lifelong Learning Strategy 2020. https://www.hm.ee/sites/default/files/estonian_lifelong_strategy.pdf

Estonian Qualifications Authority (2013). *Professional Standard: Teacher EstQF Level 7.* Accessed February 10, 2017. http://www.kutsekoda.ee/en/kutsesysteem/tutvustus/kutsestandardid_eng

Estonian Statistics, 2018. https://www.stat.ee/ee

European Commission/EACEA/Eurydice (2015). *The Teaching Profession in Europe: Practices, Perceptions, and Policies. Eurydice Report*. Luxembourg: Publications Office of the European Union.

Eurydice (2006). *Content and Language Integrated Learning (CLIL) at School in Europe*. Brussels: European Commission

Haridus- ja teadusministeerium. Kõigi valdkondade statistilised andmed, 2018.

http://qlikview-
pub.hm.ee/QvAJAXZfc/opendoc_hm.htm?document=htm_avalik.qvw&host=QVS@qlik
view-pub&anonymous=true

Huvitav kool https://www.hm.ee/et/huvitav-kool

KELLO, K. (2005). Õpikeskkonna kujundamine on kooli põhiülesanne

file:///E:/Dreamline/Downloads/ROK__Opikeskkonna_kujundamine%20(1).PDF

KiVa programm

http://www.kivaprogram.net/estonia

Kukemelk, Hasso & Ginter, Jüri, 2016. Estonia: School Leadership in Estonia 2001 – 2013. In:
Ärlestig, H.; Day, C.; Johansson, O. (Ed.). A Decade of Research on School Principals.
Cases from 24 Countries. 125-136

Kuuskorpi, M. & González, N. C. (2011). *The Future of the Physical Learning Environment:
School Facilities that Support the User*, CELE Exchange, Centre for Effective Learning
Environments, OECD Publishing, doi: http://dx.doi.org/10.1787/5kg0lkz2d9f2-en

Lehtse, A. (2012). *Learning CLIL through CLIL: Teacher Students' Perceptions of the Practice
and its Effectiveness*. Master's thesis. Tartu: The University of Tartu.

Loogma, K., Tafel-Viia, K., & Ümarik, M. (2013). Conceptualising Educational Changes: A
Social Innovation Approach." *Journal of Educational Change* 14 (3): 283–301.

Noored kooli.

http://www.nooredkooli.ee/

Nordahl, T., Jahnsen, H., Stoen, J., Tinnesand, T. (2016). *LP-mudel. Õpikeskkond ja
pedagoogiline analüüs.* Tartu:

OECD. 2016. *PISA 2015 Results (Volume I): Excellence and Equity in Education.* Paris: OECD
Publishing. Advance online publication. doi:10.1787/9789264266490-en.

PGS (2010). Basic Schools and Upper Secondary Schools Act

PRÕK [RT I, 29.08.2014, 18 - jõust. 01.09.2014]

Põhikooli- ja gümnaasiumi seadus, 2017.

https://www.riigiteataja.ee/akt/104072017040

Rebane, K. (2014). Toetada õppija autonoomiat. Õpetajate Leht.

http://opleht.ee/2014/12/toetada-oppija-autonoomiat/

Tampere, K. (2010). Content and Language Integrated Learning: Estonian CLIL Teacher Profile. LAP Lambert Academic Publishing.

Täht, K. (2016). Õpilaste eluga rahulolu ning sellega seotud tegurid PISA 2015 uuringu näitel. https://www.innove.ee/wp-content/uploads/2017/11/%C3%95pilaste-rahulolu-PISA-2015.pdf

Uibu, K.; Tropp, K. (2012). Bilingual and monolingual students' linguistic competences and their development at Estonian primary *schools*. In: Toomela, A.; Kikas, E. (Ed.). *Children studying in a wrong language: Russian speaking children in Estonian schools*. *Twenty years after the collapse of the Soviet Union* (17–42). Frankfurt am Main: Peter Lang Verlag.

Vaikuseminutid. http://vaikuseminutid.ee/mis-on-vaikuseminutid/

Õpetajate Koolituse Raamnõuded, 2015. https://www.riigiteataja.ee/akt/812791?leiaKehtiv

UNITED KINGDOM

LEEDS EDUCATION CONTEXT

NATIONAL CONTEXT

The education system in the UK has changed drastically in the last seventy years, with the structure, governance and autonomy of schools undergoing wide reaching reforms at key points during that time. The Education Act of 1944 introduced the tripartite system of maintained (local authority controlled) education, wherein secondary age pupils were streamed by ability, determined with a test at age 11 (the '11 plus' exam), into three categories of school: grammar schools, secondary technical schools and secondary modern schools. This system was formally abolished in 1976 and replaced by the comprehensive system, however some elements of the previous system still remain in parts of the UK. The comprehensive school system does not set its admissions criteria on the basis of pupils' academic achievement or aptitude, and most secondary schools in England are now comprehensive schools. Primary schools do not select pupils based on ability.

The 1988 Education Reform Act introduced parental selection for school choice, which outlined that parents had a right to choose which school their child applied for. Consequentially, the education system became competitive, with individual schools working to prove their superiority to attract pupils and parents, and thereby attracting additional funding.

Education in England remains in a constant state of reform, with yearly modifications to examinations, assessment, the status of schools, types of schools, teacher training, the schools inspection framework and other accountability processes.

There is therefore now a wide variety of primary and secondary school structures within the UK education system, some of which have been introduced in the last 10 years.

- **Community schools**: They are controlled by the local council and not influenced by business/religious groups. They follow the National Curriculum
- **Foundation schools and voluntary aided/controlled schools** (including faith/religious schools: They follows the National Curriculum but have more freedom than community schools to change the way they do some things. Faith schools, for example can choose what they teach in religious studies

- **Academies**: These are state-funded schools which are directly funded through the Department of Education (DfE), and are therefore independent from local authority control. Academies are self-governing non-profit charitable trusts, and may receive additional support from personal or corporate sponsors. They do not have to follow the National Curriculum, but they do have to ensure that their curriculum is broad and balanced, and contains maths and English. Groups (or chains) of academies are known as Multi-Academy Trusts (MATs). *

- **Free schools:** These are specific types of academies established from 2011 through the government's 'Free School Programme' - founders of free schools can include parents, education charities and religious groups, in addition to MATs.

- **Grammar schools**: these schools select pupils based on academic ability (through an exam). They can be run by the council, a foundation body or a trust. The UK government is currently considering the options for the expansion of selective education.

- **Private schools**: These schools are not state-funded schools and therefore they charge fees to parents. They do not have to follow the National Curriculum.

The academy programme was introduced about 15 years ago and has been expanding ever since, with a particular rise in the number of academies since 2010. Currently, the majority of secondary schools are academies although the number of primary academies is increasing. The Education Act 2011 changed the arrangements for establishing new schools, so that any new schools that are built have to be an academy or a free school, not a local authority maintained school.

The **UK schools education system** is divided into 6 stages:

- Early Years: 0-5 years old

- Key Stage 1: 5-7 years old

- Key Stage 2: 7-11 years old

- Key Stage 3: 11-14 years old

- Key Stage 4: 14-16 years old

- Key Stage 5/Post 16 Education: 16-19 years old

In most parts of the country, primary schools cater for children up to the age of 11 and secondary schools cater for children from the age of 11 (to either age 16 or 18). At age 16,

students can transfer to a sixth form college or college of further education. Higher Education (universities etc) starts at the age of 18.

