It was in the 1950s when it was my turn to go to school. It was great. What a joy. For the first time there was an expert trying to teach me all the letters and words in a certain order. (I never understood why I had to copy my Dutch teacher’s order of AAP, NOOT, MIES etc.) The louder they were said, the better and these teachers checked. My voice was excellent and what I shouted (boys!) was not so important. That was the beginning of my school career.

Later (aged 7 or 8) at the beginning of a new ‘academic’ year, all of a sudden there were three black guys in our classroom. Actually it started, that first day, with two as the third one was late, not being very familiar with the route to get to school. I had never seen black guys before except for some drawings about some children - a white one and a black one - with enormous lips.

Well, that was not the case with the three in my classroom, so there were no connections between drawings (stories) and reality. Two of them came from Indonesia and one from Surinam. The Indonesians were real refugee children. The Dutch had been fighting a colonial war over there and these families could escape from that and left for the (former) colonial ‘home’ country. A lot of us were curious about them and wanted to play with them all day asking whatever came up in our minds. (Racism did not exist at that time…?)

I was even invited to one of the families to have dinner with them. That was really exciting. I remember I was very nervous the evening I went there as, at that time, parents did not take you! It was an evening I never forgot and until now I know exactly how they received me and what the food was like (very strange).

There was only one who was obviously not curious, or acted as if he were not - that was the teacher.

Gerard de Kruif
Editor
International studies show that many Swedish teens lack basic reading skills and have below-average results in reading comprehension tests. How is it possible to work with teenagers in the classroom to increase and improve their reading comprehension skills?

We work at Nobel Upper Secondary School, a large vocational school in Karlstad, Sweden, with a high proportion of young people who have Swedish as a second language and/or students with reading and writing difficulties. These students need a comprehensive and systematic training to improve their reading and thereby increase their chances to participate fully in a democratic society.

In our classroom with teenagers, aged from 15 to 20 years old, we work systematically with different reading strategies and methods to improve the reading comprehension. In this article we would like to share a few of the methods that we have found useful and successful with our own pupils.

One efficient tool is the Venn diagram, which helps pupils finding and distinguishing similarities and differences between certain aspects in the text. We use Venn diagrams on both fictional and non-fictional texts, when comparing for example two religions, two countries or two fictional characters.

A Venn diagram is two circles, overlapping each other (see image). When reading the text, the pupils put the characteristics for one aspect in the first circle and the characteristics for the other aspect in the second circle. In the overlapping part, they put the facts that are similar for both aspects.

This simple tool really helps the pupils to sort the facts in a text, providing them with a structure and helping them understand how to organize the information.

Close Reading is another method, frequently used in our classrooms, especially when working with fictional texts like short stories and novels. The method helps the pupils to understand the text, both literally and metaphorically and after a few “close reading sessions” in the classroom, students become more observant and confident when reading on their own.

We usually divide the text into short paragraphs in a Powerpoint and then display one paragraph at a time during the lesson (see image). Each paragraph is then carefully scrutinized and reflected upon by the class, first individually and then in pairs: What do these words mean? Any double meanings? Reactions? Images in your head? What may have happened in the past? What might happen next?

Finally the teacher summarizes the discussion, before moving on to the next paragraph. Thus, the pupils realize that there are several nuances in a text and that there is sometimes a difference between what is explicit and what is left out. Moreover, there are different ways of understanding a text, depending on the reader’s experience and knowledge; the discussions in pairs and groups broaden our students’ horizons.

The method works for all languages and levels from basic to proficient users. Working together with close reading in the classroom makes our pupils more active as readers, which turns them into better readers.

Finally we would like to stress the importance of the teacher working together with the pupils in the classroom when introducing these tools. In upper secondary school we sometimes assume that our students are old enough to know and understand certain things on their own. However, reading comprehension has very little to do with age; it has to do with practice.

Our job must be to teach them reading strategies regardless of whether our subject is History, Biology or English. We all need to help our pupils to find the right methods to comprehend texts, no matter how old students are or what subjects they are studying. Reading is so much more than decoding text.

Susanne Mellerskog
Lead teacher
susanne.mellerskog@karlstad.se

Ingegerd Norder
Lead teacher
ingegerd.maj.norder@karlstad.se

The boy lay on the sidewalk bleeding in the rain.

“Reading is so much more than decoding text.”
The students wanted to show appreciation to the teachers and staff within their school. The Student Council prepared a card for the Senior Management Team (SMT), teachers and Learning Support Assistants (LSAs). The wording on the card read “Thanks for turning me into such a smartie!” The Student Councillors had a tough job to inform all the students about this idea without letting the staff know about it. They urged them to keep it as a surprise until the cards were delivered during assembly. In fact, during PSCD lessons the students in each class were given time to sign on their teacher’s/LSA’s cards. The Student Councillors represented all the students by signing the SMT’s cards.

