

*This profile is part of the EU Study on Supporting School Innovation Across Europe. It presents one of the 24 schools in the study, giving an overview of the changes and experiences in that school. Find the rest of the materials from the study at:*

[www.schooleducationgateway.eu/innovation](http://www.schooleducationgateway.eu/innovation)

## Nurturing students' independent learning and well-being through phenomenon-based education, distance learning and kinesthetic learning at the Primary School Zadarski Otoci



### About our school

- ◆ **Location:** Zadar, Zadar County
- ◆ **Established:** 1914
- ◆ **Status:** Public school that provides primary education and lower secondary education (grades 1 – 8)
- ◆ **Number of pupils:** 776 (in 2016)
- ◆ **Website:** <http://os-zadarski-otoci-zd.skole.hr/>
- ◆ **Contact person:** Davor Barić



### Why did we innovate?

The school was established in 2009 with the purpose of taking over the constantly rising number of students in the neighbouring primary school. Due to its special location, the school is also central for six smaller branch-schools situated on six islands in the vicinity of the city of Zadar: Veli Iž, Molat, Premuda, Silba, Ist and Olib. For students from the neighbouring islands, a part of the classes is organised remotely in online mode through teleconferencing directly from the central school. This special role played by the school implies the use of non-traditional teaching and learning methods, as well as the search for new managerial decisions.

The Primary School Zadarski Otoci has a significant number of students with developmental disabilities (as well as learning difficulties and/or mental disabilities). A design of the school is thus specifically adjusted for people with physical disabilities. This characteristic also makes the school search for

innovative pedagogical and organisational solutions that would serve the needs of all students enrolled in this school.

As the school leader summarises, the key aim of introducing innovations was to integrate students into the local community, to make them pro-active by bringing local community's activities closer to students, and to build synergies between the school curriculum, teaching plan and programme and local community's actions.



## What were our innovations?

In the context of its innovative organisational approaches, the school has developed internal documents which regulate the organisation and the work ethics of the school. As stated by the interviewed school staff, the regulation of work ethics is a novelty in the Croatian school education system that makes the school more transparent in front of parents and a wider community. The school practises diverse pedagogical and organisational innovations, for example: interdisciplinary phenomenon-based education in STEM; teaching and learning via distance; kinaesthetic teaching and learning.

The school applies interdisciplinary teaching and learning approaches in regular lessons, with a special focus on science, technology, engineering, and mathematics (STEM). Since 2009, the school has participated in the international GLOBE programme, which organises regular and ongoing students' measurements and observations of natural phenomena in the school environment and in the nature. A team of scientists from the Faculty of Natural Sciences (Universities of Rijeka and Zagreb) are engaged in cooperation within the GLOBE to share their experience with students, to transfer the knowledge and to provide support to students. The school has also installed a meteorological station which enables the online presentation of meteorological data in real time on the portal Pljusak. The data is publicly available and can also be used by other schools for teaching and research activities.

As the school is in charge of six smaller schools located in the islands, it has incorporated distance teaching via teleconferencing since 2013. Distance teaching lessons are mostly organised for such subjects as chemistry, biology, and physics, as there are no teachers on the islands who would teach these subjects. In addition, schools on the islands are not equipped with laboratories; thus, students have a chance to see experiments only remotely in online mode. Videoconferencing is also used for the communication between teachers of the Primary School Zadarski Otoci and the schools on islands. It enables teachers to attend school meetings and discussions. The distance teaching was supported by the project e-Otoci (e-Islands) coordinated by Carnet (Croatian Academic and Research Network). The school also uses e-Diaries since the 2014/2015 school year.

