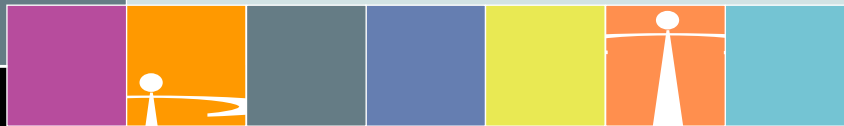




CREATIVITY  
AND INNOVATION  
IN LIFELONG  
LEARNING



Creativity  
and Innovation  
European Year 2009



**CREATIVITY  
AND  
INNOVATION  
IN LIFELONG  
LEARNING**



## **imprint**

chief editor: ANITA KARDOS

layout: KATA VILIMI

TEMPUS PUBLIC FOUNDATION © 2009

responsible for publication: PÉTER TORDAI director

print: KOMÁROMI NYOMDA ÉS KIADÓ KFT.

This publication was funded by the European Commission and the Hungarian Ministry of Education and Culture.

Please note that views expressed within the booklet are not necessarily those of the European Commission or the Hungarian Ministry of Education and Culture

Tempus Public Foundation

H-1093 Budapest, Lónyay utca 31.

infoline: (+36 1) 237 1320

e-mail: [info@tpf.hu](mailto:info@tpf.hu)

web: [www.tka.hu](http://www.tka.hu)

# CONTENTS

## 5 FOREWORD

## 7 CREATIVITY AND INNOVATION IN EDUCATION

8 The Role of Education in Developing Creativity and Innovative Skills

## 11 COMENIUS | pre-school and school education

13 Golden Key: Music Inspired by Fairy Tale, Drawing Inspired by Music | *Teleki-Wattay Music and Art School, Pomáz*

15 Creativity and Natural Sciences in Comenius Projects | *Jurisich Miklós Secondary Grammar School, Kőszeg*

18 The Future in our Hands – European Economy and Environment | *Xantus Janos Secondary and Vocational School of Tourism, Budapest*

21 Language Learning through Music | *Irinyi János Primary and Art School, Balatonfűzfő*

23 Rainbow – Creativity and Innovation in the Rainbow Project | *Arany János Primary and Secondary Grammar School, Százhalombatta*

25 Sharing the World – Condividere il mondo | *Orczy István Primary School, Szeged*

27 Developing Competences through Drama | *Káva Cultural Group, Budapest*

## 31 ERASMUS | higher education

32 'But Any Child Would Improvize – if Allowed to Do so' | *The experiences of an Erasmus Grant period*

34 The 'European Digital Print Media' Intensive Programme | *Budapest Technical College*

37 Intercultural Evenings and the Masterstrokes of EILC Organization | *Pázmány Péter Catholic University, Piliscsaba*

## 39 LEONARDO DA VINCI | vocational education and training

40 Opportunities in Non-formal Learning and Learning by Doing – 'Study so you can help' | *'Egyesek' Youth Association*

42 Preparing Young People for Starting a Business – Youngbusiness.net 3 Programme at the Polytechnic Institute of Economics | *Budapest Youth Enterprise Centre*

44 For the Introduction of 4D Educational Content and Methodology in Hungary | *Kossuth Zsuzsanna Vocational Training School, Dabas*

47 'A Healthy Heart to All Young People' – The impact of a Leonard study visit on heart transplants in Hungary | *Gottsegen György National Institute of Cardiology, Budapest*

## 49 GRUNDTVIG | adult education

50 ACT WELL: Art and Creativity – Tear down the barriers with talent: disabled people in the language of arts | *Hilfer Bt.*



## FOREWORD

The EU declared this year the European Year of Creativity and Innovation. A major role of the EU's thematic years is to formulate a clear message about the priorities of EU policies. If we look at the list of former thematic years, it is clear that they were rather different both in terms of their impact and their 'afterlives'; also, international cooperative projects responded to them to different extents. Many of us may not remember that 1990 was the year of tourism or 2004 was the European year of education through sport, whereas the year 1996 started a real change of paradigm, and by now, lifelong learning has become a cornerstone of the EU's education and training policy.

Sometimes it is not easy to bring the EU's policy priorities close to people or to the everyday life of educational and training institutions. However, it is different with creativity and innovation. Throughout the year, we could see a number of creative and innovative projects at the events and in the publications related to the thematic year, initiated at a national as well as an EU level within the framework of Lifelong Learning programme and their predecessor programmes, Leonardo and Socrates. Since these projects had often started years before announcing a certain thematic year, the question arises as to what we can expect from this year as regards the Lifelong Learning programme.

The most important documents of the programme in 2009 (such as the call for application) – apart from a general reference to the year – only specified special priorities related to creativity and innovation in the case of some characteristically peripheral application types. It is hardly by chance or oversight. International cooperation in education and training – perhaps exactly due to the basic situation of the implementation, since we are talking about the cooperation of institutions from various countries, with different approaches and background experience – often led to creativity or innovation related outcomes. It also means that the most important expectation about the year is not the increasing number of projects.

What presents a much greater challenge is to find the right creative and innovative tools, adjusted to the nature of the relevant projects, to support the creative and innovative projects. The emphasis falls more on the presentation of the existing achievements, and the further consideration of use or application. Can the dissemination solutions applied in the case of other subjects be efficient enough – or would they appear rather trivial?

The projects collected in this volume present a colourful bunch of illustrations of what the international cooperative projects have resulted so far in this field – from public education through VET to higher education, in cultural and art education, in technical and technological solutions, in educating young people with special needs, or even in teacher training. The publication – which is an essential part of the tools used by Tempus Public Foundation as the Hungarian coordinator of the thematic year – is supposed to ensure greater publicity to really creative ideas. We hope that the good examples will be brought to new life by other institutions and new partnerships, and not by copying, but recreating them.

As ERNŐ RUBIK, one of the European Ambassadors of the year writes on the website related to the thematic year, as a kind of key message: *'You must be courageous enough to leave the trodden path, and you shouldn't give up seeking your own ways.'*

TORDAI PÉTER  
Director





CREATIVITY AND  
INNOVATION  
IN EDUCATION

**Round-table on the role of  
education in developing  
creativity and innovative skills**



# THE ROLE OF EDUCATION IN DEVELOPING CREATIVITY AND INNOVATIVE SKILLS

Edited extract of the round-table held at the conference of 28 April, 2009.

## Participants:

ERNŐ RUBIK inventor, ambassador of the European Year of Creativity and Innovation;

LÁSZLÓ MÉRŐ mathematician, writer of books and articles, psychologist;

JÓZSEF MURVAI educator, Leader of Edison Club (Primary School, Csorvás);

VIRÁG SUHAJDA, Rogers Person-Centred Secondary School;

PÉTER KRISTÓF, Junior Achievement

**Moderator:** VERONIKA PISTYUR

## What does creativity mean?

L. MÉRŐ: Defining creativity is a tricky thing. For example, we think that intelligence is hard to define, still, it's quite easy to decide how intelligent someone is. On the other hand, everybody believes they know what creativity is, yet there isn't such a general consent about it as in the case of intelligence, and opinions widely differ.

E. RUBIK: There are two ways. One is to say this is the solution to the problem, and that's it. The other is when we don't take a ready-made solution, but think about the question and the answer to it. Now we can either re-invent the wheel, or come to an unusual solution. It doesn't necessarily mean a new patent; the new answer could as well be a more efficient way of washing up the staircase.

P. KRISTÓF: One way is the one that we know, and the other – innumerable.

E. RUBIK: There are many known solutions, too – sometimes we can't even choose one.

V. SUHAJDA: Creativity and knowledge can't be separated. I think creativity is an innovative application of one's existing knowledge and background information.

L. MÉRŐ: By nature, creativity is not only new but also makes sense (which we tend to forget). We can talk about a new, creative approach if it is reasonable and could as well be a paradigm.

## Does school education develop, or on the contrary, suppress creativity? How could the development of creativity be integrated into the relatively rigid framework of school education?

V. SUHAJDA: It also depends on the personality of the teacher how much he or she lets children be creative. I think creativity is a given thing with little children. Therefore, development is not the right word; we should rather talk about retaining or encouraging creativity.

J. MURVAI: Children need tasks to which they can give creative answers. Let's look around, identify the problem, and find an answer to it. We shouldn't necessarily think about complicated things. For example, the children in the Edison Club made hangers for their bags so they won't have put them on the floor, making their clothes dirty later, or a 'pencil extender' to make a short pencil end more comfortable to use.

E. RUBIK: Creative personalities can be developed, not creativity in itself. We won't have a creativity class or subject, for example, and we don't need them, either. The creative features of a personality can be developed. I think creativity is a fundamental human skill; capability for new answers, or a different attitude.



In fact, everything in the world is in constant motion and change – creativity is a reaction to that, and the way we react. We agree that we should not develop, but retain and encourage creativity, and let it free. Value as a category is very important. School differentiates between valuable and less valuable. Appreciating a creative answer over an uncreative one, school can be influential.

L. MÉRŐ: I'm not sure that the much scolded conventional, 'Prussian type' school system harms creativity; moreover, it is something that can be outwitted. Children tend to challenge boundaries.

V. SUHAJDA: There is no survey comparing the performance of alternative and traditional schools. I have worked with secondary school students from traditional schools who were very creative, whereas other students from alternative schools could never experience creativity of the 'rebellion' kind, and there was no self-organization among children.

P. KRISTÓF: Very often, having to be creative is exactly what blocks creativity. It's like the compulsory 'let's have fun' on New Year's Eve, which can be very depressing.

L. MÉRŐ: But the majority does have fun.

### **Does this 'compulsory creativity' really exist?**

J. MURVAI: Clearly, the 'you'll fail if you're not creative' approach does not work. The point is that children should be free to choose their tasks.

E. RUBIK: Life itself creates necessity with the problems which need solutions. Take global climate change, for example: we are forced to be creative, because it just can't be addressed with uncreative solutions.

L. MÉRŐ: Also, schools shouldn't force creativity too much. Schools provide education, not intelligence. We leave school with just as much intelligence as we had before school, only differently 'cultivated', structured. Children should be sent to schools matching their personalities, since they may need different educational methods. Alternative schools can be so spectacularly successful because there are few of them; there are a lot more traditional schools. Also, new methods are first tried by teachers who do it with pleasure, who are receptive to new ways. Anything they do, they do it well, and children love them, because they love children. As soon as we make it compulsory for every teacher to be creative and use new methods, it won't work.

V. SUHAJDA: As I see it, it's not the school's framework, but the teachers themselves that it depends on. For example, within Comenius projects, traditional schools also use several creative solutions and new methodological approaches. I also agree that schools should be chosen according to children's personalities: one child needs the atmosphere of an alternative school, whereas the other may be motivated by competition. The process of learning differs from child to child, so they should be provided with tasks accordingly. It can be done in traditional schools, too, for example by alternating different types of exercises.

### **So, children's creativity can be best triggered by creative teachers. How can teachers be encouraged to be creative?**

L. MÉRŐ: Again, I'd like to emphasize the importance of balance. A school with only creative teachers will fall apart. We need all styles of education.

P. KRISTÓF: How can teachers be motivated? It would also take social determination. But most of all: we as teachers shouldn't be bored during our own classes – that's the most important first step.

J. MURVAI: Most schools can only finance the compulsory classes. I'd like to bring public life actors together with teachers who engage with children in extracurricular activities so they can jointly elaborate a grant system which could be applied for through annual project plans. It would be a great loss if there weren't any resources and professionals to deal with the children.

**Why is it that few students are attracted to natural and technical sciences, whereas certain popular scientific books and exhibitions, for example, are very successful?**

E. RUBIK: Interest in sciences and interest in a scientific career are not the same. In the case of the latter, the social value system has a strong impact (especially on parents' influence). It's hard to be successful and earn a lot of money in a scientific career. For a long time nothing happens, until you finally get your Nobel Prize (well, that one brings some financial recognition).