Assessment in the UK is normally carried out at the end of the Key Stages, when pupils take national tests and other examinations. The current examination system is:

- 3-5 years old: Early Years Foundation Stage (EYFS) tests
- 7 years old: KS1 SATs (Standard Attainment Tests)
- 11 years old: KS2 SATs
- 16 years old: GCSE (General Certificate of Secondary Education) exams
- 18 years old: A Level (Advanced Level) exams

Higher education:

Undergraduate degree - typically 3 years – graded as follows

- First-class honours (1st, 1 or I) – typically 70% or higher
- Second-class honours; Upper division (2:1, 2i or II-1) – typically 60–69%
- Lower division (2:2, 2ii or II-2) – typically 50–59%
- Third-class honours (3rd, 3 or III) – typically 40–49%

Masters degree - typically 1 year

PhD - typically 3 years

Accountability systems: Department for Education & Ofsted

The national government's Department for Education (DfE) is responsible for children's services and education, including higher and further education policy, apprenticeships and wider skills in England. Their responsibilities include:

- teaching and learning for children in the early years and in primary schools
- teaching and learning for young people under the age of 19 years in secondary schools and in further education
- supporting professionals who work with children and young people
- helping disadvantaged children and young people to achieve more
- making sure that local services protect and support children

The DfE delegates the control of maintained schools to local authorities/councils but has a team of Regional Schools Commissioners (RSCs) who oversee all the centrally funded schools, such as academies and free schools. Both local authorities and RSCs have a duty to challenge, support and, if necessary intervene in underperforming schools. RSCs also oversee the expansion of the whole academy programme.

Ofsted is the Office for Standards in Education, Children's Services and Skills. They inspect and regulate services that care for children and young people, and services providing education and skills for learners of all ages. They carry out inspections of all maintained schools and academies, some independent schools, and many other educational institutions and programmes. They also inspect childcare, adoption and fostering agencies and initial teacher training. They publish reports of their findings so they can be used to improve the overall quality of education and training.

LOCAL CONTEXT

Leeds is an expanding city with a current population of over 761,000 people. Estimates indicate that in 2015 there were 186,196 children and young people under the age of 20 in Leeds. Leeds City Council employs over 17,000 people, and it is the second largest local authority in the UK. The growth and development of Leeds has resulted in a changing demographic, with families now holding a greater proportion of the city as a whole. This has brought with it an exciting and youthful feel, and the city celebrates the continuing opportunities and progression that are provided by all citizens and communities in Leeds. The growth in children and young people has resulted in extra planning and care to deal with the significant pressures on school places, early years' provisions and complex needs services.

Leeds is an increasingly diverse city with over 20 ethnic groups amongst the school age population. 31% of children and young people in Leeds are from Black, Asian or Minority Ethnic groups. The proportion of pupils in Leeds schools who have English as an Additional Language (EAL) continues to grow, and in the January 2016 school census there were 196 different languages recorded as being spoken by the children of the city.

Figures from the most recent school census show that 19% of children are eligible for Free School Meals and 16% have Special Educational Needs. National measures of child poverty indicate that 22.7%, or 37,300, children in Leeds live in poverty, which is above the national figure of 19.9%. Leeds has a strong economy which supports its continued growth and expansion, but there are too many children and young people who experience poverty. In Leeds, approximately 40% of children in the poorest communities are classed as disadvantaged (in receipt of 'pupil premium' funding).

At the start of the 2017 school year there were 221 primary age schools, 38 secondary, 3 through schools and 7 special schools in Leeds. These figures include all state-funded schools. Most primary schools in Leeds are community, foundation and voluntary schools. For secondary schools, over half are academies or free schools.

There is no doubt the current education system is more autonomous and fragmented and this trend is set to continue. Councils have fewer powers to intervene and significantly less funding to support school improvement. All this is arguably at a time when expectations on school performance and pupil attainment have never been higher. The political changes that have resulted in a changing school system have led to Leeds City Council reforming the way that it works with schools and settings; and the ongoing budget cuts have seen the shape of Learning Improvement reform. The vision for Leeds is to ensure that all children and young people are appropriately cared for, safeguarded and supported to secure their wellbeing and to exceed their potential in good or better educational settings.

Strong partnership work has been established with schools over the years, which gives the city an exciting and innovative edge. Using restorative approaches is a key element of Leeds' ambition to become a child friendly city. Restorative practice is a term used to describe behaviours, interactions and approaches which help to build and maintain positive, healthy relationships, resolve difficulties and repair harm where there has been conflict. These approaches provide staff with a range of language, behaviours and tools that strengthen their relationships with children, young people and families, empowering them to share responsibility by using a solution-focused approach, which supports positive change. The Department for Education is very interested in the model that Leeds have developed and Leeds

is therefore one of only ten local authorities in the country to be appointed as a Partner in Practice, providing the opportunity to explore innovative models of delivery in Leeds.

Learning Improvement

The Learning Improvement Service has key responsibility within the Children and Families Directorate for monitoring, evaluating and reporting on the quality of education and standards of attainment for all children and young people in Leeds. The Leeds Learning Improvement Strategy is based on the belief that improving settings and outcomes will ensure that Leeds has a successful future. Reducing inequalities and narrowing the achievement gap between vulnerable and disadvantaged children and young people and their peers is key to the success of the local authority's strategy. The strategy promotes strong partnerships and collaboration and commits Leeds to work with partners on a transformational agenda. This will involve agreeing collaborative projects that draw on the creativity and expertise of all partners to create professional learning communities. The Best City for Learning Strategy defines where Leeds currently is as a city, where it aims to be, and how it is going to achieve its priorities. The strategy has seven areas of focus:

1. World Class Provision
2. Great Leeds Schools
3. High Expectations for All
4. Strong Attainment
5. Inspirational Teaching and Learning
6. Uplifting Leadership
7. Transition

This strategy has led to the creation of 'learning alliances', which are partnerships between schools across all primary schools in Leeds.

Effective leadership and management and outstanding teaching and learning are critical to securing successful outcomes for all our children and young people. Leeds City Council recognises schools and settings as autonomous and self-governing and also reinforces the role of the local authority in knowing them well, enabling provision to be monitored and challenged effectively and intervening where there are exceptional concerns.

The Service's ability to work with a wide range of data and contextual information at every level will support early identification of a setting's strength and vulnerability. For those schools and settings requiring the most intensive support, the Learning Improvement Service is committed to brokering bespoke packages of challenge and support, to support providers to reach good or better at their next inspection.

Continuing Professional Development offer for schools in Leeds

Schools in Leeds can access professional development in a number of different ways:

1) Leeds City Council Learning Improvement Team

The Learning Improvement Team is a non-profit making traded service, giving schools and settings the opportunity to purchase tailored packages of flexible support and, in addition, high quality training opportunities. Services offered support Early Years, primary and secondary schools and settings.

Bespoke Support

'Bespoke Support Packages' of school improvement support from the 0-19 team are carefully designed to meet the needs and priorities of individual schools and settings. These days can focus on a range of areas of development including the following: headteacher performance management; a review of teaching and learning; literacy and numeracy across the curriculum; governor/staff straining; specific subject development; improving outcomes of vulnerable learners and many other aspects

Training Opportunities (including Courses, Conferences, Networks)

The 0—19 Team provide a wide range of training opportunities including individual courses, networks and conferences. These opportunities focus on local and national priorities. Accreditations and national subject association memberships and our partnership with current school based practitioners ensure that the training reflects the best of current pedagogy and practice. Details of training opportunities are available through the 0-19 brochure and online at www.leedsforlearning.co.uk.

Leading Learning Partnership (LLP)

The LLP is a specific secondary CPD programme. It is a unique, system led school improvement package designed to stimulate professional growth and ensure future sustainability through principles of partnership, area-based networking and capacity building within and across partnership schools. LLP membership includes access to termly subject leader networks as well as briefings for senior leaders and governors. Partnership priorities are responsive to national policy changes and the school improvement needs identified by members. The LLP now provides a programme of over a 100 CPD events accessed by thousands of staff each year. Critical to the LLP's success is its aim to develop system leaders with over 30 school leaders working collaboratively to plan, facilitate and lead the Leeds Learning Partnership network and conference programme.

2) Through Teaching School Alliances (TSAs) and Multi-Academy Trusts (MATs)

Teaching Schools are part of the government's drive to give schools more freedom and take increasing responsibility for school improvement and professional development at a local level. As well as offering training and support, teaching schools will identify and co-ordinate expertise from their alliance, using the best leaders and teachers to:

- play a greater role in the recruitment and training of new entrants to the profession;
- lead peer-to-peer professional and leadership development;
- identify and develop leadership potential;
- provide support for other schools in partnership with the LA;
- engage in research and development.