Student Councils form part of non-formal citizenship education in state Maltese schools. They serve to engage students in learning about democracy and instil in them various skills, such as leadership skills, negotiation skills, teamwork and others.

Students in a Student Council are elected by their peers through a democratic election process. Canvassing takes place a few weeks before the election. Nominees promote themselves by preparing posters which are exhibited in a prominent place in school and also by speaking in front of their school mates in order to persuade them to vote for them. On the Election Day, the students in the junior classes of the school vote for their preferred nominees.

The counting of votes takes place in the Head’s office and is done by students who are not nominees. The nominated students with the majority of votes are elected in the Student Council. The students are prepared for this process beforehand during Personal, Social and Career Development (PSCD) lessons through hands on tasks. The process allows all students to truly experience the democratic process that takes place when there is an election.

On the first Student Council meeting, roles such as the President, Vice President, Secretary and Public Relations Officer (PRO) are assigned or voted on within the Student Council and under the supervision of the PSCD teachers. The Student Council meets regularly to discuss the students’ ideas, interests and concerns.

One of the main tasks of the Student Councillors is that of listening to their peers and putting forward their ideas during the Student Council meetings. Hence the Student Council acts as the voice of the students in front of the school administration and staff.

During the scholastic year, the Student Council organizes various activities for the whole student population. These activities vary from fun, fundraising and educational ones. This year the Student Council members came up with an innovative idea, that of highlighting the teachers’ work and effort which sometimes can be taken for granted by the students themselves. The students wanted to show appreciation to the teachers and staff within their school. The Student Council prepared a card for the Senior Management Team (SMT), teachers and Learning Support Assistants (LSAs). The wording on the card read “Thanks for turning me into such a smartie!” The Student Councillors had a tough job to inform all the students about this idea without letting the staff know about it.

They urged them to keep it as a surprise until the cards were delivered during assembly. In fact, during PSCD lessons the students in each class were given time to sign on their teacher’s/LSA’s cards. The Student Councillors represented all the students by signing the SMT’s cards.

Teacher Appreciation Activity
small packet of smarties was attached by a ribbon to the card. These cards were then given to the staff during the assembly in a cheerful atmosphere.

The staff were pleasantly surprised by the gift and appreciated the thought, the effort and the appreciation shown by the students. This activity not only helped students develop important values and skills but also helped to strengthen the bond between the students and the staff.

Ms Karen Borg
karen.borg.2@ilearn.edu.mt
Postal Address:
15 Point Str, Zebug, Gozo, Malta

Ms Jacqueline Camilleri
jacqueline.camilleri@ilearn.edu.mt
Postal Address
‘Ave Maria’, St Bert Street, Xewkija, Gozo, Malta

Both PSCD teachers within the Gozo College in Malta
Empowering the Teacher of Tomorrow
Welcome to the 11th International Conference
Tallinn, Estonia 22-24 September 2016
www.learningteacher.eu/tallinn-conference-2016

The Learning Teacher Network’s 11th International Conference will be held at the Nordic Hotel Forum in Tallinn, Estonia on 22-24 September, 2016 with the title ‘Empowering the Teacher of Tomorrow’.

The International Conference will elaborate on how to empower and build capacity of ‘The Teacher of Tomorrow’ for inspiring and successful teaching and learning today and tomorrow. The underpinning perspective of the conference will be - in line with the Global Action Programme - to embrace knowledge, skills, values and attitudes that empower learners and schools/teacher education to learn and educate for sustainable development.

All are welcome to take part in this inspiring international conference of the year!

Venue
The new, modern Nordic Hotel Forum four-star business and conference hotel is situated in the heart of Tallinn on Viru Square, just a short stroll from business, shopping and entertainment venues. Tallinn’s picturesque Old Town is just 150 metres ‘around the corner’. The hotel rooms are modern, spacious, and with free WiFi.

Speakers
Ms Irmeli Halinen, Head of Curriculum Development, Finnish National Board of Education, Helsinki, Finland: ‘Collaborating to create a relevant curricula based on well-being for all in 21st Century Finland’.

Prof. Charles Hopkins, UNESCO Chair, York University, Toronto, Canada: ‘The crucial role of ESD in achieving the Sustainable Development Goals: Key new essential aspects for Education 2030’

Mr. Alexander Leicht, Chief of Section of Education for Sustainable Development and Global Citizenship, UNESCO, Paris: ‘Scaling up ESD - implementing the UNESCO Global Action Programme’ (tbc)

Dr Elena Cavagnaro, Stenden University of Applied Sciences, Leeuwarden, the Netherlands: ‘Being human, sustainability from the inside out’.