L. MÉRŐ: It's a myth, an urban legend. It's not typical that after a hundred wrong tracks you find the right one. What's typical is that after a hundred wrong tracks another hundred dead ends follow. It's a waste of time to rely on this if you have no chance to win a Nobel Prize.

P. KRISTÓF: But you can't know in advance who the probable winner is. One thing is sure: you can't win the run if you don't even enter the race.

V. SUHAJDA: With regard to sciences, what I see as a problem is that there is just too much to learn, which requires a fast pace and leaves less space for creativity. That is what makes a lot of children lose their interest. Another problem is that a scientific career means hard work, whereas young people today are more attracted to easy success and earning a lot of money with little work.

E. RUBIK: I can't imagine real achievement without hard work, in any field. The same applies to science, too - you can't just do it for the Nobel Prize. To remain with the analogy of running: three or four compete for the prize, all the others only go for a run.

**How can you make young people enter the race? How could entrepreneurial spirit be developed at school?**

MÉRŐ L.: I think it has nothing to do with creativity. The one that realizes the enterprise is usually not the one who had the creative idea. Enterprise and innovation are completely different fields with different backgrounds.

MURVAI J.: We also intend to teach entrepreneurial skills in technology classes. Children invent something that could be turned into a product and be the basis of a school enterprise.

KRISTÓF P.: Junior Achievement has been present in Hungary for 15 years. Within the framework of the programme, student enterprises are established at the school (real enterprises, with a VAT number and windup at the end of the school year, etc.). An important factor of their business success is whether or not there is a creative idea to rely on.

SUHAJDA V.: Definitely, entrepreneurial spirit and creative personality have a lot in common: both take self-confidence and self-respect, and a strong faith that what you create is valuable. How can we solve the discrepancy between 'dreamers' and 'implementers'? Today we are surrounded by a 'culture' where creative ideas can easily be stolen. Through the cooperation of dreamers and implementers, and a win-win communication, trust could be restored.

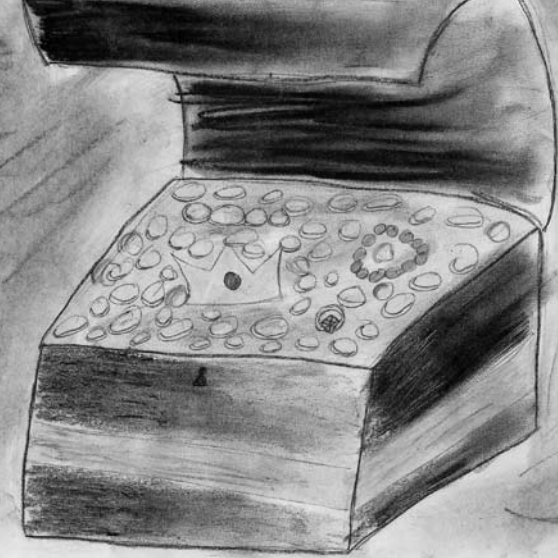


COMENIUS

| pre-school and school education |







## GOLDEN KEY: MUSIC INSPIRED BY FAIRY TALE, DRAWING INSPIRED BY MUSIC TOGETHER IN MUSIC AND ART

Teleki-Wattay Music and Art School,  
Pomáz

The teachers collaborating in the first year of the international Comenius school project called *Together In Music and Art* have undertaken to make classical

music more comprehensible and attractive for their students. We agreed that small children's music and art education must begin as early as possible, on which, we feel, teachers and parents are not laying too much emphasis these days. This may be due to the social, economic and technical changes which took place at the beginning of the 21st century, as well as to the lack of suitable, modern pedagogical methods of inspiration. We also considered the issue of arts essential because there has been an unfortunate decrease in the number of art classes at primary schools, and thus teachers may neglect the development of children's artistic creativity. We looked for a topic which is close to children's soul; so did we choose the piece composed for Grimm's tale *The Golden Key* by Hungarian composer Lajos Papp.

This year we have had two priority objectives:

1. To obtain a better and more profound knowledge of our own national composers, and to transfer this knowledge to the students of the partner schools.
2. Relying on the creativity and imagination of our students, to provide guidance to the independent interpretation of classical music, demonstrating the intellectual freedom of music through Grimm and Papp's work *The Golden Key*.

Everyone has creative skills. Arts provide a unique environment and practice where students can actively participate in creative experiences, processes and development. Researches show that if we introduce students into the artistic processes while we integrate the elements of their own culture into education, we can develop their creativity and initiative, productive imagination, emotional intelligence and their inner moral compass, as well as the ability of critical thinking and independence.

The school's beginner piano students learnt the 16 pieces of the piano cycle *The Golden Key*, composed for Grimm's tale by Hungarian composer Lajos Papp. The curiosity of this music cycle is that in the first part of the musical tale the composer gives titles to the pieces, whereas in the second part the teacher and the student can come up with titles together, relying on the student's creativity.

The story is about a little boy who finds a chest dug in the cold winter forest, and opens it with the golden key. What is in the chest? The task was to find this out with the help of the music, considering its mood.

The piano pieces which the children learnt were recorded on CD, and then we sent this audio material to our partner schools, where the students made drawings of the feelings or objects inspired by what they heard. Our students and teachers edited the completed drawings and audio recordings and turned

them into an interesting PowerPoint presentation, presented to the audience of Pomáz in a live concert on the European Comenius Week.

The methodology used in the project relies on children's creativity to introduce them gradually into the world of classical music. We considered it important that the students should experience the relations between arts, and under our guidance they were given an opportunity to understand and practice self-expression. They had a chance to discover that they can, moreover, they should, imagine their own feelings, and that it was not a problem at all that the same music inspired different thoughts and feelings in them.

This approach to and interpretation of music was novel to the children participating in the project, as well as to their teachers. They took part in the project with great interest and creativity, and they did not consider it work, but a source of common experience.

Our goal to set our students on a road which brings them closer to classical music and helps them understand its message, was successfully met.

The 'tangible result' of the project is the CD containing our common work; the musical material can be used by any teacher or parent who is interested in this field, considers the music and art education of their children important and want to help them become adults who understand and love music.

In the second year of the project, we would like to develop the participating children's openness and sensitivity to musical improvisation: we will create music inspired by the paintings of our own national artists – in the case of the Hungarian school, it will be Pál Szinyei Merse's *Picnic in May* –, using and developing further the knowledge which our student obtained while working on *The Golden Key*.

The *Together In Music And Art* project could as well serve to find common, usable and original solutions to common problems. When there is a common goal, even different school types can work together. It can also be exemplary in what ways and how a characteristically elementary art school can contribute to the music education of the lower grade students of primary schools, even if they are of various nations. Art education can not be handled separately. It was important to the teachers participating in the project that arts and their understanding should not only be available for 'privileged' children.

Our motto is the opening line of the pedagogical programme of Teleki-Wattay Music and Art School: *You can't create talent. You must create the soil, the opportunity, where talents can grow better.* (NEUHAUS)

JUDIT POLÁNYINÉ TAKÁCS

*Project Leader*





## CREATIVITY AND NATURAL SCIENCES IN COMENIUS PROJECTS

### Jurisich Miklós Secondary Grammar School, Kőszeg

Jurisich Miklós Secondary Grammar School of Kőszeg first joined the Comenius programme 10 years ago. Since then, our participation has been continuous and – according to the feedback we receive – successful. Our students have benefited a lot from the projects, experienced a lot, and it is their personality that has developed most.

Inspired by the novelty, the unusual environment and the task, the students participating in the projects solved the various tasks with great enthusiasm. Everyone had their own tasks, and each one of them did the part that they liked; everyone had an opportunity to express themselves, and while working independently, they could also experience the necessity of belonging to a community.

During the work, they flexibly adapted themselves to the circumstances, reformulated and elaborated quite original problems with ease. According to the relevant literature, these are all creative characteristics. It is clear, therefore, that the Comenius projects do not only develop students' foreign language skills and help them establish relationships with students of other nations, but they also contribute to the development of their creativity. In our projects, therefore, we first instinctively and later more and more consciously sought to develop the creativity of our students. In this brief summary we can only mention a few elements which contributed to that. Certainly, students experienced in fine arts designed logos and made drawings, whereas those with a literary vein wrote articles and summaries, and technology fans made videos and websites.

We managed to steal natural sciences into all of our projects, and sometimes it was not only students with a scientific interest who showed interest in the subject. We relied on young people's natural curiosity, these cognitive motives, and used them to motivate students to try and explain the interesting phenomena that they experienced. What made the problem even more interesting was that they could process and compare the results within the framework of an international cooperation. Thus, it was also inspiring for them that they needed to present a given subject to a wide audience, not only in Hungarian, but also in a foreign language.

None of our former projects were specifically scientific, still, each involved some chemistry, physics, biology, geography and of course the combination thereof. Certainly, we have managed to integrate all these results into the curriculum of the given subjects, sometimes as a new demonstration experiment, a new reference or a new item in the final exam. Each time we tell our students that it's the product of a Comenius project, created by the students themselves.

It may be useful to briefly present the scientific products of some of our projects, as well as the process of their creation and development. The subjects and their more or less detailed, further developed versions can be viewed at or downloaded from the school's website, among the projects:

**[www.jurisich-koszeg.sulinet.hu](http://www.jurisich-koszeg.sulinet.hu) » Pályázatok, pályamunkák**

The subject of our three-year school project: *The town as the subject and source of education*. The Spanish coordinator school also suggested involving mathematics in the project. As an example, they suggested measuring the dimensions of the obelisk of our town and calculate its volume. We took it as a starting point, and our students became more and more enthusiastic. Walking the town, they

found more and more places which could be associated with mathematical problems. They made the collection more complete and better, attached music to it, and that was how *Mathematical Walks in Kőszeg* was born. The current version can be downloaded from the school's website.

In the spirit of the Olympic and Paralympic Games, our school development project (GRYBB) aimed to prepare certain curriculum parts which can be applied to students who can't go to school daily, due to their professional sports activities. With regard to that, we have processed a lot of useful information and summarized our results. One subject of the three-year project was healthy lifestyle, which also examined healthy diet, the energy content of certain foods, etc. This led our students to the idea: why not measure the amount of energy freed up when we burn one single peanut? Basically, that's what happens in our body: most of the peanut becomes carbon-dioxide and water. The students carried out the measurement and they got an astonishing result: burning one single peanut significantly raised the temperature of 0.1 l water. Certainly, the next step was how much we have to work to get rid of that energy. Then naturally followed the question: what is the case with other foods? All this was put together into a presentation titled *To Eat or Not to Eat*, presented to an audience within the framework of a physics teacher training. This same project also led to writing summaries about the heart. Among them, the one called *Heart* specifically discussed the biological aspects of the heart, whereas *Beating Mercury Heart* modelled the heart by a drop of mercury. The related files can be downloaded from the school's website.

Our language project (3-2-1-0) with a Portuguese school – by chance – also had several points of contact with natural sciences. In a study called *Waves*, one of our students discussed the bouncing waves observed at the ocean shore. Another student examined an interesting phenomenon: how is it possible that cars on Bom Jesus hill roll upwards? Is it really a sacred place, or is there a scientific explanation? This is discussed in his presentation titled *Antigravity*. Certainly, during the projects we also needed to find some time for sports. They definitely have a strong team building effect. Some students who participated in the sports activities, loved sports as well as physics, so they discussed the physics of the ball as the common part of the two fields. Another product of the same project was the presentation called *Let's Measure*. What gave the idea was that we had to measure the length of our bus. The driver was not there and we didn't have a measuring tape. But we had a ball of thread, and of course a watch. So we folded a relatively long piece of thread into four parts, hang a small hair ornament on it and then we swung it. From the period of swing of this pendulum we could calculate the length of the thread, and now we could measure the length of the bus, too. This, of course, set the imagination of some creative students on fire, and they carried out some further unusual measurements. They can be downloaded from the website.