MATs are groups of schools who increasingly run their own programmes of professional development for their own teachers, as do individual schools

School Funding in the UK

The way in which state schools (LA maintained schools and academies) in England are funded is fairly complex at the moment and is now under review. Currently, the main source of funding for schools (for pupils aged 5 to 16) in England is the Dedicated Schools Grant (DSG). The DSG is paid to local authorities, minus deductions for academies (who receive funding direct from

central government). The DSG is notionally divided into three blocks: The largest block, the Schools Block (80%); The High Needs Block (13%); The Early Years Block (7%).

Local authorities do not pass DSG funding straight on to schools. In allocating funding, they must consult with their local schools' forum and with all maintained schools and academies in their area. The local authority, in consultation with the forum, determines the overall individual budget for schools in the area, any funding to be centrally retained, and whether any funding should be moved between the three blocks of the DSG. It also determines a local funding formula which is used to distribute the individual schools budget between local schools. This current system results in significant variations in the amount of funding per pupil in different parts of the country: in 2016-17, the unit of funding per pupil ranged from just over £4,000 in one local authority to just under £7,000 in another. The current review will address this issue.

There are **other sources of income** for schools including post-16 (age 16-19), high need (for pupils with SEND), early years and pupil premium funding. Pupil Premium funding is additional funding each year for disadvantaged pupils, Children Looked After (CLA) and qualifying children from service families.

Schools can also access some **capital funding** from the Education Funding Agency (EFA) which provides separate grants to local authorities, maintained schools and academy trusts for building maintenance, refurbishment and rebuilds.

In addition, most schools generate a proportion of their income themselves. Fundraising activities include asking for parental contributions, leasing out premises for community use, and sponsorship from business.

Looking forward, the UK Government has committed to introducing a national funding formula (NFF) to calculate the amount of core revenue funding that mainstream schools in England would attract. This would avoid the differences in funding levels that currently existing in different parts of the country. There will also be separate national formulas to calculate early years funding and high need funding (largely for children with SEND), as well as for some services still centrally provided by local authorities. As is currently the case, schools would also get income from other sources.

SCHOOLS AND OTHER SETTINGS IN LEEDS THAT WERE VISITED DURING THE PROJECT

Early Years:

- Bright Beginnings (Private, Voluntary, Independent): *www.brightbeginningschildcare.co.uk/*

Primary schools:

- Rosebank (Local Authority Maintained): http://rosebank.greenschoolsonline.co.uk/

- Westgate (Local Authority Maintained): http://www.westgateprimary.co.uk/website

- Beechwood (Local Authority Maintained): http://www.beechwoodprimaryschool.co.uk/

- Allerton CE (Local Authority Maintained): http://allertonceprimary.com

- Shakespeare (Local Authority Maintained) *www.shakespeareleeds.org.uk/*

Secondary schools:

- The Farnley Academy (Academy): *https://www.farnley.leeds.sch.uk/*

- Ralph Thoresby School (Local Authority Maintained): *www.ralphthoresby.com/*

- Cockburn School (Academy): *www.cockburnschool.org/*

- Brigshaw (Academy): *www.brigshaw.com/*

Post 16 setting:

- Elliott Hudson College (Free School): https://www.elliotthudsoncollege.ac.uk/

Special school:

- West Oaks SEN Special School and College (Local Authority Maintained):

  http://www.westoaksschool.co.uk/

PARTNERSHIP WORKING BETWEEN SCHOOLS IN LEEDS

This case study outlines two key strands of partnership working between schools in Leeds:
- *Primary School Learning Alliances*
- *Leading Learning Partnership (LLP) – secondary schools*

Both these are important aspects of the city's overall strategy to support the professional development of teachers and improve outcomes for children and young people.

School / Setting:	**Leeds City Council: Learning Improvement Service**
Website:	http://www.leedsforlearning.co.uk/
E-mail:	Primary Learning Alliances: learningleadership@leeds.gov.uk Leading Learning Partnership: Kevin.paynes@leeds.gov.uk
Context / Other background information relating to this strand of professional development	The **Leeds Learning Improvement Service** has a responsibility within the Children and Families Directorate for monitoring and evaluating the quality of education and standards of attainment and progress for all children and young people in Leeds. An important focus of the work of the service is reducing inequalities and narrowing the achievement gap between vulnerable and disadvantaged children and young people and their peers. To support its work with schools, the Learning Improvement Service actively encourages school to school support and the development of **system leadership**. The main elements of this include: • **Teaching School Alliances.** These are part of the government's drive to give schools more freedom and

take increasing responsibility for school improvement at a local level. As well as offering training and support, teaching schools now play a greater role in the recruitment and training of new entrants to the profession. They are also responsible for designating and deploying Specialist Leaders of Education (SLEs) to support other school leaders.

- The use of **National/Local Leaders of Education (NLEs/LLEs) to** provide support and challenge for Headteachers to help secure school improvement or in developing a fresh perspective on issues presenting considerable challenge.

- The use of **National Leaders of Governance (NLGs).** These are chairs of governors of outstanding schools who use their skills and experience to support governing boards in other schools and academies.

- **Seconded Leaders.** The local authority will work in partnership with seconded Leeds Headteachers or senior leaders on identified priorities.

In addition to the above, the Local Authority is actively involved in the creation and promotion of effective, professional learning communities through which schools and settings can network, collaborate and share good practice. This case study outlines two of these main strands of work.

DETAILS OF CASE STUDY

PRIMARY SCHOOL LEARNING ALLIANCES

All primary schools are encouraged to be part of a self-chosen learning alliance, including vulnerable schools if they have the capacity so to do. These are enabled and facilitated by a

school improvement adviser (SIA) who acts as a critical friend in the process and monitors the impact of peer review and evaluation. Typically the number of schools in a Learning Alliance is three to five.

Through the Learning Alliances, schools are able to further improve the quality of teaching and learning to impact directly on pupil outcomes. As the alliances develop, schools are able to optimise their resources, promote professional learning, enable leadership and develop sustainability and continuity throughout staffing and create strong systems for evaluation and moderation of the standards they achieve. This can be achieved in a way that is bespoke to each individual learning alliance to ensure that is a meaningful exercise that is forensic and sharply focussed on improving outcomes for children.

The SIA works with school leaders in the alliance to support the development of the characteristics of successful partnerships, seen as:

- A shared set of values about leadership and teaching & learning
- A collective responsibility for pupil outcomes
- A collaborative focus on teaching and learning
- An agreed focus on professional learning (CPD)
- Focussed professional enquiry, reflection and evaluation
- An openness to networks and partnership working
- Inclusive membership
- Mutual respect, trust and support

Through such involvement, the Learning Improvement Team will gain deeper insights into the development of leadership and the delivery of teaching and learning in a school, adding to the shared understanding of its schools and settings.

The adviser role in the learning alliances is to:

- facilitate and contribute to the group's work: planning, enquiry based activity and evaluation
- provide robust challenge and support as necessary during the process
- maintain brief written records of visits/contact

- share practice across the city.

The impact of the Learning Alliances:

- 99% of Local Authority maintained schools are now part of a learning alliance
- The work of the alliances has had a positive mention in school inspection reports

The quality of middle leadership in schools is improving.

SECONDARY SCHOOLS LEADING LEARNING PARTNERSHIP (LLP)

The Leading Learning Partnership (LLP) is a unique, system led school improvement service designed to stimulate professional growth and ensure future sustainability through principles of partnership, area-based networking and capacity building within and across partnership schools. LLP membership includes access to termly subject leader networks as well as briefings for senior leaders and governors. Partnership priorities are responsive to national policy changes and the school improvement needs identified by members.