In addition to the keynote plenary sessions, the Friday and Saturday conference programme is composed of 55 sessions, where a large number of colleagues from pre-schools, schools, teacher education, universities, NGO’s and other educational organisations will share their knowledge, experience, methods and good practice.

The many parallel sessions offer a wide range of stimulating topics for discussion and dialogue, for engaging, exchanging know-how.

Register now
The registration period is open. Until today 138 colleagues from 23 countries have decided to participate and take part in the event. We expect and warmly welcome more colleagues. Take the opportunity to learn, network, and enjoy with international colleagues!

Register now for the conference, join the event and meet colleagues from and beyond Europe to be inspired, find new connections, and gain new knowledge at this appreciated international event.

Register on-line on www.learningteacher.eu/tallinn-conference-registration
"Little butterflies" and eTwinning project
- Example from Croatia

The national curriculum for early and preschool education from the beginning of 2015 contains guidelines for the creation of teaching practice. The curriculum is directed towards child wellbeing that can be achieved through a carefully designed planned education and upbringing process. The learning process becomes more important than individual goals.

In accordance with European Commission recommendations, the curriculum equally defines key competencies as well as their development in children. These competencies are developmental and need to be continually followed up. How much a child is successful in certain activities depends on various competencies therefore they need to be looked upon as a whole.

One of the key competencies is the digital one which we would like to discuss in this text among other things. Kindergarten Varaždin is located in the north-western part of Croatia and approximately 800 children attend it. 80 kindergarten teachers work there and one of the kindergarten groups is "Little butterflies".

This group is involved in a variety of activities and the link between their usual everyday activities and digital competencies is represented by eTwinning projects. eTwinning is a free online platform with more than 360,000 teachers from European countries registered and active in more than 48,000 projects. This platform is completely safe for its users, which is of extreme importance since all the activities involve children. Teachers are free to share their ideas here, find new ideas and collaborate in projects which they are able to choose based on their interest and activities of children in their group.

The Kindergarten group "Little butterflies" is involved in two international projects:
1. “Spinning in the garden” with schools from Slovenia and Croatia,
2. “Music, kids and play” with kindergartens from Czech, Slovak, Slovenia, and Poland.

Both projects enable children to connect with other children from Europe through their everyday activities. Projects take place in the virtual world of eTwinning which enables children to acquire digital competencies by using ICT.

Firstly, children conduct a number of activities (drawing the flag of the country they come from, learning nursery rhymes in the languages of the rest of project participants, creating nursery rhyme illustrations, creating greeting cards) and afterwards they take photos of their work, record videos showcasing their singing abilities and solve quizzes on eTwinning.

In the project, children use various web 2.0 tools appropriate to their chronological and developmental age. By using the program Comix/ they create comic books with nursery rhyme lyrics which they present to friends from Europe.

Even though this platform is virtual, children acquire concrete and key competencies for lifelong learning. Therefore, by learning nursery rhymes in the languages of other project participants, children acquire language competency due to communication in foreign languages (Slovenian, Slovakian, Polish and Czech). Greeting cards that children made were sent by post to other countries so this was a possibility for them to go on a little trip in the centre of Varaždin town.

This way, children had an opportunity to learn how road traffic functions and how post functions in the country and abroad. Within the project, children had a chance to use the program Quizizz http://quizizz.com/ which allows solving easy tasks in a fun way.

Materials were uploaded to the eTwinning platform with the help of the program Padlet https://padlet.com/ which is also easy to use and allows children direct involvement with ICT. We believe that digital competence acquisition is of great importance, especially in the context of labour market in which today’s five-year-olds will actively participate in fifteen years.

The uncertainty of the future requires the development of many competencies to enable our children to have active participation in the European labour market which we belong to today through development of their skills, attitudes and values.

The multicultural environment of an eTwinning portal gives us added value through collaboration with friends from all around Europe.

Andreja Sedlar, mag.praesc.educ. sedlar.andreja@gmail.com
Kindergarten Varaždin, Croatia
http://quizizz.com/
https://padlet.com/
http://www.makebeliefscomix.com/Comix/
Innovating English Board Games in the Classroom to get children talking in English

That sounds like a paradox, doesn’t it? A board game that is considered to be innovating? In our childhood, the whole family used to gather around the table to play a board game!

Well, the jury of the European Language Label 2014 awarded “Bang the Button!!!” as being an innovating, creative and internationally-orientated project.

There are lots of games and ideas on the Internet, but there are hardly any ready-to-use games that are immediately available in a classroom. For children it is important to speak in English in language classes, putting into practice what they have learned and having a lot of fun.