We are just closing a bilateral project with a French school, in which we discovered each other's and our own culture, history and arts. This project also gave students a chance to make some scientific observations. One of them concerned wine, since both regions are famous for their red wine. The starting point was common: observe monthly what happens to the grapes and the wine. The comparison itself is very interesting, but our students also started some serious research work to examine and discuss the health-protecting effects of red wine, recently so much talked about. That is the topic of their summary called *In vino sanitas*. Another topic related to this project concerns sports. The French partners introduced us into the characteristic Basque game, petanque, played in their region. Since we lack any sports which are characteristic of our region or Hungary, our students decided to examine skateboarding, so typically characteristic of young people. They studied its history, its popularity, and some students even studied the physical aspects of skateboarding, and tried to describe and analyse

some characteristic moves and stunts such as 'pumping' or 'pogo' from a physicist's perspective. One of these students summarized his findings under the title *Skateboarder*, of which he made a PowerPoint presentation, presented later at a physics competition.

Natural sciences are also inherent in several aspects of our currently running project called *Celebrating Cultural Diversity*. Just think of the curiosity of Mount Teide on the island of Tenerife and the very different climates of the two parts of the county-sized island. These topics are also being processed by several papers.

If our application is successful, our next project will be of scientific nature, too: the laws of nature which connect nations. We expect a lot from this project, since the joint work done by young people from several countries can bring even more interesting results.

I hope the above examples have shown that any project work can be used to exploit young people's natural curiosity and observation skills, further enhanced by unusual situations, and that any topic can be suitable for occasional scientific observations, descriptions and analyses. I wish everyone good luck to that.

ISTVÁN MÁTRAI  
*Project Coordinator*

# THE FUTURE IN OUR HANDS – EUROPEAN ECONOMY AND ENVIRONMENT

## Xantus Janos Secondary and Vocational School of Tourism, Budapest

Our school has repeatedly and successfully applied for grants under Comenius school cooperation since 1998. Out of the three projects completed so far, perhaps the most successful one was a three-year project closed last year, called *The Future in Our Hands*.

We tried to find a topic which is interesting and accessible to all the eight participating countries, and which can be linked to the curriculum and extracurricular activities at several points. When selecting the topic, all the country coordinators agreed univocally that we should raise students' interest in Europe as a whole, and facilitate a responsible approach and the understanding of the processes which take place in their environment. We have formulated the following goals for our project: we want our students to discover and better understand local, national and European economic, industrial and environmental processes by giving them a chance to conduct research work and to compare the various possible ways of managing common European challenges. The project aimed to help our students become responsibly thinking, active European citizens, whose innovative approach and practical activity can have a positive effect on their community.

During the three years of our project we implemented tasks and practices related to one single sector each year. In the first year, we studied the primary sector and its impacts on the environment. We laid special emphasis on food production and agricultural technologies, including the use of chemical fertilizers. During the mobility projects, we compared the practices applied in each country. Also, our students enthusiastically plunged into the secrets of domestic gastronomy: they prepared varied presentations for the representatives of the other nations on Hungarian eating customs, gastronomic traditions, the history of Hungarian cuisine and cooking methods. The closing act of the first project year was the *Food Court* food festival in Belgium, at which each nation presented themselves through a gastronomic video and a mini buffet. On this occasion, the eight countries jointly published their international collection of recipes.

In the second project year, the focus was on secondary industries. We organized research workshops for the students, focusing on the subjects chosen for this project year (salt exploitation and use, paper production, forest management, cement and concrete production), where they could seek answers to the questions arising in groups and with the help of the Internet, library and chemistry/biology/geography teachers. In this academic year, a special emphasis was laid on field trips to factories, which provided students with valuable practical knowledge about the subject matters (e.g. the Dunaújváros Paper Factory, Dunacell, Package Producer, the cement factory of Holcim Kft. in Miskolc, the Wieliczka salt mine in Poland, the Renova environmental friendly paper factory in Portugal, Cecil cement and concrete factory in Portugal and the Belgian Linopan NV and Spano NV factories). During the mobility projects (and also when receiving foreign visitors in Hungary), the findings of the field trips were processed in workshops held for international groups.

The last project year focused on the tertiary industry, paying special attention to tourism and its environmental impacts. The central event of the final project year was an international meeting in





Krakow, attended by delegations from all the partner countries. Each school prepared a presentation on an issue characteristic of their own countries. All the presentations concentrated on the conflict between the ecological and economic aspects of tourism. At the meeting, the students collaboratively sought solutions to the problems brought up. We organized a photo and fine art contest in each school, focusing on local tourism. The winning works of art were exhibited in Krakow, where we also announced the international winners in each category. It was also the conference in Krakow where we presented the most important product of our project, an international guidebook for students, *Young Persons' Guidebook to Europe*, compiled in collaboration with all the partner countries. The students of each school presented their home towns from an aspect which they considered interesting. The guidebook also contains a 'survivor' dictionary, now available in all the languages.

In order to increase the number and quality of international mobilities among students and teachers, in this project cycle we organized more multilateral than bilateral mobilities. It means multilateral exchanges, that is, during a student exchange programme students from at least three different countries worked together, which we found far more efficient. Working in international groups at major student conferences (attended by all the eight countries) and during all the exchange programmes increased the participants' motivation and improved their language skills.

The students participating in the project are very proud of having represented Hungary within the international cooperation. They have become more self-confident about their linguistic and negotiation skills, since during the mobilities they were required to give presentations, discuss various issues and form opinions on several occasions. During the preparatory and research activities they recognized that the most valuable pieces of information can be obtained if they are not afraid to ask about anything that interests them. Before starting the mobilities, small international groups had got acquainted on the Internet and discussed their future tasks. Soon, even some quiet, introverted students became comfortable with communicating in an international group. Our students – due to keeping contact with other students from a number of partner institutions – have become more open to other European cultures. Back in Hungary, they enthusiastically went on and on about how Norwegians ate, slept or worked out, how economic Belgians were with heating and water, and what a central issue environmental protection and maintaining liveable cities were in other countries of Europe.

I think, the success of our project is also reflected in the large number of varied project products, which we are very proud of: a number of exhibitions, works of art, studies, Power Point presentation, a re-

cipe book, a guidebook, two newsletters every year, a common website, a logo competition, educational materials, short films, etc.

Student exchange programmes and the organization of programmes and mobilities go smoother every year in our school; we have regulated, established practices, our colleagues know their responsibilities and duties, and it's nice to be a part of a team where everyone works for success. My colleagues – although they receive any help from me and the management of the school – show more and more independence and initiative.

The cooperation between the pedagogues of the partner countries is exceptionally good, since the partner institutions participating in the project have been working together for several years. As 'old acquaintances', we can say that the communication between our countries was smooth and undisturbed. We maintained daily contact via e-mail and on the telephone until the end of the project, which greatly facilitated the quick solution of the problems arising. With regard to the coordination tasks of each country, we took great care to forward to each other any necessary information, finished material, video or report in due time. The mutual support between the partners was perceptible throughout the common work. We are part of a large, international family, and our partners are of the same opinion; all the participants expect a long term cooperation. We never hoped to have such an extensive student exchange system; we consider it a great opportunity to be present all around Europe through our partners. We expect regular student and teacher exchange and common methodological and cultural programmes to be realized in the future, which can help our school to remain successful and competitive within Hungarian education.

ANITA GRABANT  
*Project Coordinator*



## LANGUAGE LEARNING THROUGH MUSIC

### Irinyi János Primary and Art School, Balatonfűzfő

The goal of the pedagogical projects implemented in our school was to prepare our students for a foreign language performance to be presented at the Comenius school project meetings, contributing to as many aspects of children's competence development as possible. The project presented aims to give rein to students' creativity through foreign songs during and outside language classes (in this case, we worked on a song called *Sonne* by the German band *Rammstein*).

The project focuses on language learning, and within that, vocabulary building, by means of an electronic presentation made for a song. Students process the lyrics with an electronic dictionary, and then display the translation of the lyrics on the slides. They also learn to sing the song, and then make choreography, costumes and scenery. Older students can also make a video clip. Students work in groups during the entire project. Therefore, besides enhancing linguistic skills and competences, the activities also provide an excellent opportunity to develop artistic, communicative, digital and social competences. Since students process materials in a foreign language, besides linguistic skills, intercultural knowledge can also be exploited.

The entire project is built on students' creativity and gives rein to self-expression. The songs are chosen by the students themselves, which enhances their motivation. Having translated the lyrics, they are totally free to decide on how to display the lyrics in the electronic presentation, as well as on the way, the costumes, the scenery and the choreography of the performance. Of course, the teacher mentoring the project made sure during the entire process that while completing the tasks, students mastered new knowledge, techniques and an increasing level of implementation. Teachers and experts helped to make the final product as high quality as the circumstances allowed.

By processing songs which students like we can increase the efficiency of language teaching and enhance motivation towards learning languages. It is important because in the process of language learning, this method can be widely used in any foreign language and at any educational level. Displaying the lyrics at the presentation, as well as the organization and the realization of the performance can contain elements directly related to the development of creativity.

Such foreign language projects are now regularly carried out as part of the institution's traditions. Besides the international Comenius project meetings, the performance can also be presented at the events of foreign language study centres, and organizing regular foreign language programmes allows to make the language teaching efficiency of schools public.

The idea was born while preparing for the reception of the first Comenius guests. Due to the cooperation, the performance resulting from the project work can also be viewed by native spectators. The international connections also allowed language teachers outside Hungary to try this method.

The project provided us lots of opportunities to encourage students to show their creativity and solve problems independently. It can be a good idea to make students keep a portfolio and/or study log during the project. In order to keep up motivation and to meet the objectives of the pedagogical project, we must ensure publicity and project aftercare.

The project directly targeted language learning groups, whereas the indirect target group included the other participants of the event, as well as the delegation of the foreign guest school. Those invited to the event included the entire school community: non-participating classes, teachers of the school and parents.

Besides the performance, the obvious and measurable development of the competences is a considerable achievement. The skills developed were as follows: active listening, reading in a foreign language, word processing, using an electronic dictionary, digital competences, making a presentation, visual representation, searching images with a browser, using Clip Art, aesthetic competence, cooperation skills, communicative skills in a foreign language, intercultural competences, memory skills, vocabulary building, sense of rhythm, phonetic skills, singing, performing competences, self-expression.

This initiative and the methods used have become so popular among students that now they volunteer for further similar projects.

Organizing similar projects have been integrated into the institution's life and foreign language teaching practice. Students have more self-confidence in front of an audience and in presenting their knowledge in a foreign language.

The most exemplary aspect of the project is that it can be used with any age group, and several of the methods can also be applied in other areas of education. Visuality – especially when the representation is really creative – enhances the memorization of the teaching contents. The method can be easily adapted and applied. Note that it requires teachers to do a lot of preparatory work, and an appropriate background of IT tools and knowledge is indispensable during the entire process.

AMÁLIA BANDINÉ LISZT  
*Project Coordinator*







## **RAINBOW – CREATIVITY AND INNOVATION IN THE RAINBOW PROJECT**

**Arany János Primary and Secondary Grammar School, Százhalombatta**

The alternative curriculum division of Arany János Primary and Secondary Grammar School of Százhalombatta participates in the project along with the coordinating institution, Durham Trinity School, England, supervised by Mrs. ANN SOUTHREN, and Estonian, Polish and Romanian partners. The students have special educational needs and are faced with various challenges, and their teaching is segregated because, due to their special needs, they cannot be educated in an integrated classroom. Most of them may never have an opportunity to travel to other European countries, or even within their own country. Therefore, we thought we could bring Europe into the classrooms.