Since its inception in 2011, the LLP has grown to provide a programme of over a 100 teacher training events accessed by thousands of staff each year. Critical to the LLP's success is its aim to develop system leaders with over 30 school leaders working collaboratively to plan, facilitate and lead the Leading Learning Partnership network and conference programme.

The LLP is designed to:

- Provide practical school-focused training that raises standards
- Meet schools' leadership development needs
- Develop teachers' knowledge of practical and highly effective evidence based strategies that accelerate progress and close the achievement gap
- Deliver a cohesive programme to improve the leadership of teaching and learning across the whole school
- Support and develop a learning community that collaboratively responds to curriculum and assessment changes
- Provide teachers and support staff with access to verified teaching and learning strategies that raise attainment and accelerate progress, especially for disadvantaged pupils.

Though the LLP, schools can access:

- Networks and conferences in 13 subject areas – one each term per subject so a total of 39 events during the school year
- Three face to face senior leader and governor briefings
- Three senior leader briefing papers
- Email updates

Some examples of the impact of the LLP:

- On average **97%** of members who attended the subject leader events rated them as 'good' or 'excellent'.
- **92%** of LLP members felt the LLP programme enabled them to learn the best practice from other schools.
- **94%** of LLP members praise the programme's ability to facilitate networking and learning from other leaders.

EMBEDDING WORLD CLASS LEARNING THROUGH SIMPLE SYSTEMS AND WHOLE SCHOOL INNOVATIVE APPROACHES

School / Setting:	**West Oaks SEN Specialist School and College**
Website:	http://www.westoaksschool.co.uk/
E-mail:	Principal andrew.hodkinson@westoaksschool.co.uk
	Vice-Principal sue.towers@westoaksschool.co.uk
	Head of School keeley.murray@westoaksschool.co.uk
Principal / Headteacher:	Mr Andrew Hodkinson
Type of school:	Local Authority Maintained Special School
Phase (age-range):	2 – 19
Context	West Oaks School is an SEN Specialist School and College, which has a strong tradition for SEN excellence. The school has the capacity to educate 280 pupils on its two sites: the Boston Spa site (a rural village campus which incorporates a long established partnership base in the local high school, 16+ enterprise centre and local farm provision) and the Woodhouse Learning site (an inner city campus in the Meanwood area of Leeds) which opened in September 2015. Over the next few years pupil numbers are likely to grow beyond 300 as the school becomes one of the largest special schools in Europe. West Oaks caters for children with a wide range of needs: profound, multiple and complex conditions,

	autistic spectrum conditions, severe learning difficulties. Over 75% of pupils have a diagnosis of Autism.
Other background information relating to this strand of professional development	West Oaks has been established for over 40 years and has a passion for excellence for everyone associated with the school whether pupil, parent, staff or community member. We are keen to support our staff to constantly improve their practice and hopefully this case study reflects that.

DETAILS OF CASE STUDY

Why did the school decide to undertake this work?

Our values are rooted in excellence for everyone and driven by simple systems and processes. It may sound simplistic and obvious but at West Oaks, we consistently focus on our core business - curriculum, teaching, learning and leadership to enhance our school offer. Our curriculum is based around a play-based learning approach which enables us to shape our learners and this is complemented by our approach to leadership and school structures, our LLP (leading learning plan), approach to induction, coaching and training.

What are the key features of this piece of work

Play based learning approach and philosophy

West Oaks has a clear play-based learning ethos aimed at ensuring our pupils thrive and become independent learners, develop autonomy and most importantly enjoy learning. We believe that learning through play and following children's ideas and interests is the best way to capture pupil engagement. Our play-based approach is developed through a spiral provision within three key classroom environments for our pupils aged 2 to 7 years.

Once pupils have completed the three stages, they are developmentally ready for a more formal way of teaching with reduced access to continuous provision.

Curriculum approach

Our curriculum is constructed into five distinct areas, which are designed to shape, develop, challenge and empower our learners whilst maximising their achievements at every stage of

their development. Our curriculum is broken down into Foundations for Early years and Key Stage 1 (shaping), Footsteps (developing), Stepping stones (challenging), Reaching high (achieving) and Moving on for learners at 16+ age (empowering). We also have a thematic approach to our curriculum and centre learning on a 'Big question and topic' approach.

2016-2018 Leading Learning Plan

Our approach to school improvement and development is simple. We have a Leading Learning plan and we sustain what we do well and grow elements that need attention. Safeguarding is a golden thread through all our plans and all is underpinned by excellence for everyone. Our 2016-2018 plan has seven key priorities.

Induction, Coaching and Training

Developing our staff and ensuring that their professional standards are up to our high expectations we ensure that training in school is via a fortnightly school twilight session that everyone attends. There is a strong school-based mentor system in place with weekly coaching input and peer observation support. To ensure all our teachers and the associate staff understand our school processes and standards, all our staff follow an induction process in our model classroom. Our Progress and Innovation Co-ordinator manages pod progress, assessment and our new staff are all mentored by our TLCo's.

Use of the model classroom to set and maintain high professional standards

The model classroom is set up with all our practices and explanations for staff and visitors to learn from. The layout sets the tone for the school and all classes follow the same routines. In the model classroom we are able to "walk and talk" our values as we reference circle time, workstation expectations, pupil information and **visual timetables** that are differentiated to suit the needs of the pupils. **Daily routines** are modelled and **Transition areas** are clearly defined and kept tidy. If a **thinking area** is appropriate for the pupils in class, there should be minimal distraction and strategies (for pupils and staff) displayed where necessary. **Reward charts** must be motivating and appropriate to age and ability of pupil. **Planning** and **class timetable** must be displayed in every classroom and **pupil information** to be accessible and displayed neatly. If staff have a **circle time board** they should be kept neat and tidy. All symbols used must be the same size. All classes must have a **reading area** that is inviting and promotes reading. All **motivators**
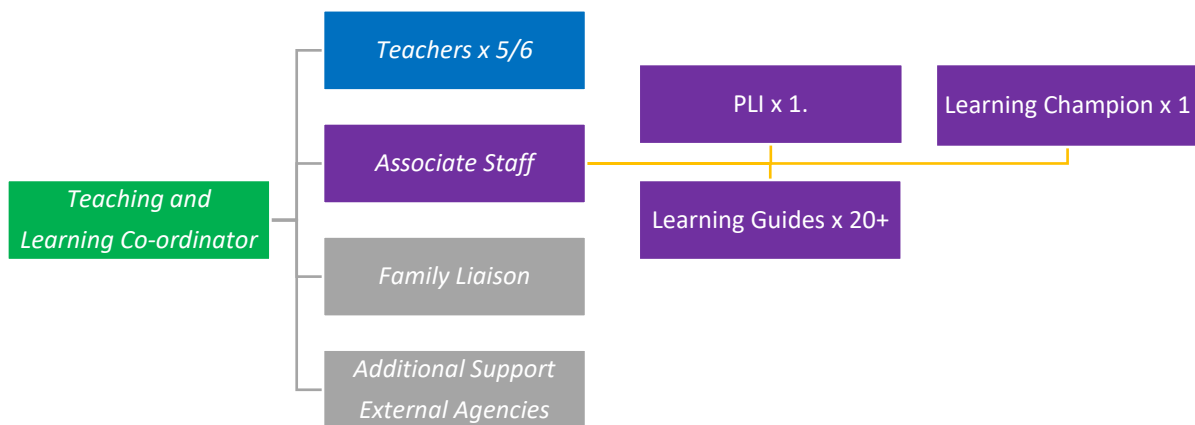
must be displayed neatly and well labelled in order to support pupil's PECS use. *More information on request.*

Layout of our 2018 model classroom

Leadership and structure

Our distributed leadership model is lean and has a strong focus on teaching and learning as we keep our strongest teachers in the classroom. Our pupils are taught within Pod communities. The Pods and learning within the pods are overseen by a Teaching and Learning Co-ordinator (TLCo) who also has a three-day teaching commitment.