For these reasons a board game was developed - a game focused on oral skills - especially speaking. In EFL (English as a Foreign Language) teaching, speaking is most important and incentivising/motivating but, on the other hand, the hardest skill to train in the classroom. Some reasons for that are as follows:

• Classes are big
• Having pupils talk in pairs is difficult to control. (While you listen to one pair, what do the others do?)
• Interviews are often unnatural and don’t make much sense (e.g. asking your best friend about his hobbies)
• Roleplays may be fun but preparing them is quite time consuming and the programme is extensive, right?
• In spite of the CEFR (Common European Framework of Reference for Languages), so useful for the indication of a level, it is still difficult to find a game that has a clearly defined level.

There are four levels of this board game available (Starters Zero for the very beginners, Starters 1 (pre A1 - CEFR), A1 and A2) and the games are played in hundreds of schools in the Netherlands, Belgium, France, Portugal and Germany.

About the the game “Bang the Button!!!”
The game “Bang the Button!!!” is absolutely unique because it involves all the skills and acquired knowledge that learners at a certain level are supposed to master and consequently the game includes vocabulary, grammar, communication, culture and some movement.

The game guarantees constant interaction and participation of all players with a healthy dose of competition.

It is played by 3-6 players and consists of a gameboard, a dice, a pawn, a battery-operated light button, 175 cards (in 4 categories: vocabulary, grammar, communication/culture and movement) with questions and answers and 6 individual scoreboards with 6 markers each.

The game can be used as a complement to any method (digital or more traditional) that is used in the classroom and is
a must for those who share the idea that the practice of speaking and listening is essential in English class.

**How “Bang the Button!!!” is played**
The question cards and the light button are placed on the indicated spots on the board and the pawn is placed on “Start”. Every player gets his own scoreboard with markers. The players take turns in rolling the dice and read out a question of the category where the pawn lands.

The first player who hits the button, may answer the question. The player with the card checks the answer (written at the bottom of the card): If the answer is correct, the player may put one marker on his scoreboard.

The first player who completes his scoreboard is the winner.

**Do the games really work?**
Yes, they do: children get really involved while playing because the level of the game, based on the Common European Framework of Reference for Languages, is the level they can play. What they have learnt (e.g. A1 level) is what’s in the game. The light button is magic: pupils don’t get their answer over; they have to be quick. The game is completely in English and ready for use in any school in any country. It is a really useful complement to any method that is used in the classroom.

Jet Hiensch
Developer of “Bang the Button!!!”
bangthebutton1@gmail.com
Today’s Estonian educational paradigm is fully focused on a learner-based teaching. Teachers are motivated to mix “extracurricular education with formal education and teaching outside of the school environment (in companies, youth centres, nature and environment centres, museums, libraries, and other cultural institutions) to enrich the learning process”. (Estonian Lifelong Learning Strategy 2020: This is an “open access” for NGOs (Non-Governmental Organizations) to support students’ and teachers’ social and personal growth on sustainable and global education.)

**SDG4**

What support NGOs should give to teachers reinforcing their professional skills for sustainable education?

SDG goal 4 outlines that “by 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development” (Sustainable Development Goals).

From the viewpoint of an organisation devoted to global education, teachers need practical and interactive teaching materials to shape the students’ values and attitudes toward sustainable development.

Teachers are, for example, happy to participate in creative workshops with an intercultural aspect to improve their own teaching styles to a more student-centered and transforming direction. However, sometimes this involves studying and changing one’s own values and attitudes as a teacher and individual.

Teachers are more confident in their teaching if they know that there are NGOs who arrange seminars and workshops on

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**How NGOs can reinforce teachers’ professional skills for sustainable education**

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Photo: Maari Ross
actual global issues. Today’s world is more complicated than we hear or see from media and the teachers’ main task is to help young people to orient in the diverse world.

Networking
Both schools and NGOs need to make clear their expectations and aims regarding the activities they plan to deliver inside or outside the classroom. Sometimes there is still a gap between the formal and informal education sectors but we see that the gap is just the lack of communication between educational institutions and NGOs.

The working networks between NGOs, schools and universities is a good start for the student teachers to get more involved in the practical learning process.

At the school level, support from the school administration is important for getting teachers on board and motivated in delivering projects and classes with a global dimension. There is always a lack of up-to-date teaching materials that help to create connections and shape value judgements on sustainable education.

Our task in Mondo has been to offer teachers various kinds of support though preparing materials and methods, training teachers and youth workers, advocating for ESD (Education for Sustainable Development) and global education among education administration and school principals and engaging young people in projects and campaigns.

Our experience shows that youth activism toward sustainable life and the practical personal choices young people make during their everyday life are based on critical thinking and their knowledge of global issues.