The notion of creativity can be defined for SEN teachers as well as for students with special educational needs. On the one hand, a community of teachers who are able to meet the challenges of an ever changing world, respond to students' needs in varied ways and do creative work in teams; on the other hand, the utmost development and expansion of their skills and competences. The foundation of a knowledge which can be further developed, the preparation for lifelong learning. Our objective is to integrate extracurricular contents facilitating the extensive exploitation of personality into our daily work within an organizational framework and a curricular system.

The subject is the world around us, but mostly the world which is accessible for SEN students: the observation of the weather, planting and nurturing seeds, feeding birds, the school and the classroom, family, the settlement where we live, traditions, customs, holidays, our foods, our nation. Thus we have a chance to celebrate our similarities and differences at an international level.

The students extensively participate in the elaboration of the sub-projects, supported by teacher teams. Folk art and handicraft techniques – felting, weaving, batik, wax-painting, beading, clay forming, finger braiding, montage –, drawing and painting are given special emphasis in developing students' creativity. We organize exhibitions of students' works of art every year, also attended by the citizens of our town. In 2008, an international travelling exhibition presented the most beautiful works of art created by our students and teachers. Our school and classroom collages, the End of School Year Gala and the Charity Show have now become a new tradition. During the Advent period the focus is on preparing for Christmas, making presents and ornaments and the Bethlehem performance. The school year closes with musical, dance and drama performances, with the participation of all the students. We share them with those interested and the partner institutions through photos, films and in project meetings. Our events are also reported by the local media. We also invite those schools of Baja, Dunaújváros and Érd which joined our project due to the dissemination. On 'charity day', our students, along with their parents and teachers, offer their own handmade gifts, sweets and cookies for sale, and the funds raised are transferred to the Hungarian Baptist Aid and the school's foundation.

By having introduced the project's quality assurance system, we can measure the development of the students' knowledge of the European Union yearly. The product of the three-year development work

is a booklet on Europe, which is now integrated into the teaching process as special division teaching material, and shared with a majority class. Students put their knowledge to the test at a competition held on the European Week in 2009. SEN students were integrated in the groups, which developed students' motivation, empathy, altruism, cooperative skills and competences.

The methodology of the project work and the ability to work in teams raised the organizational level of creativity and innovation. SEN teachers and students extensively learn English. At the parents' request, SEN students receive communication-centred language classes within a habilitation training programme. At Christmas and the End of School Year Gala, they present what they have learnt through English songs and role plays. Due to the project, computer usage, including word processing, Internet, e-mail, storing and editing photos, etc., has also developed at an organizational level. Building up a documentation system has become a conscious and planned process at a classroom as well as a divisional level. Every year an almanac of the groups is compiled. Due to the project, music education has become popular; students are learning to play the recorder, and one colleague has started to play the guitar, and now he is also playing the recorder and the zither.

We have launched a painting therapy for our autistic students, and beside others, we also shared this method with the students and the international team on the day of creativity at the Durham project meeting. Hundreds of experts in the United Kingdom saw the documentary made thereof.

The methodology was enhanced with the following elements: project method, cooperative techniques, team work, painting therapy, communication technologies – Mackintosh, PECS (picture exchange communication system for students incapable of speech) –, foreign language communication, computer usage, folk art and handicraft techniques, dissemination, documentation system, PR activity, learning English, music, etc.

Due to our international connections, we could personally experience the educational system and the system operated for SEN students in other countries participating in the project, and practise communication in foreign languages and the project method. An unforeseen 'extra' benefit was that we learnt how to work more efficiently. Indirectly, the project contributed to establishing the Regional Autism Centre, the expansion of its professional work and the contents of qualitative education, as well as the conceptual definition thereof. We are convinced that the society should be prepared for the integration, while there are students who also need to be prepared for the integration and there are others who can only be efficiently developed through segregated education.

The coordinating institution shared the International School Award with us in 2009, which we are very proud of.

DR. ANNA NAGYPATAKINÉ HAJZER  
*Project Coordinator*





## SHARING THE WORLD – CONDIVIDERE IL MONDO

### Orczy István Primary School, Szeged

The students of Orczy István Primary School can choose to learn English, German or Italian. Of course, as an Italian teacher, I consider it important that as many students choose my beloved language and culture as possible. One key factor to that is motivation. At the beginning of our project, I set the goal of introducing new, creative tools in teaching Italian language, besides the conventional classroom activities.

Through the eTwinning programme, the schools of the member and candidate states of the European Union can establish partnerships in order to work together on joint projects in a number of ways, with the extensive use of ICT tools. All this allows me to effectively exploit my students' interest in new technology to enhance language learning, as well as to help them experience how to cooperate with their peers within a European programme.

Italian is taught as an optional second foreign language to about forty students. The children wanted to find Italian friends and pen pals, such as I wanted to find a school and colleagues in Italy, open to collaboration. That was how I came to get in touch with Arnolfo Di Cambio school, near Siena, on the Internet.

We know that we all are the citizens of a common Europe, where the difference between cultures does not divide, but connects us like a bridge. As a teacher, I consider it essential that children should establish personal relationships as soon as possible, which they can further develop in the years to come, thus continuously using the knowledge and vocabulary learnt in language classes. The programme contains correspondence in a foreign language, that is, Italian, learning about each other's cultures, countries, and sharing our worlds through the tools of information technology. In the past few years, we have organized a number of joint programmes, since we wish to publicize our project extensively to attract a wide range of contributors. In both schools, we present our achievements to all the other students.

In February 2007, I travelled to Casole D' Elsa at the invitation of the Arnolfo Di Cambio school. In a presentation, I introduced our town, Szeged, as well as our school and project. This meeting made common work even more intensive. We made a photo album of our Eastern meals and traditions, school celebrations, and we generally tried to introduce our partners into Hungarian traditions. In return, we learnt about interesting Italian traditions, such as the *Palio*, a horse race held annually in Casole D' Elsa.

The best contestants of the Italian competitions can win a journey to Italy. The Italian Ministry of Foreign Affairs has granted us €2,000 for field trips on two occasions, so we could visit Venice, Trieste and the huge amusement park in Gardaland last spring. In 2008 we visited Rome, the Vatican, Rimini, Siena and San Gimignano. Thus, students could get an insight into Italian culture, see historical and cultural sights and practice the Italian language. The experiences boosted their motivation to learn the language.

As correspondence via mail proved to be somewhat awkward, and responses took a long time to arrive, we decided to chat on the Internet; we sat down to the computers at the same time and kept chatting all morning. Whereas our school has an entire classroom equipped with computers, the Italian

partner school had one single computer with Internet access. Due to these chatting sessions, however, the local government decided to support the school with several more computers. The students and the teachers told this story in a funny cartoon, which won them a local eTwinning competition. We often leave messages on the forum, or even send drawings to Italy.

We have given a Christmas party twice at the Italian Cultural Centre of Szeged, also attended by Honorary Consul Dr. JÓZSEF PÁL, head of the Italian Department at the University of Szeged, as well as lecturers and teachers of Italian.

We organize the *Gianni Rodari Memorial Contest* every year. This year, children arrived on 25 April to recite Rodari's poems and tales and to dance. This year, besides the schools of Szeged, students also arrived from Budapest. The best performing students received valuable prizes. In the past few years, many have made illustrations to the Italian writer's tales. Besides the competition, we also held handicraft workshops. We made mosaics, bookmarks, window decorations. The Venetian mosaic made jointly by the contestants now decorates our school.

We learnt to play boccia, and we also took part in the European Junior Championship held in Switzerland. We made huge collages of Szeged and our friends' town, Casole d' Elsa. We have made a photo presentation of our trip to Italy and all the achievements which we are proud of. At the *La Mia Italia* (My Italy) competition, students drew pictures of how they imagined our partner country. This year, nine of our students were awarded for their works, also exhibited at the Italian Institute of Budapest.

Last year, children's wish came true – we personally met the Italian students. We organized the programmes of The Week of Italian Culture, and received over sixty Italian guests in December. Italian students gave a drama performance and a Christmas concert, whereas we gave a Christmas performance in Italian. We all went to Ópusztaszer to visit the Memorial Park. The teachers of our partner school gave presentations on Italian culture and the artistic and environmental educational programmes of the school. We also had with us Luigi Sebastiani, Head of Education in the province of Siena, in representation of the Italian Ministry of Education. Our guests also visited the Town Hall of Szeged. The Italian newspaper *La Nazione* described students as 'the ambassadors of culture and art', and the event as a methodological tour.

We are proud of having received the Qualified eTwinning Project and Quality Label titles as well as the European Quality Award. These are awarded to projects which are generally of high quality at a European level. Our programme has been reported by *Szegedi Körzeti Stúdió*, *TiszapArt* television, a regional daily, *Délmagyarország*, *La Nazione* magazine, *Dorozsmai Napló*, *La Fragola* Italian web-based student magazine, and our work was even recognized by the Italian Ministry of Education. Recently, the Italian television channel *Canale Tre* has presented our partner school and our joint project.

In the academic year 2008–2009, students learning Italian won 19 awards at municipal and national competitions of Italian language and culture.

In the past three years, we have gained a lot of experience, participated in competitions, made a video clip, met new friends, made excursions, and the children can learn about Italian language and culture through a process of experiencing. Our programmes are attended and supported by many guests and parents.

Our project is a good example for how the various areas of culture and traditions, combined with the extensive use of modern technology, can facilitate the realization of our language teaching goals.

MÓNIKA KISS

*Italian teacher, Project Coordinator*

## DEVELOPING COMPETENCES THROUGH DRAMA

### Káva Cultural Group, Budapest

DICE (*Drama Improves Lisbon Key Competences in Education*) is an international research project, centrally supported by the European Union and incorporating the organizations of twelve countries.

The initiator and leader of the project is Káva Cultural Group from Hungary. Civil organizations, universities and cultural centres from twelve countries participate in the project.

The goals of the project:

1. To demonstrate with cross-cultural quantitative and qualitative research that dramatic activities in education are a powerful tool to improve the Lisbon Key Competences. To publish a *Green Paper*, based on the research, and disseminate it among educational and cultural stakeholders on the European, national, and local levels. To translate the Green Paper to at least 12 languages.
2. To create a *European Education Pack for Drama in Education* – a tool-kit for schools in how to use dramatic activities to improve the Lisbon Key Competences. The leading professional author of the publication is CHRIS COOPER, Artistic Director of Big Brum Theatre in Education Company of England. To translate the publication to at least 12 languages.
3. To compare the dramatic activities in education in the partner countries and help the transfer of know-how and the mobilities of experts representing various trends.

According to former researches and observations, dramatic activities used in education can be very effective tools in, among others, the following social and pedagogical fields: reinforcing social cohesion, active citizenship, facilitating intercultural dialogue, gender equality, developing creativity, improving competitiveness, facilitating understanding of human rights, respect for democracy, encouraging tolerance, respect for other peoples and cultures, contributing to a sense of European citizenship.

This research focuses on the following five key competences:

- **Communication in the mother tongue** – Communication is the ability to express and interpret thoughts, feelings and facts in both oral and written form (listening, speaking, reading and writing), and to interact linguistically in an appropriate way in the full range of societal and cultural contexts – education and training, work, home and leisure.
- **Learning to learn** – 'Learning-to-learn' comprises the disposition and ability to organize and regulate one's own learning, both individually and in groups. It includes the ability to organize one's time effectively, to solve problems, to acquire, process, evaluate and assimilate new knowledge, and to apply new knowledge and skills in a variety of contexts – at home, at work, in education and in training. In more general terms, learning-to-learn contributes strongly to managing one's own career path.
- **Interpersonal and citizenship competences** – Interpersonal competences comprise all forms of behaviour that must be mastered in order to an individual to be able to participate in an efficient and constructive way in social life, and to resolve conflict where necessary. Interpersonal skills are

necessary for effective interaction on a one-to-one basis or in groups, and are employed in both the public and private domains.