Class Teachers and Associate staff

In our Pods, each class is taught by a class lead and supported in their delivery by our Associate staff. Our Associate staff are a strength of the school and operate at a high skill level; they know our children well. It is very important for us that our Associate staff help guide the child through the learning process whilst focussing on developing their independence. Our Personalised Learning Instructors (PLI) and champions ensure there is high-level support for children at our school. This team philosophy and focus on excellence for everyone is key to our delivery.

Benefits/Why we adopted this approach

School focus should always be on your core business of teaching and learning whether in a primary, special or secondary provision. Our approach has helped improve teaching and learning as 83% of teaching was judged good or outstanding in 2016/17 and pupil progress was a key strength of the school. The purpose of education is for children and young people to enjoy what they are doing whilst making progress relative to their own unique starting points. The West Oaks team around the child approach and the investment we have made in key areas of teaching, learning, curriculum, coaching and leadership have all had a positive impact in the learning experience for pupils/staff.

How is this whole school approach monitored?

External Advisors and feedback from parents, local authority and nationally through organisations like Ofsted and NAS highlight our effective approaches. We also monitor and improve our own provision.

Examples of impact: Our school is over-subscribed and we were commissioned to design, build and populate a new £10 million school in 2015 growing our numbers from 132 to 271 pupils and 130 staff. The school was built on time, within budget and demonstrates the confidence Leeds has in West Oaks to deliver excellent SEN provision. External feedback from parents, local authority and nationally through organisations like Ofsted and NAS also consistently highlight our effective approaches. Ofsted (UK Government Inspectors) gave the school the highest grade (1) rated outstanding in 2007, 2012 and 2017 and the National Autistic Society (NAS) accredited the school has a Beacon of Excellence for teaching children with Autism in 2017.

What next

1. Continue to sustain and grow elements that need to improve.

2. Focus on 16+ provision.

3. Development of strong global inclusion partnerships (Open day September 17th 2018).

Examples of documentation that supports this include (on our website):

1. Curriculum and Assessment map 2017/2018

2. 2017 curriculum statement

3. Play Based learning overview

4. Model classroom

5. Ofsted reports 2017, 2012, 2007

6. Leading Learning Plan overview

Any further information please contact Andrew.hodkinson@westoaksschool.co.uk.

COCKBURN SCHOOL
Specialist status in the Performing Arts

DEVELOPING HIGH QUALITY TEACHING AND LEARNING ACROSS THE SCHOOL THROUGH CLEAR WHOLE SCHOOL SYSTEMS AND STRUCTURES AND A COMPREHENSIVE APPROACH TO CPD FOR ALL TEACHERS

School / Setting:	**Cockburn School**
Website:	http://www.cockburnschool.org/
E-mail:	info@cockburnschool.org
Executive Headteacher:	Mr David Gurney
Head of School:	Mr Rob Dixon
Context	Cockburn School is a large secondary school in the Cockburn Multi-academy Trust. There are 1200 pupils on roll, a significant proportion of whom are disadvantaged and eligible for Pupil Premium funding.
	The school has been designated as a National Support School and the Executive Headteacher is a National Leader of Education (NLE). This means that the school is able to work with other schools in the region to share good practice.
	The achievement of pupils at the school is very high.

DETAILS OF CASE STUDY

WHY DID THE SCHOOL DECIDE TO UNDERTAKE THIS WORK?

The school were keen to establish a consistent approach to all aspects of teaching and learning within the academy including ensuring that all staff are able to access an appropriate level of CPD to maximise the impact of their work in improving the outcomes for all children and young people.

WHAT ARE THE KEY FEATURES OF THIS PIECE OF WORK

1. Teaching and Learning Policy

This sets out clear guidelines for all staff in order to:

- raise standards of teaching and learning.

- develop a consistent approach to lesson planning, structure, and delivery.

- adopt a common teaching and learning vocabulary and understanding of the learning process.

Appendix: https://drive.google.com/open?id=1jwMvkq7f3L8gpFgx-5IuEnpYhaoas0QZ

2. Continuing Professional Development Policy

Cockburn School is a learning community committed to providing opportunities for learning and development of its entire staff. It is an expectation that all members of the learning community will take an active role in their own professional development and support the professional development of other colleagues. The policy covers such aspects as:

- Identifying training needs

- Matching provision to training needs

- A summary of the wide portfolio of CPD approaches including professional development provided 'in-house', through school partnerships and by external providers.

All those engaged with CPD are encouraged to reflect on their development and act in it, disseminate effective practice and evaluate the impact of the CPD.

Appendix: https://drive.google.com/open?id=1ht6pnClh6xT9b-wypIdiXxsYBUhRSB_V

3. The Cockburn Learning Cycle

This outlines how effective teachers should design learning as a consistent approach to Teaching and Learning and is based on the accelerated learning model. The five part Learning Cycle supports teachers to structure their lessons to encourage consistency for students, but also facilitates flexibility of structure so progress is maximized for students.

A lesson should comprise of all parts of the cycle to facilitate good learning. There is an associate guide for teachers to explain the details of this for teachers.

Appendix: https://drive.google.com/open?id=1bzYjcOuWM_KVvf5zho8KEYnxroeRrN8P

Evidence of impact: As a result of excellent teaching, Cockburn School's progress 8 score of 0.65 places the school the 3rd highest within the Local Authority and in the top 10% of schools nationally. Disadvantaged students have a Progress 8 score of 0.49.

WHOLE SCHOOL APPROACH TO ENSURING HIGH QUALITY TEACHING AND LEARNING TO IMPROVE RATES OF PUPIL PROGRESS THROUGH THE "BRIGSHAW CHALLENGE"

School / Setting:	**Brigshaw High School, Allerton Bywater, Leeds**
Website:	http://www.brigshaw.com/
E-mail:	office@brigshawtrust.com
Principal:	Simon Riley
Type of school/setting:	Secondary Academy
Context	• NOR: 1350
	• Demographics: The numbers of students that are supported at school action plus, or with a statement of special educational needs or known to be eligible for the pupil premium are broadly average.
	• The school is part of the Brigshaw Learning Partnership, a Multi-Academy Trust (MAT) that also includes 5 primary schools (Allerton Bywater, Kippax Ash Tree, Kippax Greenfield, Kippax North, Swillington). The MAT is overseen by a Trust Board.
	• The school works in partnership with Temple Moor High School and Royds School to offer a broader range of subjects in the sixth form.

DETAILS OF CASE STUDY

WHY DID THE SCHOOL DECIDE TO UNDERTAKE THIS WORK?

The school's leadership had identified that the quality of teaching and learning across the school as a whole was inconsistent, both between subject areas and within subjects. As a result, attainment and progress data at the end of Key Stage 4 (age 16) varied from year to year. In addition, the school's own pupil tracking data indicated that some pupils (in some subject areas) were falling behind and not achieving expected levels of progress. The issue was particular prevalent for vulnerable pupils (e.g. disadvantaged).

WHAT ARE THE KEY FEATURES OF "THE BRIGSHAW CHALLENGE"?

There are six 'non-negotiables' that all teachers are expected to incorporate in all their lessons.

1	Quality feedback	• Verbal and written (including setting targets) • Use of 'Green for Growth' process to 'close the gaps' and develop mastery of the subject • WAGOLL (What a good one looks like) • Development of literacy a key priority • DIRT (Dedicated Improvement and Reflection Time) • **Mark First/Give More**
2	Quality questioning	• Plan challenging questions (**for ALL**) and expect quality answers • Use effective strategies • Expect ALL to listen and respond if asked
3	Quality metacognition	• 'Triple Learning Line' – knowledge, skills and the Brigshaw Learner (including subject specific focus): establishing a common language for learning • Focus on 'Building Learning Power' • Explore how pupils learn best • Opportunities to tackle difficulties

		• Effective self and peer assessment • **Make expert Brigshaw learner subject skills explicit**
4	Establish Pride	• Enthusiastic and restorative approach • Perfect beginnings – meet/greet/end/send • Use of praise and rewards • **Phone calls/Postcards/Notes in planners**
5	Know Your Class	• Effective use of seating plans • Differentiate for all cohorts • **Strategically place in room**
6	Challenge	• Use the 'Brigshaw Learning Cycle' – accountable for 60 minutes • Best Presentation • **Support with home learning**

Supporting Resources

- A summary sheet of the Brigshaw Non-negotiables
  https://drive.google.com/open?id=1bHTkCDRYO9DCo9j7etzaanu1p1_AO0WH
- Background document: "The Purpose of Green for Growth at Brigshaw"
  https://drive.google.com/open?id=14wJe0_aL0LmWlT4OVfJVg3Y4nn0unYp1
- A PowerPoint on questioning etc (from a staff training session)
  https://drive.google.com/open?id=1bHTkCDRYO9DCo9j7etzaanu1p1_AO0WH

How is this whole school approach monitored?