The school is also practising pedagogical innovations that support movement in teaching and learning practice, as there is a scientifically proven relation between students' **physical activity, their learning process and achievements**. The architectural construction of the school provided each of the classrooms on the ground floor with doors through which students can exit directly to the open space area. Teachers use this area for conducting short physical activities and exercises during their lessons, with a strong support received from the school leader and school council. The idea is to keep the students active all the time by being in the movement. Teachers create different assignments at different spots in the classroom and as students move around from one spot to another, they discuss the topics, learn vocabulary, create communication scenarios, etc. The school also offers different extra-curricular sport activities to its students (football, basketball, fitness, table tennis, volleyball, etc.). Students with learning and other mental disabilities also benefit from taekwondo lessons.



## What have we achieved?

### Pupils

According to the teachers in the focus group, one of the main achievements was fostered peer learning in two ways. First, the most advanced students supported those with lower achievements and raised their self-confidence. Second, students from higher grades demonstrated experiments (in chemistry, biology) to those from lower grades. This kind of peer-learning activity was well accepted by students because teaching was made more fun and students felt more open to discuss learning topics with their peers.

Students with learning and other mental disabilities have benefitted from taekwondo lessons. According to the school leader, the students have prospered not only in their motor skills, but have also improved their learning abilities and have achieved better results in the school.

The school staff also observed positive effects due to engagement of organisations and institutions from the local community. This involvement made students more interested in teaching topics, developed their sense of cooperation and community belonging, and enabled them to connect the teaching content with the real life.

### Teachers

By implementing innovative approaches, teachers had the opportunity to develop themselves, both in the professional and individual terms (as reported by the teachers themselves).

### School as a whole

Since the school has students with learning disabilities, among which Attention deficit hyperactivity disorder (ADHD) and dyslexia are the most common, the school contributed to the development of audio-visual teaching aids (e.g. audio books) for those students. They have prospered not only in their motor skills, but have also improved their learning abilities and have achieved better results in the school.

Since the school acts as the regional leader for the GLOBE project, it has already attracted and prepared four other primary schools from the region to participate in the programme. Those schools were triggered by lectures and workshops given by STEM teachers of the school during in-service teacher trainings on Zadar county level organised by the Teacher Training Agency.

The school is also recognised as a “school practice room” (*školska vježbaonica*) by the Ministry of Science and Education, i.e. exercising teaching practice for higher education students of different subjects. In the “practice room” students can observe the teaching practice and can learn from observation and from discussing the practice with the teacher mentor from the methodological, pedagogical and psychological aspects. In that sense, the practised innovative pedagogies and modern teaching technologies implemented in the school can be transferred to future teachers.



## The process of change: what helped us succeed?

### School level

Teachers' enthusiasm and willingness to invest time and their own financial resources for the benefits of children was crucial. The practical implementation of innovative approaches was successfully integrated due to teachers' strong motivation, further investigations done and self-learning.

Understanding, support and openness of the school leader to new teaching approaches, organisational solutions, and new projects was important for the innovative practices to be implemented.

### Community level

Excellent cooperation with parents was another enabling factor. For example, parents were involved in projects which fostered students' reading skills and reading as a culture, as a good habit. In a project "Bag full of books" parents and students were asked to read and discuss the content of the books read at home. Overall, the projects promoted values that were embedded in the everyday school practice, and they received parents' support.

Organisations and institutions from the local community were significant supporters as well, because they have become partners when certain themes have been taught. The University in Zadar and its Faculties for Pedagogy and Philosophy were important contributors as their students participated in the "school practice room" activities. Other stakeholders include local libraries, numerous different NGOs, museums, radio, theatre, etc. These stakeholders were motivated to support the school's activities and keen to experiment with new approaches such as organising activities in public spaces where other people get acquainted with school's achievements.

### National level

\*On the system level, the supporting factor was the fact that a new school building was built in times when infrastructural investments were on a very low level. Thus, a new building per se was a motivating factor for teachers to perform better.

\*Another enabling factor was in-service teacher trainings organised by the Teacher Training Agency.