- **Entrepreneurship** – Entrepreneurship has an active and a passive component. It comprises both the propensity to induce changes and the ability to welcome, support and adapt to innovation brought about by external factors. Entrepreneurship involves taking responsibility for one's actions, positive or negative, developing a strategic vision, setting objectives and meeting them, and being motivated to succeed.
- **Cultural expression** – Cultural expression comprises an appreciation of the importance of the creative expression of ideas, experiences and emotions in a range of media, including music, dance, oral expression, literature and plastic arts.

All these competences are basic skills of lifelong learning which are indispensable for young people to become healthy adults, to meet the challenges set by today's society and to be European citizens. We believe that dramatic activities in education have a positive effect on all these basic competences, and will therefore fill a hiatus in our current educational system, which, in many European countries, is incapable of overcoming the new challenges.

The project is innovative because it is the first – primarily quantitative – research which studies the effect of dramatic activities on the Lisbon key competences, with the essential added value of very extensively disseminating the findings among decision makers and others concerned.

The most important products of the project are the Green Paper and the European Education Pack for Drama in Education. We present these documents to the decision makers and stakeholders at conferences and workshops held in each partner country. The project will be closed by a conference to be held in Brussels in October, 2010, also attended by European decision makers.

The most important target groups of the project are the decision makers working in responsible positions in the area of education and culture, as well as the stakeholders of education and culture: teachers, school principals, experts of the relevant professional institutions and civil organizations, and of course, the students themselves. Only through the dramatic activities involved in the research, altogether about 12,000 students in 12 countries will benefit from the project.

The leading organization of the consortium, Káva Cultural Group, is Budapest's first and Hungary's largest TIE (Theatre in Education) group, a recognized drama pedagogy and theatrical workshop with high-standard national and international programmes. Our main activity is preparing and implementing TIE programmes for primary and secondary school groups, but we are also committed to implementing drama programmes and long-term drama projects. We mainly work with groups of children and young people aged 9-16, who are, in many cases, disadvantaged, and from various parts of the country. In implementing our programmes, we strive for high aesthetic quality and a complex application of various forms of learning. Our group started its operation in 1994 and became fully independent in autumn 1997. Our colleagues are among Hungary's most experienced experts in the fields of drama, theatre in education and civil management.

DICE is the biggest professional project in Káva's history. In collaboration with experts from twelve countries (actor and drama teachers, directors, actors, drama teachers and researchers), we study the impacts of drama and theatre in education through complex (qualitative and quantitative) research methods. It is a huge project, in a financial, but mostly a professional sense, from which the drama teachers as well as the wider drama community of Europe will benefit a lot (hopefully, already in the



The members of the consortium are nationally as well as internationally recognized organizations, representing both the governmental and the civil sectors.

**Consortium leader:**

- Hungary: KÁVA CULTURAL GROUP

**Consortium members:**

- Netherlands: LEESMIJ FOUNDATION
- Poland: UNIVERSITY OF GDANSK (UNIWERSYTET GDANSKI)
- Romania: SIGMA ART FOUNDATION (FUNDATIA CULTURALA PENTRU TINERET SIGMA ART)
- Slovenia: TAKA TUKA CLUB (DURŠTVO TAKA TUKA)
- United Kingdom: BIG BRUM THEATRE IN EDUCATION CO. LTD.

**Affiliated members:**

- Czech Republic: CHARLES UNIVERSITY, PRAGUE
- Norway: UNIVERSITY OF BERGEN (HOGSKOLEN I BERGEN)
- Palestine: THEATRE DAY PRODUCTIONS
- Portugal: UNIVERSITY OF LISBON (UNIVERSIDADE TÉCNICA DE LISBOA)
- Serbia: CEDEUM CENTRE FOR DRAMA IN EDUCATION AND ART (CENTAR ZA DRAMU U EDUKACIJI I UMETNOSTI)
- Sweden: CULTURE CENTRE FOR CHILDREN AND YOUTH, UMEA (KULTURCENTRUM FÖR BARN OCH UNGA)

mid-term). Note that in the field of drama and theatre in education no research of such calibre has been carried out so far.

ÁDÁM CZIBOLY  
*Project Leader*

Contact: Káva Kulturális Műhely  
H-1022 Budapest, Marczibányi tér 5/a., Hungary  
tel/fax: (+36 1) 315 0781  
web: [www.kavaszinhaz.hu](http://www.kavaszinhaz.hu)

Project Leader: Ádám Cziboly  
mobile: (+36 20) 335 6504  
e-mail: [cziboly.adam@kavaszinhaz.hu](mailto:cziboly.adam@kavaszinhaz.hu)  
Skype: [cziboly.adam](https://www.skype.com/name/cziboly.adam)





ERASMUS  
| higher education |



# 'BUT ANY CHILD WOULD IMPROVIZE – IF ALLOWED TO DO SO'

## The experiences of an Erasmus Grant period

Zoltán KODÁLY's thought about children's free improvisation still applies, and it constitutes a basis for several alternative music teaching methods in Hungary. Now, however, I will describe an English music teacher's method encouraging creativity and improvisation, recently presented in Kodály's home country.

I pursued my Erasmus studies at Bath Spa University, the English partner institution of the University of Kaposvár. During the grant period I got familiar with a music education methodology based on traditions different from those of Hungarian culture. I was particularly fascinated by how the teacher encouraged the students to express themselves freely in music, thus giving rein to their personalities and developing their creativity.

Speaking of improvisation, most of us will probably think of jazz, although improvisation is not necessarily the privilege of some exceptionally talented musicians, but that of any average, or even mentally or physically disadvantaged person. Musical improvisation skills can be developed through various creative musical exercises. The exercises improve students' memory, system approach, divergent thinking capability, as well as their performance at IQ tests. The funny exercises unnoticeably develop certain skills in children which are indispensable in our competitive world, constantly setting unexpected challenges.

During my field trip to England, I met JASON THORNTON, a nationally and internationally recognized conductor and animator. His pedagogical work is characterized by constant revival and creativity. His classes introduce children into the joy of composing music, improvising and creating something new. When we first met, and I sat down in front of him in his office, his very first question after introducing ourselves was: '*Anikó, have you ever improvised?*' Certainly, my answer was '*no*'. '*Then now you will!*', was the self-confident response, and so I did.

Our first joint project was an independent, common piece of music, made in collaboration with the students of Liszt Ferenc Music School of Kaposvár. During the one-week programme, we conducted various improvisation and team building exercises for about three hours every afternoon, which made both the students and me realize that reproducing music from a score is not the only way to play music. With Jason's help I learned how to encourage the children, as well as ourselves, to create independently and think creatively.

We always began the classes with some kind of rhythm exercise. It usually meant playing rhythmic motives, from quite simple to complex ones, using various parts of the body. Such exercise was, for example, the 'rhythm snake', where everyone adds a new, independent rhythm to an initial motif. (It's not necessarily clapping hands. You can as well slap your legs, snap your fingers, hiss, stamp your feet, etc.)

The warming-up exercise was followed by 'creation', which needed 'inspiration', and idea which provided the theme, and then we tried to find a tune to it. While looking, we tried lots of tones, tools and movements. We had many ideas, some of which were discarded, some transformed and some kept unchanged. I noticed that first neither the children who were participating, nor the teachers and others interested, standing at the back of the classroom, understood what they were expected to do. When



Jason asked them to 'play a tune as if you were an elephant', or 'disassemble your flutes and use only the upper part to imitate the whizzing wind', they didn't really understand what was going on. The continuous practising, however, made everyone realize that it really was music, and it was good, in fact, very good. It really was our piece of music, really played to our audience. Our tunes were unique and unrepeatable. They were ours, we created them. The final stage of the process was always a concert, where we performed our jointly 'composed' pieces.

The method can not only be used with children of average capability, but also with mentally or physically disadvantaged children or adults. 'Sound Beam' can be a tool to that. The sessions are based on a special tool which helps participants make music through simple movements. In fact, they improvise, too. The tool is built up from different parts. Some parts have buttons which even people with severe physical handicap can operate, since the sounds only need a little push of a finger; also, the tool has two 'microphones', which don't amplify the sounds, but generate a pre-set sound on a computer when any movement is detected in front of them. These sounds can be the sounds of certain instruments, basic rhythms, a backing track, singing, etc. Through this tool, making music becomes available to anyone. Certainly, the 'Sound Beam' can also be used with participants of average ability. Kaposvár will receive help from its sister town, Bath, and the Bath Philharmonics in procuring the tool. The process of procurement is still under way.

After the Kaposvár project, I got an invitation to Bath. The programme was implemented as part of the Bath Mozart Fest, and was just as successful as in Kaposvár. Our goal is to realize more such initiatives.

I am convinced that this method has opened new dimensions before me as well as before the students and teachers who participated in the programme.

Self-expression through music has been a part of our lives for thousands of years. Modern man lives in the illusion of predictability. The danger of musical templates is that we may lose our flexibility, creativity, and we get used to the (of course, nice) musical patterns of certain artists. Making music is about playing from the heart, from deep inside, not tensely stooping over the scores. Improvization is real knowledge, which is up-to-date and which helps develop a constantly renewing, creative approach to life. That is why I consider it important – and I am also grateful – that I could present this programme in the European Year of Creativity and Innovation, calling the attention to the importance of improvization.

ANIKÓ KOVÁCS

1 For more information on 'Sound Beam', please visit [www.soundbeam.co.uk](http://www.soundbeam.co.uk)

# THE *EUROPEAN DIGITAL PRINT MEDIA* INTENSIVE PROGRAMME

## Budapest Technical College

Printing and print media industries are facing the biggest challenges of the past five hundred years since Gutenberg. On the one hand, it is due to the ever fiercer competition arising from globalization and the fast changing requirements of the publishing industry, and, on the other hand, the high requirements towards professional training. We must find ways to make this profession more attractive to young people against the Internet, digital television or 3G mobile communication.

Due to the ever stricter environmental regulations, more environmental friendly printing technologies are required, which impose less burden on the human environment, and therefore serve sustainable development. The new digital technologies were first introduced in order to increase the efficiency of the printing industry and to ease the environmental burden. By now, new publishing platforms have been developed, innovatively integrating digital and traditional print media. The development of information technology allowed the spatial and temporal separation of printing operations. Networked graphic production has been gaining ground, integrating electronic companies and networking companies. New, hybrid media technologies are now used, and intelligent print products and functional printing have emerged. Suppliers, manufacturers, sales representatives and users conduct on-line communication for on-line marketing, PR and advertising purposes. Due to the spread of electronic media, printing industry has become a global business. Digital technology is gaining ground more and more intensively in Europe; in Hungary, for example, it is emerging especially quickly, due to the low circulation of the publications, characteristically below the European average. Digital technology allows more and more print media products to be produced with changing or personalized data, in small circulation and within very short deadlines (even within 24 hours). All these represent new market niches, presenting serious opportunities for small and medium-sized printing enterprises. The new technologies contribute to the increasing efficiency of information transfer, and give more rein to innovation and individual initiative. All this requires a new approach in product innovation, designer processes and management. The business success of competitive enterprises requires professionals with adequate expertise, international experiences and a high level of specialized foreign language skills.