As part of the school's on-going monitoring and evaluation cycle, the quality of teaching and learning is regularly assessed through planned lesson observations and learning walks focusing on particular 'non-negotiable' aspects. These are undertaken by school senior leaders, middle leaders and also through peer to peer assessment and coaching models.

Examples of documentation that supports this include:

- Proforma: Observation of Learning
  https://drive.google.com/open?id=1yEoR2hp7JneGyYlr_58lsTXJxssUV1yt

Examples of impact:

Student outcomes:

- 2017 KS4 (GCSE) examination data indicates that the overall progress of students is 'above average' (Progress 8 score = 0.22)

Ofsted inspection:

The leadership of teaching and learning is very effective… As a result of good leadership and management and better teaching, students' achievement has improved significantly'.

THIS CASE STUDY OUTLINES THE EFFECTIVENESS OF THE COLLEGE'S PROCESSES FOR MONITORING THE QUALITY OF TEACHING AND LEARNING (AND ITS IMPACT ON LEARNER OUTCOMES) AND THE COMPREHENSIVE PROGRAMME OF PROFESSIONAL LEARNING THAT SUPPORTS THIS

School / Setting:	**Elliott Hudson College**
Website:	https://www.elliotthudsoncollege.ac.uk/
E-mail:	info@elliotthudsoncollege.ac.uk
Principal:	Mr David Holtham
Type of school/setting:	Free School (Post-16 College)
Context	Elliott Hudson College opened in September 2015 and its first cohort of A Level students gained outstanding results in August 2017. There are currently 800 students on roll, mainly from the south of the city and including those from areas of significant deprivation. The College is part of The Gorse Academies Trust, a highly successful Multi Academy Trust comprising 10 academies (covering all phases).
Other background information relating to this strand of professional development	Leaders at EHC believe that all staff should be supported to improve their practice, regardless of experience or previous performance. They have designed a system of professional development which aims to bring together the work carried out in a variety of areas, including appraisal, quality assurance,

individual professional learning and CPD so that all these areas work coherently together to help staff to develop as teachers.

DETAILS OF CASE STUDY

There are a number of well-established processes at Elliott Hudson College which collectively ensure that all staff are performing to the best of their ability, leading to outstanding outcomes for students. These include:

1. The Elliott Hudson College Teacher Matrix

Appendix 1: https://drive.google.com/open?id=1sJiBpaadSKxKVjMjxRdHxjrzCTDlBetc

This is a comprehensive method of evaluating the effectiveness of individual teachers. Teachers are scored against specific criteria in the following areas of focus:

- Outcomes for learners
- Planning and the quality of student files
- Engagement with professional learning
- Wider contribution to the life and culture of the college.

2. Professional Development Map

Appendix 2: https://drive.google.com/open?id=14AQ4Cjx4YrcGMWy9t4Nv8DRXq6jAQWcm

This document presents a very clear picture of the huge array of professional learning opportunities provided by the College for its staff and how they all link together. At its heart is the appraisal system which will signpost specific strands of CPD for staff as required.

3. Professional Learning Journal

Appendix 3: https://drive.google.com/open?id=1wTf8KG0oSf6Q1Xq6QpH9AKxyT1QN3sn1

This is focussed on the cycle of self-development of individual teachers through initial research and subsequent trialling ('Deliberate Practice') of particular teaching and learning strategies.

4. Quality Assurance planning

Appendix 4: https://drive.google.com/open?id=1DjSe2214sb4XgK2XT1rgr7wFwoJgEzJS

This document maps out the annual monitoring cycle across the College covering the key aspects of standardisation, scrutiny (of various aspects) and the focus of lesson visits. The aim is to ensure that all of these things feed in to the professional development of staff.

Examples of impact:

- Student outcomes in 2017 were outstanding. When compared with other similar providers Elliott Hudson College was the 4th highest performing college in the country for the progress of A Level students in 2017.
- Both internal and external independent inspections of the college have rated teaching and learning as outstanding in 2017-2018.
- EHC's own appraisal matrix suggests that 97% of teaching staff are securely good or outstanding in 2017-18.

LEADERSHIP DEVELOPMENT

School / Setting:	**Allerton CE Primary School**
Website:	http://allertonceprimary.com/
E-mail:	helen.stott@allertonceprimary.com
Headteacher:	Helen Stott
Type of school/setting:	Voluntary Controlled Church of England Primary School
Age-range of pupils:	2 – 11
Context	Allerton C of E Primary School is a large primary school situated in North Leeds approximately 6 miles from the city centre. There are over 590 children currently on roll, with approximately 100 children in Nursery. Inspected by OfSTED in 2017, it was judged to be 'Good'. An inspection under the Statutory Inspection of Anglican and Methodist Schools (SIAMS) framework deemed the school as 'Outstanding'. There is a Children's Centre on site, with the area being one of high deprivation. As a church school it works closely with the Anglican Diocese of Leeds, catering for children from a range of faiths, ethnic backgrounds and language groups. Its work is underpinned and driven by Christian values and it takes pride in its nurturing, creative and caring approach.
Other background information relating to	The school is an operational partner of the Noctua Teaching School Alliance, a partnership of schools working together to

this strand of professional development

share and develop good practice and one which works closely with the Local Authority to offer school to school support.

There is an unwavering and strong commitment to developing leaders in the school. A range of continuous professional development (CPD) opportunities, courses and programmes including the National Professional Qualifications offered by the National College are signposted by the head teacher - middle and senior leaders have all engaged with these. Classroom based action research projects are undertaken by several staff and these inform school developments. We are a real learning community.

DETAILS OF CASE STUDY

INVESTMENT IN STAFF

Key to our school improvement has been significant investment in staff, in terms of CPD, opportunities for leadership development, working with other schools and offering school to school support.

Staff lead at all levels. HMI, in 2017, commented on the outstanding leadership at all levels. Staff want to lead and are passionate about their own development. Staff actively seek out quality CPD opportunities.

The school budget is set with CPD at its heart, linking training to school improvement goals and also personal development goals. Approximately £20,000 (€23,000) is allocated for CPD with supply/cover costs being an additional cost.

Subject leaders engage in training from a range of sources including local authority support, family of schools network and National College endorsed programmes including Teaching Leaders/Ambition Leadership. Ambition Leadership has had the biggest impact, due to the high quality support, training and coaching provided. The impact of the Teaching Leaders training was evident in the approaches of the staff who initially attended this. This in turn encouraged

another five staff to request to take part in the programme. Governors can see the impact and therefore support this investment. Information is routinely disseminated through key stage and whole staff meetings.

Support staff also receive professional development in wide ranging areas allowing them to lead in their own right. For example teaching assistants have become in-school specialists in ELSA (Emotional Literacy Support Assistants who deliver training on specific needs such as Autism, Speech and Language and nurture strategies)

COACHING FOR LEADERSHIP

All teaching staff have a development coach. They meet in these coaching pairs twice every half term to discuss issues they are having with leadership. 84% of staff said they had made positive changes in their leadership as a result of their coaching.