We would like to share our knowledge with you at The Tallinn Conference and start a discussion about how and why NGOs should support teachers to integrate sustainable development education issues into school curriculum.

Johanna Helin
mondo@mondo.org.ee
and Mari-Kätrin Kinks
mari@mondo.org.ee
NGO Mondo, Tallinn, Estonia
The Language Platform for Learning French

An earlier contribution presented the “Language Platform” of www.linguacluster.org: its birth, novelties in the language teaching approach and its content. Hereafter, the author explains how to use the platform as an instrument for testing and learning French, then gives a rough sketch of possible future developments.

This immense amount of work provides the following selection algorithm:

1. Language - culture
2. Source language: Dutch, French, German, English, Italian, Spanish
3. Target language: French, German, Dutch
4. CEF (Common European Framework of Reference for Languages) level: one single level or a combination of levels
5. Work mode (1): test, exercise or ‘learning path’
7. Work mode (2): written, oral, written-oral

Thanks to all these features, the ‘exercise’ mode makes the site a learning instrument of a brand new kind.

The following table shows the number of Multiple Choice Questions for each linguistic aspect, for each CEF level and the number of written and oral exercises tests.

<table>
<thead>
<tr>
<th>Linguistic aspect</th>
<th>CEF</th>
<th>Oral</th>
<th>Written</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammar-Spelling</td>
<td>1301</td>
<td>1520</td>
<td>1948</td>
</tr>
<tr>
<td>Morphology</td>
<td>592</td>
<td>A2</td>
<td>5450</td>
</tr>
<tr>
<td>Syntax</td>
<td>463</td>
<td>B1</td>
<td>2185</td>
</tr>
<tr>
<td>Microconversation / dialogue</td>
<td>1093</td>
<td>B2</td>
<td>1343</td>
</tr>
<tr>
<td>Pronunciation</td>
<td>91</td>
<td>C1</td>
<td>911</td>
</tr>
<tr>
<td>Expressions, Collocations</td>
<td>2055</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocabulary: signification</td>
<td>2772</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocabulary: formation</td>
<td>74</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In “test” mode, the program provides at the end the final result and the time spent to finish the test. This result depends on three factors:

- The number of right answers
- The time spent compared with the average time experimental groups needed
- The CEF level

In the case of a simple test, one has access to the false answers and can try again. A new selection based on the same selection criteria and even a totally new selection are also possible.

Participants in a contest can register their score and, in the near future, they can also see in real time the results of their competitors, creating in that way a healthy emulation.

A simple request to the webmaster creates the possibility of organising one’s own local, regional, national contest, and this is totally free. Thirteen years ago, this facility was the starting point of the yearly “Tournoi Mondial de Français par Internet”, a worldwide contest for French for youngsters (from 12-24 years) via the Internet.

The ‘learning path’ mode opens the way to thematic lexical or grammatical selections of exercises in order to allow the learner to train his knowledge of specific topics of vocabulary or grammar.

At the start, the screen is divided in two parts: a language part and at the right side a ‘cultural’ illustration the learner can hide if he wishes so. (cont’d next page)
VISIS

When it comes to taking the Sustainable Development Goals (SDGs) from vision to action, having a framework or methodology to work with along that journey is of great advantage.

VISIS is an open-source methodology for doing sustainable development.

The VISIS Method was originally developed by Alan AtKisson in the 1990s to support sustainable development efforts in city and regional planning. Today, VISIS is widely applied in a variety of sectors — business, government, education and research — around the world as a framework for sustainability planning, training, and stakeholder facilitation. It has also been used by the United Nations and will be included in a toolbox of methods now being prepared by the UN.

VISIS stands for Vision > Indicators > Systems > Innovation > Strategy. These are the five critical steps in a sequenced, iterative process of goal-setting, assessment, analysis, initiative development, and planning, in a sustainable development context.

Read more on http://17goals.org/visis-methodology-for-sustainable-development/

(cont'd) The upper left circle allows for changing the language of the assignment. Clicking the audio symbol activates the spoken version of the exercise. Down, from left to right, the key gives access to the correct answer, the ear eliminates the written version of the exercise, the symbol «I» sends for feedback, the spacebar serves for the navigation (e.g. the following exercise, the pop-up ‘navigation’).

At the right side, the question mark explains the assignment; with the envelope the user sends a message to the webmaster and the open book gives access to the dictionary.