The direct goal of the *European Digital Print Media* (EDPM) programme is to develop students' professional competences through creative team work, and to contribute to the development of an environmentally conscious approach enabling them to meet the requirements of the labour market and to satisfy the needs of the print media industry faster and in a better quality. During the programme, students acquire multidisciplinary knowledge and skills in a peculiar, international environment, with the participation of the best teachers of the European print media industry, which, in such form, is unprecedented in any of the partner institutions. They carry out printing projects through creative team work, with short deadlines. They need to use trade specific software and digital printing presses during the new, computer-aided work processes. The first phase of the project also includes an intercultural communication part. It contributes to easing off the initially tense atmosphere, and successfully encourages participants to form active, small teams for the project work.





With the participation of 9 recognized European higher education institutions of the printing and media industry, the programme will be organized for the third time in 2009, again in Budapest. The cooperation between the partners has a history of many years, with a number of successful milestones (establishing an international network, the elaboration of international masters courses, etc.)

From this year on, as a new international element, students will have to write a home essay on their own countries' professional aspects and developments related to the printing and media industry and

environmental protection. They have to present it in groups at the beginning of the programme. It is useful for two reasons: on the one hand, students are more prepared when they arrive, and, on the other hand, the team spirit which encourages common work develops sooner.

The EDPM programme applies the most up-to-date pedagogical methods for the efficient transfer of knowledge, relying on the experiences and methodologies of the participating partners. We apply the problem solving method used in group learning, in which the teacher's main role is to support the learning process (TELLA and MONONEN-AALTONEN, 1998). During the team work, students learn how to collaborate with others from different linguistic and cultural environments. The principle of group membership based on a random selection (LIPPONEN, 1997) facilitates socialization; students are more motivated and self-confident in groups, and they also learn from each other. The individual preparation and the collective skills development manifested in the project work efficiently improve creativity, presentation and communication skills. The didactic methods applied rely on the principles of contribution and cooperation. It focuses on active participation, communication and interaction, as the most essential elements of any community. Special emphasis is laid on communication with native speakers of English, which contributes to the development of linguistic competence.

The direct beneficiaries of the EDPM programme are students studying printing and media engineering or management, and arts. Its indirect beneficiaries are students of other related fields, applicants or participants of studies abroad, advertising professionals, the professional organizations and advertising professionals of the host country, professionals of local printing companies with foreign interests, as well as participants of VET and language teaching. We advertise the programme through various channels, e.g. the annual international professional forums, personally, during Erasmus mobility, via the coordinators of the partner institutions, on the website, in national and international magazines. Every year, we have more applicants than we can accept; still, it was surprising that the number of applicants this year was many times the number that we had applied for.

Certain elements of the programme have been integrated into the daily education (e.g. printing computer designed patterns on textile, multicultural team work with foreign Erasmus and Hungarian students). A new feature of the current BSc. programmes of the college is that students are required to complete one specialized subject in a foreign language. Three subjects offered in the intensive programme were also offered to Hungarian students as 'criterion subjects'.

It presented a great challenge to the students that the promotional projects needed to be done within a very short time, and ready to be shown at an independent exhibition at the end of the programme. In the practical part of the programme, students are given an opportunity to practise and use certain

skills which are indispensable in real working conditions – e.g. creative team work in a multicultural environment, research, independent learning, self-development –, and which prepare them for the ever increasing competition in the global labour market. What gives special value to the intensive programme is that during the implementation phase of the project work it also includes a one-day placement at a company.

An additional, innovative element of the project is that it encourages environmental awareness. The placement introduced in the intensive programme also allows participants to look at environmental investments. They can study opportunities of using renewing energy carriers in an industrial environment and in municipal operations. This gave many of them the idea of choosing sustainable development as the subject of their project task, but the host institution of the programme, Rejtő Sándor Faculty of Light Industry and Environmental Protection, as well as the programme itself, were also the subjects of some really clever advertising materials.

The friendly, personal relationship dating back to many years meant great help in the organization. During the preparatory visits, we worked out the programme in collaboration with the coordinators of several partners. At the preparatory stage, the professional programme curriculum, based on a consensus, is finalized by small groups of partners responsible for the individual subjects.

We consider direct contact with the industry essential, as well as inviting guests with serious industrial and designer background into the programme. The domestic industry paid special attention to the participants of the international programme, providing a great insight into latest developments of the field (field trips to factories in Kecskemét, Debrecen and Eger). The presentations announced as an 'open summer university' were also attended by several corporate experts.

The organized extracurricular programmes (educational path, using renewing energy, recycling) contributed a lot to developing environmental awareness. The cultural programmes provided an insight into Hungary and the people who live here, and made the professional programme more entertaining (a trip to the Lake Balaton, horse-riding show in Bugac, wine tasting).

All these were meant to contribute to a higher international recognition of Hungary and the professional culture in Hungary, as well as to a better image of the country.

The two EDDM programmes implemented so far have received very positive national and international professional feedback. It was a great honour to have been invited to the IP conference, organized by DAAD in 2007, as the only Hungarian project.

DR. LÍVIA KOKASNÉ PALICSKA (PHD)  
*Programme Coordinator*





## INTERCULTURAL EVENINGS AND THE MASTERSTROKES OF EILC ORGANIZATION

**Pázmány Péter Catholic University,  
Piliscsaba**

By now, the EILC courses which we organize constitute an integral part of our academic year – an indispensable part of our lives. As a faculty of arts, we consider language education and presenting the cultures of other nations very important. Teaching Hungarian language and culture provides us an excellent opportunity to promote Hungary's cultural values, and bring them closer to students through language teaching. We are convinced that upon returning to their homes countries, those learning our language will not only be the ambassadors of our country, but those of our university, too – and that is the best publicity we can ask for.

We have been organizing EILC courses for many years now; we have our well-trying methods, which, however, does not mean that our programmes are all the same. Quite on the contrary: if the organizers don't want to get tired of doing the same job year by year, it is worth – moreover, necessary – inserting new, innovative elements into the programme.

We owe a lot of institutional, professional and personal relations to the summer or winter universities, since we do not only receive students from our existing partner institutions. The informal atmosphere of the courses and the 'intercultural evenings' allow an insight into the partner institutions and their courses and researches. Also, we are happy to share our experience gained during the preparation and implementation with our partners: this year, for example, we introduced our Polish and Slovakian colleagues, arriving in Hungary within the framework of Erasmus staff mobility, into the 'masterstrokes' of organizing EIL courses.

According to the past few years' feedback, the intercultural evenings are the most popular programmes. These events aim to present the students and their home countries and cultures. The representatives of the various nations can present a characteristic dish or dance. The evenings usually contain quizzes and funny team games, occasionally with spontaneous concerts or dance performances. However, opportunities are unlimited, and students surprise the organizers with their creativity every year. One of these evenings is organized by the host team, with music and dance teaching, preceded by a presentation on Hungarian folk music and followed by the collective cooking of characteristic Hungarian dishes. Tasting each other's national dishes is an important element of the communication between students of different nationalities and getting to know each other. That was why we started to collect the recipes brought by foreign students, and have now turned them into a complete international cookbook. Of course, new recipes are continuously added to the collection. The novelty of the summer of 2008 was the Erasmus pavilion. In our campus in Piliscsaba there is a pool which is out of use, from the times when the area served as a Soviet military camp. We set up a pavilion on this peculiar venue, with benches, tables and electricity supply inside. This became the centre of leisure programmes, since in the hot summer the nearby forest proved to be an excellent venue for organizing intercultural evenings, chatting, collective cooking, playing music, dancing.

With regard to receiving foreign students, the most successful novelty of the past few years was the team building training. It is held by a psychologist colleague from the Career Guidance Office operated at the faculty. At the training held shortly after arrival, the participants get to know each other and ease the initially tense atmosphere through entertaining exercises and solving problems together. The experiences are very good: the training helped students make a coherent, creative team capable of cooperating.

As I mentioned, the EILC team tries to come up with some novelty at each course. The innovative programme of 2009 will be drama. The English speaking drama group of PPCU's Faculty of Arts, recent winners of several awards, will join the work of the course, and they will not only perform, but also involve EILC students in staging a truly international scene.

MÁRTON BEKE  
*Programme Coordinator*





LEONARDO DA VINCI  
| vocational education  
and training |





## OPPORTUNITIES IN NON-FORMAL LEARNING AND LEARNING BY DOING *STUDY SO YOU CAN HELP*

### *Egyesek Youth Association*

The subject of the *Study so you can help* Leonardo mobility project is youth work / non-formal education and non-profit management. It aimed to ensure two volunteers of *Egyesek Youth Association* professional practice at the partner institution of the Association, the *Olde Vechte Foundation* in the Netherlands.

Unfortunately, in Hungary, youth work – that is, taking care of the special needs of the age group of 12–25, and organizing and implementing programmes designed specifically for them – is still in its infancy. Educational counsellors mainly focus on a younger age group, and only deal with the children at the parents' or teachers' request. The target group for family services is specifically 'problem' children and families; however, more and more of these services have also been eliminated recently. In Western Europe (as well as in the US), it has been long recognized that 'normal' – that is, not necessarily disadvantaged – young people also need to process certain topics which interest them in a way which suits the characteristics of their own age groups, and attend related programmes where they are not treated like small adults, children, or maybe potential customers. This kind of youth work is also prevention, since young people who can find the kind of environment and activities which give answers to their questions and provide encouragement and support, are less likely to try drugs or commit a crime.

'Egyesek' Youth Association has been engaged in this activity since 1998, and we wish to further develop this activity. That is why we sent two of our members on placement to a country where youth work has a great tradition and many decades' experience.

Creativity is a tradition in our Association, and what it means to us is to create something from nothing. The designers and implementers of the programme were also among the later beneficiaries – they created all that was finally realized. They did not only manage the practical part of the project (application, travelling, accommodation, insurance, contract, communication, etc.), but also agreed with the host institution in the work programme; their mentors/tutors were open to their ideas, and therefore the placement programme could be fully customized. As a result, both beneficiaries were outstandingly motivated about and committed to their goals and learning processes.

The programme which they developed and elaborated had an essential objective: to create new, added value, that is, to be innovative. Before the placement, beside the linguistic and cultural preparation, they also laid great emphasis to professional-psychological preparation; as the non-formal educational method applied by the host institution is based on learning by doing, and requires considerable self-knowledge, both of them attended an intensive self-knowledge training based on their own experiences, which they later regarded very useful. During their placement, they paid great attention to learning about as many Dutch youth organizations as possible, beside their host institution, of course, thus enhancing their knowledge of youth work and non-profit management. So they took part in the current daily work of the foundation and in long-term planning and preparatory project work, as well as in the preparation, implementation and assessment of youth exchange programmes and trainings organized by the foundation.

Besides, they cooperated with another organization which organizes similar trainings, and they visited three other organizations, too. As a closing act of their learning process, they elaborated their own training programme.

The most important goal and achievement of the programme was the development of their professional skills and competences:

- The beneficiaries learnt how to apply the methods of learning by doing and how to transfer them to others (leading, moderating, coordinating and supporting small and large international groups, holding, organizing, moderating workshops, giving presentations, organizing and holding outdoor activities, individual counselling, assistance, processing experiences individually, in pairs or in small and large groups).
- The beneficiaries have obtained a medium level knowledge in compiling training programmes using the methodology of learning by doing – with assistance, they are capable of designing new, adaptable training programmes. (Since then, they have been worked out and held trainings independently.)
- The beneficiaries got an insight into the operation of a non-profit training centre (Olde Vechte Foundation) and a profit-oriented training centre (Essence Organisation); they are capable of applying the organizing, HR management and marketing methods which they have learnt to other organizations, as well.
- The beneficiaries have acquired a high level knowledge in project management and designing youth projects; they are capable of independently (but assisted by a team, of course) organizing and implementing international youth exchange programmes and trainings, and independently writing successful applications to the youth related funds of the European Union and the European Council.