ACTION RESEARCH PROJECTS-IPEEL

In order to ensure we remain an outward focussed school we have engaged in action research projects. In some of the programmes we have acted as a control group (for example, in Good Behaviour Game and Catch Up programmes). However, in IPEEL we were the target group. This meant we received training, support and regular reviews on cutting edge approaches to teaching English.

OPERATIONAL PARTNER IN NOCTUA TEACHING SCHOOLS

- We have two Specialist Leaders of Education (SLEs) as part of this partnership – focusing on Arts and Early Years.
- Members of the senior leadership team (SLT) have undertaken Early Years (EY) audits and are involved in school to school support work.
- We have engaged in further training such as the reading hub and EYFS support.

INNOVATION

Allerton CE is innovative in our approach to staff use and our learning spaces:

- We have a community Café, Arts studio and extensive grounds.

- An outstanding teacher leads on Arts and Literacy across school, working with each class for a fortnight. This is to model outstanding practice but also to mentor staff. The fortnight ends with a celebration for parents, which sees close to 100% attending.

Visitors and assessors to school consistently comment on this impressive aspect of our school.

WHY DID THE SCHOOL DECIDE TO UNDERTAKE THIS WORK?

We were given the target to develop leadership at all levels (as an outcome of our Ofsted inspection in 2012). Due to our unwavering focus over the last five years our most recent inspection (2017) stated, "You have built a cohesive leadership team with complementary strengths. You all know your school well and are united in your desire to bring about improvement at a fast pace." There is a culture of ongoing development, investment and a passion for self-development. Staff want to be the best they can so they can provide the best for pupils and as a result are willing to try varied approaches.

All staff have the opportunity for CPD, not just teachers.

Talents are nurtured and leadership potential supported. This is through clear systems, support and Phase leadership.

WHAT ARE THE KEY FEATURES OF THIS PIECE OF WORK

- Clear and unwavering focus on leadership development – strong appointments, CPD, mentoring
- Using the school budget effectively to invest in staff to address goals identified in the school development plan.
- Using a wide-ranging set of sources and approaches to continuously develop staff
- Involving all the staff in school improvement – half termly whole-school School Development Plan (SDP) meetings with everyone feeding in to the school goals
- Being innovative with resources, partnerships and staff expertise

SUPPORTING RESOURCES

1. Noctua Teaching Schools http://www.noctuateachingschool.org.uk/

2. Ambition School Leadership (formerly Teaching Leaders) https://www.ambitionschoolleadership.org.uk/

3. Coaching website

4. School website

HOW IS THIS WHOLE SCHOOL APPROACH MONITORED?

- Leaders report to SLT on a termly basis, with impact of actions reviewed

- Leaders report to the governors on an annual basis informing them of developments, strengths and areas of weakness in their areas or responsibilities. They also attend SLT meetings to share successes.

- Every member of the teaching staff has a leadership target within their performance management which they must prove they have met in order to achieve a successful appraisal.

- Leaders routinely seek regular frank and honest feedback from peers and SLT.

- A subject leader market place event takes place in July each year, to share successes and outcome of initiatives with Governors.

- Paperwork is never done for the sake of it. All actions must have a real purpose and if it doesn't work then we change it!

Examples of documentation that supports this include:

Ofsted report   SIAMS report   Teaching Leaders AIS   IPEEL report

IVE NPQSL assessment visit

Examples of impact:

Staff retention and leadership development

The school's data on pupil outcomes

IMPROVING TEACHING AND LEARNING THROUGH THE USE OF VIDEO RECORDING AND COACHING

School / Setting:	**Rosebank Primary School**
Website:	http://rosebank.greenschoolsonline.co.uk/
E-mail:	asmith@rosebank.leeds.sch.uk
Headteacher:	Alice Smith
Type of school/setting:	Local Authority Maintained Primary School
Age-range of pupils:	3 – 11
Context	Rosebank Primary School is a larger than average primary school with 332 pupils on roll from Reception to Year 6. In addition, there is a nursery for 3 and 4 year olds with 41 regular attendees. The school has a deprivation index of 0.38, much higher than national. The percentages of children from minority ethnic groups (89.8%), whose first language is not English (66)% and who are eligible for free school meals (60%) are all well above national figures. In addition, there is high pupil mobility.
	The school works closely with a range of partners including through a Learning Alliance and the local Family of Schools. There is an inclusive, supportive culture, where the teachers have high expectations and aspirations for themselves and all pupils.

DETAILS OF CASE STUDY

For many years, Rosebank has adopted range of practices to improve teaching and learning. This has included attendance at a range of training events, lesson observations and feedback, pupil work scrutinies, research, collaborative planning and partnership working with other schools.

Recently, Rosebank Primary School has adopted the use of an IRIS camera to improve teaching and learning throughout the school. The IRIS camera uses two iPads linked to microphones to film either whole classes or groups of children learning. It allows the teacher to review the impact of their teaching through watching back the videos. As a result of carefully embedding this practice in school, Rosebank has a strong culture of self-reflection and improvement with staff empowered to make decisions about how to improve their teaching practice. Teachers have found this one of the most useful and supportive ways of improving their individual practice.

In order to ensure that this process was effective and that teachers were truly analytical, it was important to first ensure that there was a good culture and ethos with teachers wanting to improve their practice throughout school. This was established through a major focus with staff on Carol Dweck's 'Growth Mindset' and John Hattie's 'Visible Learning'. This helped staff become more open to being critical of their own teaching and to enjoy being challenged and taking risks. It also helped teachers become more aware of the importance of really looking at the learning taking place in the classroom through focused observations of the children at work and the effectiveness of the interactions that they were having with the children.

To enable the reflection on lessons to be as effective as possible, personalised coaching sessions took place. The leadership team felt that it needed to empower teachers to come up with their own solutions through giving them time to reflect on their teaching with another member of staff. Therefore, we booked bespoke training with the British School of Coaching to ensure that the conversations that were taking place with teachers were truly enabling an in depth analysis of the learning taking place, that would lead to improved teaching and learning. All leaders took part in a two-day course learning how to use coaching techniques. The BSC

(British School of Coaching) made it very clear to us that there was a huge difference between 'mentoring' and 'coaching'. Mentoring was where the leader would give advice and ideas to the teacher whereas coaching was about asking challenging thought provoking questions and supporting self-reflection with teachers working out their own solutions. Coaching is much more empowering than mentoring and can support teachers develop confidence in their abilities. The training was followed up with leaders being observed carrying out a coaching session by colleagues from the BSC. This was to ensure that the coaching style was being correctly adopted and effective in enabling teachers to find the solutions for their own practice.

Using the IRIS camera alongside a coaching session allowed teachers to critically analyse the teaching and learning in their classroom very effectively. Teachers came to coaching sessions having watched a video of their lesson or part of their lesson and having analysed it for strengths and areas to improve. The coaching session would last for an hour and would allow for in depth reflection of the video that the teacher had made. Towards the end of each coaching session, action plans were created by the teacher and dates set to review progress within a reasonable timescale. Teachers left coaching sessions feeling good about their abilities and able to make a difference. Improvements made ranged from considering new resources to support learners, ways of maximising the use of teaching assistants, enabling more collaboration within the lesson or changing lesson structures.

As already mentioned, teachers found this method of staff development supportive and non-threatening. Although teachers have a very busy work schedule, they found fitting in time for IRIS and coaching a worthwhile experience. It helped that the videos were private and the only person who would see them would be the member of staff themselves unless they wished to share them with other practitioners or their coach. As staff grew in confidence through analysing their lessons, they became braver at trying new things, taking more risks with teaching styles and approaches. They also knew that there would then be the opportunity to discuss the impact of this and how to improve further, coming up with their own strategies through working with a coach.

As leaders, we could see the impact of using IRIS and coaching when carrying out teaching and learning reviews and observations each term. Strategies and ideas that teachers had discussed in coaching, were taking place in class and benefitting all learners.