Perspectives and challenges

Interculturalists and CAL-UHasselt still have a lot of ideas to enrich the existing “Language Platform” even more by means of various projects:

- Encode each year the 375 new MCQ written for *OLYFRAN by the Flemish interuniversity commissions and add them to the 'Language Platform'.
- Add a functionality 'Record' in order to make the site an even more performance training instrument for the learner’s spoken French.
- Add more oral accents in order to better present the rich variety of the ‘francophonie’.
- Enlarge the section ‘Cultures Francophones’ now limited to the Walloon, especially Liege culture, by deepening the topic of communicative culture and by adding illustrations of all the French speaking countries. Here, the ‘Language Platform’ partners had to ascertain that for the subject ‘Communicative Culture’, a lot of work still has to be done. So, a complete taxonomy, a usable framework of ‘Communicative Culture’ is still missing.
- Finalise the already available source languages (Spanish, Italian, English, German).
- Add new source languages (Russian, Chinese?).

Willy Clijsters
Universiteit Hasselt
willy.clijsters@uhasselt.be

*OLYFRAN “Les Olympiades du Français et de la Francophonie”.

www.linguacluster.org
www.uhasselt.be/ic
www.olyfran.org

ESD/GAP Conference in Palermo, Sicily, Italy

The Learning Teacher Network’s 3rd International GAP/ESD Conference will be held at the charming four star Grand Hotel Et Des Palmes in Palermo, Sicily, Italy on 19-21 January 2017.

The title of the international seminar is ‘Integrating Education into Sustainable Development’.

With input from internationally recognized experts and interactive discussions among the participants, the Palermo Conference will explore, learn more and elaborate on how schools and teacher education institutions can

a) integrate education into sustainable development, and
b) integrate sustainable development into education.

The registration period is open and the organisers wish you very welcome to Palermo for this inspiring event.

The conference programme will be published on the website during summer.

Early conference information on www.learningteacher.eu/palermo-conference-2017

The Learning Teacher Magazine 2/2016 13
Can innovative learning applications influence the students’ attitudes towards science? The case of digital games.

It has been observed in recent years that students are drawn away from science. This is due to the difficulty of the subject, the non-connection of what they learn to real life and the fact that students do not learn how to “do science” but rather how to “solve some equations”.

In our attempt to alter this situation, the tool being used is Kodu Game Lab software. By using this program, students are able to design their own digital game. They can decide what the scenery will look like, the gameplay, the heroes, the goal etc. By creating their own game, students realize that they need scientific knowledge such as mass, velocity, gravity, geometrical optics etc.

In order to create their own world and they express and explore fundamental computer science concepts. Kodu has also been used in much research showing some promising results in improving the motivation for learning programming concepts.

The main educational method being used in our research is learning by inquiry because we believe that children may reach higher levels of understanding science when they perform structured investigations. In this work, we examine how students’ attitudes towards science are influenced by innovative learning applications such as digital games’ programming.

The study implemented a ten-hour program in the first grade of secondary school (12 year old students) in Platon School of Katerini, Greece. 30 students participated and worked in groups of two. We started by having a discussion about how the computer “thinks” and how we should “talk” to it in order for it to understand us. The programming is really easy and based on “when-do”. Kodu includes a novel graphical programming environment based on a concurrent rule system without any code-writing involved. The students continued by accomplishing simple tasks and as the implementation moved on, the tasks got more and more elaborate and the help given was less and less (inquiry method).

Through this procedure, the students came across with concepts and practices not only about science but STEM (Science, Technology, Engineering and Mathematics) in general.

The great thing with this implementation is that students try to make different games, which sometimes get really complicated and difficult to win. They are motivated as every group had to play the other’s group game and there becomes a competition of who created the best (most interesting) game. Though the graphics employed were simple, the point is that students played with something that they have created by themselves.

In order to check the impact of our method on students’ attitudes toward science, a 14 question, Likert-scale, questionnaire was given to students before the course (pre-test) and at the end of it (post-test). Statistical analysis indicated that after the intervention, students had started to observe more closely natural phenomena and tried to find out why they happen.

Additionally, they also read more science-related articles in the local press, thought that the science class was easier, expressed their willingness for more active participation in the science class and had a more positive attitude towards science in general. It seems like innovative learning applications, in this case digital games programming, can influence the students’ attitudes towards science.

Our preliminary results are very encouraging; we would like to continue this work, with more students, in order to validate our findings.

Batzogiannis Ilias
iliasbatzo@yahoo.gr
Educational Physics Researcher
P technologies
Greece

Hatzikraniotis Evripidis
evris@physics.auth.gr
Associate Professor, Physics Department, AUTH
Greece

Papadopoulos Anestis
mail@platon.edu.gr
Headmaster of Platon School of Katerini
Greece

Papavramidis Filaretos
filaretus13@yahoo.gr
ICT Teacher
Platon School of Katerini
Greece
ESD (Education for Sustainable Development) is seen as a key towards a more sustainable future. For me, one of the most important aspects of ESD is active participation in meaningful local issues. Participation should not have an age limit. Therefore, when children aged 3-7 spend most of their time in kindergartens, then ESD in early years translates as children’s active participation in every day kindergarten practices.