The acquired (and constantly developed) knowledge and skills allowed the beneficiaries to participate in reforming the operation of 'Egyesek' Youth Association. After they arrived home, in February 2008 they organized and held the strategy and team building weekend of the Association, where, in collaboration with the other members, they assessed the members' needs and expectations with regard to their own personal and professional development. Based on that, the two beneficiaries assisted us in developing the long-term strategy of the Association, as well as the short and medium term programmes arising therefrom. As a result, 'Egyesek' Youth Association, formerly operating on an ad hoc project basis and with a lot of volunteer work, could begin a sustainable and plannable operation. As a part of this process, the two beneficiaries have undertaken a lion's share of elaborating the project and the application in which we will present the method studied in the Netherlands to the members and volunteers of Hungarian youth organizations within the framework of trainings held in Hungarian. The project will be implemented with the funding of the Norwegian Financial Mechanism between October 2008 and March 2010 – it will be the Association's biggest (and most expensive) project of all, which will allow, among others, the paid employment of two of our colleagues, which means great progress for us on our way to sustainable operation.

Our Leonardo project was nominated for International Cooperation Quality Award in 2009. The assessment highlighted the customized work plan, the project management involving all those concerned, the extensive assessment, the learning of new professional skills and establishing new international relations as a guarantee for a high-standard project.

The two beneficiaries presented the achievements of the project in a workshop held at the Conference on Creativity and Innovation in Lifelong Learning on 28 April, 2009. Based on the feedback from those attending the workshop, as well as the number of inquiries following the conference, clearly there is need and openness for exploring and applying new, non-formal educational methods and learning by doing.

ÁGNES HORVÁTH  
*Project Coordinator*

# PREPARING YOUNG PEOPLE FOR STARTING A BUSINESS – YOUNGBUSINESS.NET. 3 PROGRAMME AT THE POLYTECHNIC INSTITUTE OF ECONOMICS

## Budapest Youth Enterprise Centre

### Youth enterprise and employment in Central Europe – the Youngbusiness.net programme

The economies of Central Europe have undergone a great transformation during the past 17 years; the uniform, state-controlled monsters have become lively and innovative free markets. The change is clear to anyone who used to know the old system, and almost imperceptible to those with only 'western' experiences. These countries are taking giant steps towards free market economy, but there is still a lot to do.

Supporting the establishment of new enterprises and economic growth can accelerate development. The most useful thing to do is supporting youth enterprises, since they will be able to use their entrepreneurial skills in the future, too, thus helping to establish a flourishing society.

The Central European Youngbusiness.net.3 project has undertaken the challenge of finding a way to involve young people aged 18-30, and give them any opportunity to master entrepreneurial skills from which they can benefit when starting their own businesses or even if they work as employees.

### YBN – the entrepreneurial programme

The YBN programme has raised great interest. In Central Europe, WYE has developed good cooperation with the local partners, sharing with them its experiences in youth enterprise, acquired during 19 years of successful practice. WYE has been present in Central Europe since 1996, and it also assisted in establishing Budapest Youth Enterprise Centre. During the first YBN programme between 1999 and 2002, it supported the establishment of entrepreneurial services of Neumann János Vocational Secondary School and other partners in the region. Our financial supporters were the British Lotto Foundation and the Phare and Leonardo programmes of the European Union.

### The current YBN.3 programme

The current programme continues the former work, with the participation of several partners, by trying to raise young Central European people's interest in youth enterprise already during secondary school, and providing extensive services to young people planning an entrepreneurial career. The YBN.3 project, conducted between October 2007 and October 2009, is supported by the Leonardo da Vinci programme. It has set a number of objectives in the field of vocational training and skills development, with a strong emphasis on practical solutions, and primarily supporting disadvantaged young people.

### The Central European partners of YBN.3:

- **Business Polytechnic, Secondary Grammar and Vocational School of Budapest / Budapest Youth Enterprise Centre.** The goal of the cooperation with our former partner is to establish more new enterprise centres in Central Europe, providing overall youth enterprise services, including incubation.



- **Neumann János Secondary Vocational School of Eger / NIVÁK**, which also participated in former YBN.2 projects and shares its experiences with the other centres.
- **Regional Development Agency (RDS) in Rimavska Sobota, Slovakia**, is also a new partner, and wishes to exploit the opportunity that Slovakia plans to establish incubator houses, besides developing entrepreneur education, training and consulting.
- **Regionálna Rozvojová Agentúra v Moldave nad Bodvou (Slovakia)** is also a participant in the programme
- **'Covimm Consulting' SRL (Romania)**
- **Abigél Bilingual Primary School, Primary Art Teaching Institute and Secondary Grammar School of Art** also joined the program a few years ago.

### **The future**

The current achievements of YBN are mostly attributable to the supporters, including the supporter of the current YBN.3 project, the Leonardo programme. At the beginning of 2009, we established the Non-Profit Ltd. for Helping Central European Youth Enterprises. Our goal is to make this programme self-supporting within the Central European region, relying not only on the knowledge and experiences of the partners, but also on its own financial resources. Thus, it will also be more flexible, because it will not need regular project support.

### **Secondary school programme**

Launching the Student Enterprise programme of the Business Polytechnic was also a part of this process. We consider this programme important in shaping secondary school students' thinking, since finding a good job is not easy. Many young career starters live without any job opportunities, even with one or two diplomas. We think it is essential that students should learn about the risks and opportunities of an enterprise through their own experiences, and become more open to this world by participating in the programme.

Student enterprise is a programme which teaches entrepreneurial skills as part of the curriculum, and then the material must be put into practice. Students are given 1 year to work in the enterprise.

As a result of this programme, the school takes part in a number of other programmes designed to support enterprises launched by disadvantaged people or women. There is great interest in these programmes, with high attendance groups. After the trainings, participants can attend a consulting session, which contributes to our success. Our participants have launched a number of successful and high-standard enterprises.

JUDIT VISEGRÁDI  
*Project Coordinator*

# FOR THE INTRODUCTION OF 4D EDUCATIONAL CONTENT AND METHODOLOGY IN HUNGARY

## Kossuth Zsuzsanna Vocational Training School, Dabas

The goal of the Leonardo innovation transfer project submitted in 2008 by Kossuth Zsuzsanna Vocational Training School of Dabas was to introduce 3D and 4D technology related educational and training methodology in two target institutions, Kossuth Zsuzsanna Vocational Training School and the Finnish Kokkolan Vocational Training School. The third project partner is Doncaster College of Great-Britain, acting in the project as the institution transferring the methodology related to 3D and 4D technology.

The project is titled 4DSMILE, that is, 4D Simulated and Managed Interactive Learning Experiences. The project period is two years, and the financial support is more or less equally shared between the partners (the entire budget of the project is €291,545, including the 25% own funds).

As far as innovation is concerned, we have no knowledge of any educational institutions in Hungary using 4D visual representation in vocational training or in a broader educational environment. In this sense, therefore, our institution can be regarded as a pioneer in applying the technology in Hungary; however, it is not what we consider the main merit of the project. Since during the past few years our school participated in a number of asset acquisition and methodology projects, the 4DSMILE project team is of the opinion that when introducing a new educational tool, the most important aspect to be considered is its every day usability for educational purposes. In this respect, the most essential questions are perhaps those related to the efficiency of the methodology, the development of 4D educational materials, the methodological training of the teachers, the safe and secure operation of the tool and the purchase price. Therefore, the project – besides asset acquisition and the development of 4D educational material – primarily examines the daily applicability of the methodology, and that is why our project could be useful for the broader educational environment, as well.

### How and why we chose this area?

Our colleagues teaching in vocational training schools are familiar with the challenges of maintaining motivation and attention. Many educational experts share the view that applying innovative technology has an important role in raising and keeping up students' attention. Accordingly, since the 90's, the management of Kossuth Zsuzsanna Vocational Training School has been working on making the institution's educational technology portfolio as extensive as possible. As a result, our school has become one of Hungary's best equipped vocational training schools

Following the EU-accession, we held several internal brainstorming sessions, consciously seeking ways to introduce new technologies and/or methods (which could as well be funded from EU resources). Simultaneously, our institution also consciously developed its network of foreign partner schools. The two projects, which ran simultaneously for a long time, met in 2008, when we learnt that in our English partner institution, Doncaster College, a major (EU co-financed) experimental project was about to be completed, as a result of which the 3D visual effect used in cinemas also became available for educational contents. Following that, events sped up, as the management of Doncaster College agreed with our



intention to participate, and with the involvement of the Finnish partner in Kokkola the partnership was complete and the application could be submitted.

### **How efficient is 4D technology and methodology?**

In September 2009 the project will reach its half-time. By that time, the trainings planned for the educational material developers of the adapting institutions will have been implemented, the 4D equipment will have been procured by the Dabas and the Kokkola institutions, 6 learning objects planned as part of the project will have been developed, and the one-week 4D presentation series planned will have been completed in both countries. Almost the entire 2009/2010 academic year is available for the real classroom testing of the technology and the methodology built on it. Expectations towards the technology are very high, as during the presentation week held in Dabas between 18 and 22 May 2009, the 4D objects proved to be a great success among visitors and our students. One of the main questions is whether the results of the primarily American and English university researches, demonstrating the astonishing efficiency of 4D technology, will be similar in Hungary, in the case of the vocational training school target group. The answer will be provided by the study to be prepared as part of the project, and to be published within not more than a year on the project website: [www.4dsmile.eu](http://www.4dsmile.eu).

### **How available is 4D educational content?**

Before the issue of developing 4D learning objects it may be worth discussing 4D tools and displays themselves in a few words. The sight is something which is difficult to write or talk about – words can't express the effect. It must be seen, and anybody who has an opportunity should do so, whether in Dabas or elsewhere. Compared to a 3D movie, the main difference is interactivity (the 'fourth dimension'), which means we can move in space and control the medium we are in.

4D tools constitute a portfolio, whose 'simplest' tool looks very much like a plasma TV, whereas the state-of-the-art display resembles three movie screens – one facing the viewer, and the other two at an angle to the middle one. Compared to the systems mentioned above, the school's display falls somewhere in between with regard to sight and price, thus representing the 'one-screen' category, whose full acquisition cost is currently between HUF 5 and 10 million.

A characteristic feature of 4D learning objects is that they are really difficult to compare to any other existing and wide-spread digital educational material. Perhaps their main educational value is that they allow the realistic illustration of areas which are very difficult to access in reality: human organs, the structure of molecules, the solar system, an internal combustion engine in operation, etc. It also implies that content is only limited by imagination; first, however, the 4D learning object must be digitally 'created' using CAD applications, and then a converting operation adds a real 3D effect. The educational use of the technology is still at an initial stage all over the world; however, it is expected to spread quickly, and therefore more and more learning objects will be commercially available.

### **Do you need methodology training to obtain user-level skills?**

Of all the above questions, it is the easiest to answer clearly: no, you don't. During the demonstration week in May, several teachers and trainers tried the system, and not only was it very popular, but it also became clear that mastering navigation did not require more than 5–10 minutes of practising, since every 4D object can be used via a mouse and a keyboard. It is one of the most essential factors of using the technology because many complex educational devices require training for user level operation; in this case, however, it is unnecessary.

### **How safe is the operation of 4D displays?**

Safe operation is guaranteed. In this respect, there are many similarities with conventional projectors, since the 3D effect in 4D display systems is achieved through projectors whose operation is based on a similar principle.

### **Innovative nature**

To sum up the virtues of 4DSMILE project, we consider the project innovative because it may contribute to the introduction and dissemination of a type of educational material which has never been used before in Hungarian education. The innovative nature, however, also shows in the fact that our project is more than mere technology transfer; in the second phase, we will try to examine at a system level the major issues of classroom application from procurement through use to safe operation, taking into account the entire period of introducing 4D methodology. All this will be done simultaneously in two countries, Hungary and Finland, which means the professional report of the project can also contain country specific findings.