Over time, the IRIS camera has had more uses in school. At times, where teachers have struggled with knowing how to improve teaching or seeing where they were going wrong, it has been useful for them to use the IRIS to record a lesson and then watch it back together with a senior leader and discuss what was working and where improvements were needed. Teachers have welcomed this joint reflection and opportunity to discuss lessons retrospectively from a different person's perspective. At times like these, the IRIS has been linked with a more 'mentoring' approach by the senior leaders.

This year as well as using the IRIS as written above, we have adopted a whole school focus on looking at the most effective ways to support the least able children in class. This has involved filming our children with SEN or children who have limited English and we have then worked together as a staff to identify barriers to learning and how these can be overcome. A collective focus has enabled us to gather a range of resources and strategies within school to support these children in each class.

In addition to this, some staff use the IRIS camera to get children to reflect on their own learning. For example, some staff have recorded children reading to each other. The videos have then been shared with the children to get them to critically evaluate their own reading fluency. Staff have also used the IRIS to record children's presentations and have supported the children to evaluate their own performances.

Recently, outstanding teachers have also started recording their lessons and sharing them with other colleagues to support staff development even further. As IRIS uses a 'web platform', sharing videos and uploading videos is incredibly easy and takes no time at all. Teachers can write comments next to videos on the platform and group videos with ease.

Following the success of using the IRIS camera with teachers, teaching assistants have also adopted this approach, which ensures that all teaching staff are constantly reviewing and improving their impact on learning. Teachers and teaching assistants review the footage both

individually and in groups, which has created a strong learning ethos, with an open approach to constructive feedback and improvement.

The impact:

Teaching and learning has improved across the school, which has led to a rising trend in data:

- Key Stage 2 progress is in line with national progress
- Good progress evidenced in pupil books through external moderation and Ofsted.
- Good systems in place to ensure accurate data collection and moderation

"You have provided diligent leadership since your appointment as headteacher in September 2016. Together with your leaders, you have been relentless in creating a positive learning culture. You have enhanced wider leadership by giving staff full ownership of the subjects that they lead and the outcomes pupils achieve." (Ofsted, 2017)

WHOLE SCHOOL APPROACH TO ENSURING HIGH QUALITY TEACHING AND LEARNING IN MATHEMATICS TO IMPROVE RATES OF PUPIL PROGRESS

School / Setting:	**Westgate Primary School**
Website:	http://www.westgateprimary.co.uk/website
E-mail:	admin@westgateprimary.co.uk
Headteacher:	Helen Carpenter
Type of school/setting:	Local Authority Maintained Primary School
Age-range of pupils:	3 – 11
Context	Westgate Primary School is situated in Otley, a traditional West Yorkshire market town only about 8 miles from Leeds city centre. It is a one-form entry primary school which means that there is one class for every year group, from Reception to Year 6. There is also a Nursery which offers 30+ hours of provision for children aged 3-4. The school has low levels of pupil mobility and its population is predominately from a White British background. 3% of the school population receives additional funding for special educational needs and 14% are from disadvantaged backgrounds.
Other background information relating to	The head teacher has been in post since 2011 and has previously worked as a Local Authority mathematics

this strand of professional development

consultant. The school is part of the Yorkshire Ridings Maths Hub.

Maths Hubs have been established since July 2014 to help schools and colleges lead improvement in mathematics education in England. They seek to harness all the maths leadership and expertise within an area, to develop and spread excellent practice, for the benefit of all pupils and students. They are part of the wider development of school-led system leadership in England. The Department for Education (DfE) is the principal sponsor of the Maths Hubs Programme. Each Maths Hub receives funds to cover both structural costs and project costs. Since the Maths Hubs have become established, other organisations are now also sponsoring particular Maths Hub projects. For example, the Education Endowment Foundation is currently supporting two trials within Maths Hubs.

DETAILS OF CASE STUDY

In September 2014 the head teacher represented the Maths Hub in the first DfE exchange as part of the England-China Maths Education Innovation Research Project, to learn more about teaching for mastery in mathematics. The exchange involved working alongside Shanghai Primary Mathematics teachers, first in Shanghai and then at Westgate on a return visit in February 2015, to observe, discuss and evaluate their mathematics pedagogy and curriculum and to learn how key elements can be applied to mathematics teaching in the UK in order to raise standards.

There is a strong sense of team at Westgate: teachers are encouraged to collaborate and to learn from each other. The head teacher encourages risk-taking and is keen that staff find their own solutions to issues, whilst at the same time providing clear support for the development

of pedagogy and provision. A culture of high challenge and high support permeates the school and from governors to pupils, relationships are strong.

Key features of the Shanghai primary education system observed by the head teacher were the in-built structures for teacher collaboration, peer observation and evaluation (Teacher Research Group or TRG activity) and a continual focus on improving subject knowledge and pedagogy. These features were deliberately used to support staff in making radical changes to their mathematics teaching.

Initial staff reactions to being part of the exchange were apprehensive: mathematics results at the school were not low and teachers were by and large experienced, confident primary practitioners. The head teacher therefore began by working collaboratively with the mathematics subject leader, Joanne Hattersley, in a small TRG, collaboratively planning, teaching, observing and evaluating lessons together which incorporated elements of Shanghai mathematics pedagogy. Then as part of the second phase of the exchange, all Westgate teachers observed lessons taught by the visiting Shanghai teachers and participated in in-depth post-lesson discussion of what they had observed. Over the next term and a half, teachers were then encouraged to try out elements of Shanghai's teaching for mastery pedagogy in their own practice, without the perceived pressure of external observation. The subject leader worked with volunteers from Key Stage 1 and 2 in a TRG to develop pedagogy further.

This way of working developed an enthusiasm in the staff and created a sense of urgency and motivation to further develop teaching for mastery in mathematics. At the beginning of the following academic year, therefore, the school began whole-scale implementation of a teaching for mastery curriculum. Key elements of the approach were explored and agreed with teachers through staff training and tied in to the teacher appraisal structure. A rolling programme of TRG work led by the subject leader ensured that all teachers benefited from this more in-depth, focused and personalised professional development over the course of 18 months.

Teachers were supported in this classroom development by a carefully planned programme of professional development and regular opportunities to evaluate and discuss teachers' progress together. Regular staff meeting time was set aside to support the deepening of teachers' mathematical subject knowledge. Through evaluation, it became clear that teachers could see the benefit of teaching in this way, but that lesson preparation was having a detrimental impact on work-life balance due to the demands of lesson structuring and resourcing. Budget was therefore set aside to invest in 'Maths No Problem!' textbooks: a Singaporean, English language mastery textbook, approved by the DfE, and for whole staff (teachers and teaching assistants) training from the publisher.

This work also influenced the role of teaching assistants in mathematics lessons and dovetailed with the findings of the [Education Endowment Foundation's Making the Best Use of Teaching Assistants project](). Key to this was including teaching assistants (TAs) in teacher professional development wherever possible, providing additional training for TAs and evaluating together the most effective ways of working within a lesson.

The impact of this approach to professional development has been far-reaching. Teachers have grown in self-confidence and become more open to taking risks, reflecting on their pedagogy and above all, sharing practice with colleagues within and beyond the school through lesson observation and discussion. Lesson observations are increasingly seen not as an occasion to showcase perfection but as a mutually beneficial learning opportunity. The subject leader, through her work with colleagues and with the Maths Hub, has developed her expertise so that she is very skilled in supporting teacher development through collaborative approaches.

[The impact on learning]() is especially obvious in the classes who have been taught in this way since the beginning of their time in school. Teacher expectations have risen; variation in attainment is less; children's ability to explain and reason using accurate mathematical vocabulary has increased dramatically; children's confidence in and enjoyment of mathematics has increased across the board. Across school, mathematics is increasingly seen as something everyone can access and succeed in with the right amount of effort and care.

The school community knows there is much more to learn about mathematics teaching and is both comfortable with that and committed to continuing their learning, together.

YOU ARE FREE TO USE THE HANDBOOK UNDER

THE FOLLOWING TERMS:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

NonCommercial — You may not use the material for commercial purposes.

NoDerivatives — If you remix, transform, or build upon the material, you may not distribute the modified material.

No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.