I explored the views on sustainability of in-service student kindergarten teachers during a sustainability course. I asked the participants of the course to keep a reflective diary about their everyday kindergarten practice. I was interested to see (un-)sustainability in practice. More specifically, I was interested to see how children are viewed and how they can participate in everyday kindergarten practice.

Children are not treated as equal partners
Children were regarded as passive recipients of everyday teaching activities, not active participants in their own learning activities. As a rule, they were not involved in the planning processes, and the teachers planned the activities based on their own experiences. Very few teachers took the initiative to listen to children, and plan the activities based on the interests of children.

One teacher explains the prevalent situation: “I myself am most disturbed by the attitude that we still have towards children. The view that children do not know anything is still very deeply rooted in teachers, and we as adults do not give them any options and still do not treat children as equal partners”.

The overall view was that children are the citizens of the future, not citizens here and now. Teachers regarded their role of educating the future change makers very highly, but did not necessarily regard the children as ready to participate in this role as children.

Listen and act
In most kindergartens under study, participation meant that children were allowed to take part in everyday tasks and chores, like raking of the leaves, snow shoveling, waste management, etc. Teachers saw this also as an opportunity to nurture sustainable behaviors, or routines.

On many occasions, children also participated in various sustainability-related projects and competitions. In some cases, children were also involved in planning and initiating sustainable routines.

A good example of letting children take the initiative was the creation of a paper drawer. One teacher noted that during a lesson on garbage, the children came to the idea of sorting the waste themselves. For this purpose, the teachers cleared one big drawer, which was labelled “paper waste”. The teacher noted that the children were very happy to take the full responsibility for the sorting and emptying of the paper drawer.

It has been shown that participation of children depends highly on the opportunities that are created for them by adults, so changing the view of teachers regarding children should be one of the most important tasks for teacher educators. Otherwise children will not become active and responsible citizens, neither now nor in the future, and they will assume a passive role early in their life.

This also means that the opportunities or options given to children need to be meaningful, so as to not discourage participation in the future, when children see that their opinions are not taken seriously. In this study, the children were widely perceived as being creative, so, why not also involve them as creative consultants to bring out novel ideas and innovations, for which we are in desperate need in the present time.

Marianne Lind
marianne.lind@ut.ee
Junior researcher at University of Tartu Tartu, Estonia
Since the spring of 2016 Cityplot, an urban gardening co-operative, has been giving weekly workshops for children at a refugee shelter in Amsterdam. This combination has led to some very rewarding work as we have been witness to the merging of the educational with the therapeutic.

In the beginning, the workshops were more education-oriented but we quickly realized that following a set curriculum was not the best approach for the situation. What the children needed was a more fluid environment where the priority was instead on playful interaction among themselves and adults. We learned that without the basic structure of a safe place, nothing else could develop.

Creating this trust gave us the first hand experience of addressing the heart of their situation, which is a profound displacement. With them we are reminded that physical displacement has deep reverberations for our internal sense of place, for our intimate sense of belonging. And we are able to witness that for this type of foundation work - building this sense - the body has a central role. In our experience, certain activities have taken clear precedence over others:

**Sitting together**
Spending time on the ground allowed for a different type of experience compared to standing or sitting in chairs. For example, on the ground the children who were more insecure could more naturally lean on an adult and feel their support, along with the ground support under them. From this position, they could also easily transition into lying down, which engages more awareness from the body.

Playing games on the ground and drawing with chalk on the ground was also a favourite activity. On the ground, every-

**Climbing**
Climbing to higher levels clearly gave them a heightened sense of place and self. Equally important was that they got recognition for their climbing, from being seen in this special place. We could see very basic phrases working wonders for them: “Wow, look at you! You’re so high!”

**Sensory play**
Without fail, playing with water, soil and sand has a way of heightening the senses and grounding experience. The children loved to dig and get their hands in the dirt, to smell it and find the bugs crawling within. Through such activities the body learns, at a primary level, to connect with its surroundings.

**Working together**
The older children were always eager to jump in and get a big job done. Whether it was building plant containers or fetching water, they were ready to be part of a team. In this way, you could see their sense of place extending into the social.

**Eating together**
The biggest joy for everyone was the pleasure of preparing food and eating together. The children cut vegetables, shared in the stirring, set down the blanket for the picnic and so on. And one lucky child always got to do the serving. This
was a big honour, to serve others and they always did it with great pride. Sitting on the ground and sharing meals will definitely be a lasting memory for children and adults alike.