The creative nature of the project is proved by the 4D educational materials developed, as there is one criterion to be fulfilled: they should fit into the requirements of national and local curricula. Apart from this, educational material developers can (and they did!) let loose their imagination in terms of colours, shapes, dynamics and other features.

As for the general assessment of the project, the exemplary international cooperation adds extra value to the project, and the implementation follows the preliminary schedule.

JÓZSEF HALÁSZ  
*Project Leader*





# 'A HEALTHY HEART TO ALL YOUNG PEOPLE' THE IMPACT OF A LEONARDO STUDY VISIT ON HEART TRANSPLANTS IN HUNGARY

**Gottsegen György National Institute of Cardiology, Budapest**

## **Project subject**

The progression of an end-stage heart failure, an indication for heart transplant, is significantly faster in children than in adults. For obvious reasons, however, it takes much longer for a child than for an adult to get a donor heart. In Hungary in 2007, Gottsegen György National Institute of Cardiology launched a successful heart transplant programme for children. In order to maintain the success of the programme, our institute needed to establish the conditions of permanent mechanic circulatory support. Maintaining circulation artificially for hours, days or months is made risky by a number of potential complications with any of the currently available methods, although the risk rate has significantly decreased due to the technological achievements of the recent years. Consequently, permanent mechanical circulatory devices, artificial hearts have gained outstanding importance in treating heart failures which could not be treated in any other way. According to a generally accepted definition, a long-term circulatory support device can ensure the necessary cardiac output for over 20 days without replacing the circulation generator component. The procedure, called 'bridge-to-transplant', is usually part of the treatment of patients on a heart transplant waiting list. Sometimes, in case of adequate tendency for recovery from a heart failure, the treatment may also be successful without a heart transplant, which is called 'bridge-to-recovery'.

## **Innovative aspects**

Our institution has a leading role in national cardiac patient care. Artificial hearts mean a completely new treatment method in domestic practice, in every aspect. Integrating this activity into the daily operation of the institute without neglecting the existing area of operation requires a lot of creativity and innovation.

The procedure presents a unique opportunity in the treatment of children suffering from a serious disease. After the first hospital treatment, the natural course of the basic disease leads to the death of the patient within months. Successful artificial heart treatment is the result of several decades of international research and development. Smaller countries, like Hungary, can not set the goal of independently developing such technology, because even if their resources are sufficient, the expected occurrence of the disease (in Hungary, 5–10 cases/year) does not allow developing efficient independent methods. Therefore, international cooperation was a basic condition to implementing our project.

We should highlight two elements of strategic importance in the realization of artificial heart treatment whose implementation at the required standard presented a new challenge even within priority patient care. In order to prevent complications related to coagulation and haemophilia, we needed to provide 'bed-side' diagnostic devices, never used in Hungary before. Also, we had to establish a patient care service capable of the long-term (weeks, months) prevention of complications due to infection, for continuous treatment methods where the number of ports of entry multiply, and where the body's own immune system is affected adversely by a number of factors.

## Objectives, achievements

Our objective to ensure the success of the child heart transplant programme through a successful artificial heart treatment programme has been achieved. Between 29 September and 1 November, 2008, the first successful 'bridge-to-transplant' artificial heart treatment in Hungary was carried out. The course of disease after the heart transplant of the then 2.5 years old, 10 kg girl was free of any complications. The second successful 'bridge-to-transplant' was carried out a few weeks after the first one, on a younger, then 7 kg girl, and the two and a half year long waiting period could be bridged without the replacement of the artificial heart chamber, although our little patient almost weighed 9 kg by that time. The third artificial heart treatment, this time on an older, 40-kg girl, began on the day of the heart transplant operation of our second patient. In sum, we can establish that artificial hearts have been applied by our institution continuously since September 2008.

Our project and the international cooperation have also brought an unexpected benefit. During my study visit, I paid special attention to every form of treating heart failures. Besides heart transplant and artificial heart treatment, another surgical method is the electric treatment of the heart, called heart resynchronization. A successful treatment requires wires to be connected directly to the side wall of the left chamber. The heart's own venous circulatory system is normally suitable for getting the wires to the right place. However, the anatomical features of certain patients' hearts do not allow this procedure. This often happens in case of congenital heart diseases, or after the heart operations carried out to treat such diseases. In order to make the electric treatment of heart failures available in such cases, too, my Hungarian colleague working abroad and I have developed a completely new procedure. We were the first in the world to apply this method – getting the left chamber electrode into the left chamber cavity through the apex of the heart and fixing it in the endocardium; since then, it has been published in a number of high-ranking international and national professional publications and presented at recognized international and national conferences in the form of oral and poster presentations.

## Excellence

Our project well exemplifies that the surest way to the most outstanding achievements of creativity and innovation today is international cooperation. This especially applies to health care developments, where efficiency is an immediate requirement, and to small countries, where even when the resources needed for development are available, the number of cases necessary for efficient research and development requires international cooperation.

Another lesson drawn from our project is that profound and extensive preparation in international cooperation may lead to unexpected innovative achievements, even in such fields of health care which, in recent years, have gained the special attention of the international professional community.

DR. IMRE KASSAI



GRUNDTVIG  
| adult education |



## ACT WELL: ART AND CREATIVITY

### TEAR DOWN THE BARRIERS BY TALENT: DISABLED PEOPLE IN THE LANGUAGE OF ARTS

**Hilfer Bt.**

*'Be the change you want to see in the world'* could be the motto the international project called ACT WELL: Art and creativity. The objective of the four partner countries – Slovenia, Slovakia, Germany and Hungary – is to express the thoughts of those living with a disability through various artistic forms, including painting, plastic arts, dance, theatre and photography. The exchange visits of the students and their teachers serve this very purpose.

The main objectives of the project are: to strengthen the self-confidence of the disadvantaged participants, personality development; opportunities to learn about other cultures and see good examples through team work, and – as a natural, but consciously sought consequence – to shape the society's approach to those living with a disability.

We organized a closing exhibition of portraits, to be hosted by the National Museum of Budapest. The main theme was the every day life of those living with a disability: the reality and the future goals.

Both teachers and students actively participated in the process of creation; we have laid the foundations of a future cross-border cooperation, thus providing a reliable framework for further activities. To put it in other words, we have formed a very cooperative and focused international team, whose members make efforts to break down the barriers against difference, in this case, "disabilities", existing within the society, by relying on their own talents and skills.

We do our work in the heart-felt hope that we will be able to represent the interests of our target group efficiently, and facilitate the transition into a more honest and 'nicer' society of more human scale.

The four partner countries of the ACT WELL project – Slovenia, Slovakia, Germany and Hungary – have different traditions in arts as well as in the field of equal opportunities. Presenting and transferring good examples have an innovative nature in themselves; beyond that, in this project it was the concept of 'portrait' which we found especially interesting and something worth looking into: how many ways, in what dimensions of time and space and through what tools can we picture ourselves?

Since our target group consists of adults living with a disability – disadvantaged in our current world, which, in most societies, follows a 'medical' model – we thought that those concerned could effectively communicate their own desires and visions through various artistic tools, showing their values, individual approaches and their ability to assume further roles in society. The exhibition held in the National Museum between 27 June and 5 July 2009 conveyed several messages to the public about the world of those living with disabilities, which is not 'special', that is, something to be handled separately, but 'unique', that is, an image of human diversity, a full right and integral part of society, and therefore to be handled integrately.

We organized a training focusing on equal opportunities, self-awareness and communication for the Hungarian participants, for the first time in Hungary, based on the English model. The interactive elements and the regular, thought-provoking home exercises given during the one and a half year of the project set



challenges to every participant, making them overcome their passivity. The related international project meetings gave participants inspiration, ideas and a new approach in their artistic work, while, away from their usual environment, their self-confidence increased in handling new situations.

We continuously worked on the structure of the equal opportunities training, keeping constant contact with the 12-15 permanent participants and the project partners. We also involved volunteers in collecting intellectual material and articles for the closing exhibition. We organized international exchange visits and the closing event in Budapest. Our work was reported in the *Liveable World* programme of Radio Kossuth.

During our cooperation, we gained a lot of institutional, human and professional experience. At the meetings, we tried to learn not only about those aspects of the work conducted in the partner countries which were directly related to the project work, but also some other angles of it, continuously keeping in mind the key question: what led to the current view of our target group, what can we learn from each other, how can we hold a mirror to each other and what action plan can we draw up to achieve truly equal opportunities? How can cultural characteristics contribute to achieving this objective?

Of the most important elements of methodology, we should primarily mention shadowing, that is, the monitoring of the work done by institutional employees, adult students and decision makers, interactive trainings, making interviews and writing logs (*One day of a person living with a disability*) and personal experience tasks.

The direct target group of the project were adults living with disabilities, as well as their teachers and nurses. The direct target group also included certain institutional communities, decision makers, and last but not least, the 'broad public' itself, the society. We contacted them in announcements forwarded through the umbrella organizations of those living with a disability, based on existing institutional and volunteer working relations, via web-based newsletters, on the telephone or personally.

The needs arising included personality development, mainly the development of self-confidence and communication skills, learning about other cultures, assuming community roles, learning about the 'invisible' culture, the social model of disability (according to which the social circumstances make someone disabled, which can be changed).

The project was successfully completed, and the goals achieved are documented by the closing exhibition, as well as by a film based on interviews with the participants. The results can also be measured in the participants' personal lives; there is continuous social feedback from the media as well as from various educational institutions. The impact of our thought-provoking exhibition and the efficiency of the international cooperation are also verified by our guestbook.

We should highlight the active participation of the Hungarian participants, which exceeded all expectations, as well as their commitment to continuing the work for equal opportunities (many expressed their intentions to become trainers). I encountered astonishing creativity during the improvisational exercises and the international creative work. We also created a mailing list, through which we will organize further trainings and keep contact.

The project has brought many actual changes and positive developments into the participants' lives. One participant who is hard of hearing has found employment, another one who is visually impaired was elected into the committee for equal opportunities in Debrecen, and a physically disabled participant found a part-time job. One of our students was able to establish his first relationship, due to his increased self-confidence and communication skills.

Our institution was contacted by the media on several occasions, we have joined the work of 'Rolldance' wheel chair dance group, and we also organize further trainings. I, personally, have been given an

opportunity to spend half a year in England from October, to acquire further professional competences as a Grundtvig assistant.

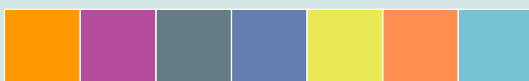
The initiative was clearly innovative in Hungary, because it provided those living with disabilities (and not their teachers or the relevant institutions) an opportunity to participate in an equal opportunities training. Despite its small scale, the closing exhibition was organized with the invaluable professional help and support of the Hungarian National Museum. From recruiting to assessment, the target group was fully involved in the process, and none of the disadvantaged groups were excluded; moreover, they were equally represented among the participants (from those with sensory disabilities to the psychosocially disadvantaged).

The project has also brought some important lessons for other applicants and the entire field:

- They should not be afraid to support innovative initiatives; they should prepare a preliminary needs analysis and ensure continuous monitoring.
- The representative bodies of those living with disabilities should not only represent the interests of their own direct target groups, but seek efficient cooperation.
- Adult training organizations should ensure trainings which are accessible not only from a physical, but also from an infocommunication point of view, thus contributing to a more human scale, more liveable society.

ORSOLYA VÉGH  
*Project Coordinator*





OKTATÁSI ÉS KULTURÁLIS MINISZTERIUM

OKM