## The process of change: what limited us?

### School level

During the construction of the new school building there was a lack of consultations with the school staff. This resulted in a building which has obstacles related to the level of usefulness of the school space. Moreover, the school has a growing number of students and a current number of classrooms is insufficient. This imposes a significant effort in planning a teaching schedule and allocating regular classes in two shifts combined with extra-curricular activities.

The school staff also struggles with extensive administrative work and other daily issues related to students, which exceed their workload capacity. Consequently, they cannot devote sufficient time to the development and implementation of innovative approaches.

Due to the fact that the school has a rather high number of students with learning and/or mental disabilities, there is a high demand for teaching materials adjusted to the needs of those students. Since there is a significant lack of such teaching aids, the teachers are hindered in offering students additional learning content because they have to spend time on preparing special teaching materials for both the regular and prescribed content.

## National level

The school is hindered by the fact that a significant part of its teachers has to teach in more than one school because they cannot gather a number of teaching hours required by the law by teaching only in one school. Therefore, those teachers cannot fully devote their time just to one school and therefore cannot participate in all school's projects and activities. Moreover, the teaching schedule has to be adapted to them so that they can deliver their teaching hours in other schools too. Since the school operates in two shifts, teachers from both shifts cannot meet often and rarely cooperate.

Even though the school has creative and innovative teachers, the education system does not acknowledge that via financial rewards or other system-level means to encourage and motivate them. Since the autonomy of the school was reduced, including in terms of financial resources, teachers invest their own money to buy the necessary items for their innovative teachings, which means that the available resources are very limited.

Teachers stressed the fact that the teaching plan and programme are too condensed and that there is insufficient time left for the implementation of practical learning. The teaching plan is focused on factual rather than on practical knowledge, which would be actually more motivating for students. In addition to that, the plan does not allow to continue teaching the topics in higher grades that were already addressed in lower grades.



## Sustainability of change

Some of the projects implemented in the school are one-off actions (e.g. projects in cooperation with parents) because of the lack of financial and human resources. Other innovations are fostered from one to another school year, e.g. the GLOBE initiative; tablets for students with learning and mental disabilities or teaching German language through movement. The sustainability is also visible in the goals set by the school. The school visit demonstrated that the projects, extra-curricular activities, teaching approaches and innovations contribute to the achievement of those goals.

According to teachers and professional staff interviewed, the sustainability depends on the results achieved, and mostly by observing and receiving feedback information from students on whether they were motivated by the action, whether there were any benefits for them and whether it interested them at all.

The monitoring and evaluation is mostly done by observing and receiving feedback information from students. The feedback is mainly provided in verbal form by means of free conversation and is not systematically collected. School lacks a common approach to evaluate and monitor activities at the school level.

The learning loops are enabled among teachers and professional staff and are supported by the school leader in regular weekly teacher meetings. At the same time the meetings are used to develop new projects and to discuss the possibilities of implementing something innovative in the school.



## What did we learn in the process? Key messages

Educating and preparing parents for changes in school teaching and organisational practices is as important as the preparation and education of teachers prior to implementation of innovations in schools. Unless parents are informed and prepared on time, the resistance and protective attitudes towards their children can hinder or support the implementation of changes.

Due to significant differences among schools in terms of available equipment and schools' premises, it is necessary to execute a comprehensive analysis to enable similar or equal opportunities to schools to develop and implement innovations.

The lack of autonomy and flexibility of schools in taking operation decisions can hinder experimentation and innovation.

### Further reading

- **A full report** 'Supporting School Innovation across Europe' explores the conditions in the school education system that can enable or constrain positive change in schools.
- **12 case studies** explore the national approaches and individual school innovations. They include the perspectives of key national education experts and stakeholders who were interviewed and took part in workshops.
- **24 individual profiles** give a quick view of the changes and experiences in each school.

Available here:

[www.schooleducationgateway.eu/innovation](http://www.schooleducationgateway.eu/innovation)

- The school profiles also feature as part of the [European Toolkit for Schools](#), alongside a range of materials and many other inspiring examples of practice from European countries.

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