For all of these activities to work however, it required that we have a small team of committed volunteers so that the children could learn to expect the return of familiar faces. Repetition and ritual are key for the work of building a lasting sense of trust and safety. It is then upon this grounded feeling that the seeds of curiosity about the world, in an intellectual way, can be planted and find their growth.

Eva Burke

Eva Burke is a philosophy researcher at The Global Center for Advanced Studies, the Netherlands, where she studies the relationship between the mind and body. She welcomes contact and conversation via evacburke@gmail.com

With them we are reminded that physical displacement has deep reverberations for our internal sense of place, for our intimate sense of belonging.
In the previous edition of the magazine an article was published, discussing the efforts of Geography teacher Dennis Hunink to use the modern technological possibilities of Geographic Information Systems to enhance the learning outcomes of students mastering mandatory Topography. While the resulting free teaching method Topografie in de Klas had been a success for a few years now, the GIS technology used in Topografie in de Klas brings possibilities to education that go far beyond ‘just’ learning topography.

With the success of Topografie in de Klas, Hunink began to explore options for his students to use this GIS technology, ArcGIS Online, in the field as well. “I had been using the Collector app with ArcGIS Online for 2-3 years in my classes, but wanted to set up a formal program that could be used by other teachers,” said Hunink.

In early 2015, he completed Veldwerk 2.0, a Collector for ArcGIS concept that allows students to take their smart devices outside and follow a displayed map for their required fieldwork exercises. The map includes markers at specified locations that prompt questions about the location which the students are required to answer online. Their progress is tracked by the teacher. Like Topografie in de Klas, Veldwerk 2.0 provides a digital version of an existing course requirement in Dutch schools.

“Implementing GIS this way works well in our educational system here in the Netherlands,” says Hunink. “The teachers are familiar with the existing coursework and it is an easy step for them to use digital maps rather than printed ones. They don’t feel intimidated by a GIS program. Hopefully, by building their confidence in this way, both the teachers and students will begin to create their own content with ArcGIS Online.”

To expand the use of Veldwerk 2.0, Hunink and Esri Nederland began to collaborate. Hunink teaches the Veldwerk 2.0 workshops in a classroom provided by Esri Nederland. The company also publicizes the workshops as an official course. Today, approximately 40 teachers from 20 different schools have completed the workshop and are using Veldwerk 2.0 in their classes.

“We started working with Dennis during the spring of 2015,” said Dene Mastwijk, Marketing Developer at Esri Nederland. “We host Veldwerk 2.0 workshops throughout the year, so that teachers can learn how to use ArcGIS Online and implement it into their students’ fieldwork exercises. After a teacher has completed the workshop, their school receives free access to their own ArcGIS Online Organization Account for a year. By taking annual webinars online, the school can retain its free license after the initial one year period.”

On a recent visit to Develstein College, Alida Oppers, Director-General of Primary and Secondary Education in the Netherlands was given a demonstration of Veldwerk 2.0 by Hunink’s students. “This is great example how innovative technology can be used in education,” was Oppers observation. “It makes classwork more visual and allows students to experiment. This type of education is effective because the students remember the lessons much better and they get the opportunity to reinforce their lessons outside of the classroom.”

This article is an edited version of an original written by Jim Baumann, Esri

Dennis Hunink
dennishunink@me.com
The 2030 Agenda for Sustainable Development

The 17 Sustainable Development Goals and 169 targets set forth by the United Nations demonstrate the scale and ambition of this new universal Agenda. They seek to build on the Millennium Development Goals and complete what they did not achieve. They are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental.

This year the Global Goals for Sustainable Development come into effect to achieve three extraordinary things by 2030 - end poverty, combat climate change and fight injustice and inequality.

The Goals and targets will stimulate action over the next 15 years in areas of critical importance for humanity and the planet.

Goal 4 is Quality Education, to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Sustainable Development is now to be defined by the five P’s: People, Prosperity, Peace, Partnership, and Planet.

Link to the United Nation website with the Sustainable Development Goals (SDG’s)

The Sustainable Development Goals (SDG’s)

Goal 1: End poverty in all its forms everywhere
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3: Ensure healthy lives and promote well-being for all at all ages
Goal 4: Ensure inclusive and quality education for all and promote lifelong learning
Goal 5: Achieve gender equality and empower all women and girls
Goal 6: Ensure access to water and sanitation for all
Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all
Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation
Goal 10: Reduce inequality within and among countries
Goal 11: Make cities inclusive, safe, resilient and sustainable
Goal 12: Ensure sustainable consumption and production patterns
Goal 13: Take urgent action to combat climate change and its impacts
Goal 14: Conserve and sustainably use the oceans, seas and marine resources
Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss
Goal 16: Promote just, peaceful and inclusive societies
Goal 17: Revitalize the global partnership for sustainable development
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