

## <del>sa</del>magazine

APRIL 2012

# Technology in education



ESHA magazine is the official magazine of the European School Heads Association, the Association for school leaders in Europe. ESHA magazine will be published eight times per school year. You are welcome to use articles from the magazine but we would appreciate it if you contacted the editor first.

The ESHA e-magazine is free of charge. You can register through the internet at www.eshamagazine.com

#### The ESHA Executive Board

Ton Duif (President), Chris Harrison (Board member), Clive Byrne (Board member), Jukka Kuittinen (Board member), Solveig Dahl (Board member)

#### About ESHA

ESHA is an association that consists of 32 Associations of Heads and Educational employers in 25 European countries in primary, secondary and vocational education.

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#### Dear collegues,

This April edition of the ESHA magazine is the last one before the start of summer holidays. The first ESHA magazine in the school year 2012-2013 will be published in October. Writing my column gives me the opportunity to reflect on the past period, in which we were very successful in our aim to connect schools and school leaders in Europe on issues as school leadership, autonomy, reduced budgets, administrative work load, ICT, etc.

It's good to know that ESHA is now an official partner of the European Commission and has been given a grant of € 100,000 for the year 2012-2013.

Furthermore, ESHA is actively participating in several projects like the European Policy Network on School Leadership, the LLWings project on Lifelong Learning and the new program Fly Higher, which aims to get more young children enthusiastic for technology and aviation. The ESHA website is enlarged with new topics and communities and our Magazine is now sent to more than 50,000 school leaders in Europe.

But this is not enough. The success of ESHA mainly depends on the collaboration and involvement of school leaders in Europe. We can see an increased number of participants visiting the website and the Magazine is well received now. I would challenge you to participate in the European debate on school leadership - www.schoolleadership.eu - and help us to improve the quality of ESHA. Together we can do it.

I wish you all a nice summer and a good term end. See you all in October on the ESHA conference in Edinburgh.

Ton Duif ESHA president

Some articles in this issue contain direct links to websites. Simply click on the coloured text and you 'll be automatically linked to a specific website or videopresentation. Try it yourself and enjoy.



# Exciting times



The world around us is changing rapidly. Web technologies have enabled us all to access any information at all time and communicate with almost everybody. Social media platforms connect people that have never met.

We are living in a connected world and information is always at arms' length. This changes our society. Public libraries are changing into social meeting

places for entrepreneurs. Small retailers are losing their value add in the supply chain because consumers search the internet for the best deal before actually buying articles. Well-known brands are outsourcing production to low income countries to facilitate mass consumerism. Information is accessible for everyone so today's brands may not exist next year.

With mass consumerism, people will find ways to stand out. Creativity is essential for the next generation. Creativity will fuel individualism which basically means that people are able to stand out and be successful.

#### 'Application of knowledge is fundamental for success in tomorrow's world'

With all the information at arms' length, education needs to change accordingly. Accumulation of knowledge is no longer the Holy Grail. Application of knowledge is fundamental for success in tomorrow's world. Learn the new generations to stand out, teach them to succeed in a mass consumer world. Challenge them to compare, apply and differentiate. But most of all, learn them that is good to be different, learn them to stay close to themselves, stay close to their values and cultures. Do not lecture, but inspire!

#### 'Connecting Leadership'

Leadership • Motivation • Working Together



29 - 31 October 2012 • Edinburgh

#### **Keynote Speakers:**



Mark Van Vugt: Author & Academic

Mark will talk about the lessons in his book 'Selected: Why some people lead, why others follow and why it matters' — all delegates will get a free copy of his book.



Tony Finn: Chief Executive, General Teaching

Tony will speak about effective school and system leadership and give an insight into teacher education/induction in Scotland.



Dr Frank Dick, President of the European Athletics Coaches Association

Frank has coached many high profile international sports stars. He will talk about teamwork and motivation.

#### Register now at www.esha2012scotland.com

#### Workshop sessions include:

- Leading Change in Challenging Times
- Leading Learning
- Co-operative Learning
- Distributive Leadership
- Leading for wider/personal achievement
- Leading in a crisis
- Motivating a team
- Engaging the disengaged
- Motivation in a high performing school
- Motivating your staff
- Motivating young people
- Motivating for further learning

#### Workshops with an insight into the Scottish education system include:

- Innovation: Our Curriculum
- Innovation: Cluster connections
- Inspection in Scotland
- Inclusive education
- 3-18 Assessment
- Innovation: Leading in the classroom
- Insight: Healthy schools
- Insight: Outdoor learning
- Insight: Active schools
- Insight: Nurturing schools

For more information and book the conference, a hotel or your travel visit www.esha2012scotland.com

Details of a full partner programme are available on the website.



3 DAY CONFERENCE FROM £375

# Agenda

#### May 4-6

NAHT conference in Harrogate, UK

#### June 4

ESHA board meeting Utrecht, Netherlands

#### August 2-6

ICP council meeting Johannesburg, South Africa

#### October 29-31

13th ESHA Biennial Conference in Edinburgh, Scotland



You will have seen, in previous editions of the ESHA magazine, the adverts and articles for the ESHA biennial conference in Edinburgh. You may have visited the dedicated conference website: www.esha2012scotland.com

Bookings are now starting to come in for the conference and I wanted to give you a nudge to encourage you book your place sooner rather than later as places are limited.

I hope to see you in Edinburgh in October!

GREG DEMPSTER

The theme for the conference is 'Connecting Leadership' addressing one of the core purposes of ESHA and one of the biggest issues in school leadership.

We all know that the role of a school leader can be an isolated one. Isolation is the enemy of improvement. It is important that we all make sure that we build links with colleagues locally, nationally and internationally to ensure we are aware of and can learn from practice elsewhere. To make this easy for delegates, we will highlight on delegate badges which school sector delegates are from along with their school size. On the third day of conference we will build on this opportunity to build relationships and links by working in groups of colleagues with similar schools.

Over three days the conference will have three sub-themes:

#### Day 1 - Leadership

Our conference will start with an exploration of leadership by Mark van Vugt. Mark is an academic and author. His presentation will focus on the development of leadership and selection of leaders as explained in his book 'Selected: Why some people lead, why others follow and why it matters'. All delegates will receive a free copy of his book. Our second keynote will be delivered by Tony Finn, the Chief Executive of Scotland's General Teaching Council - the first independent selfgoverning teaching council in the world. Tony's presentation will focus on the induction of new teachers in Scotland - an approach highlighted in the recent research as a model with considerable strengths.

The rest of the day will be taken up with a range of workshops focussed either on Leadership themes or on giving an insight into aspects of the Scottish Education system. Delegates will be able to attend two different workshops. This day will finish with a wine reception in the Scottish Parliament then delegates will have the rest of the evening free. For full details of workshops options visit:

#### Day 2 - Motivation

www.esha2012scotland.com — weblink

Our second day will start with a keynote from Dr Frank Dick. Frank will be drawing on his experience as a coach to sports stars – he has worked with Daley Thompson, Boris Becker, Gerhard Berger, Denise Lewis, Marat Safin and Katarina Witt. He is currently involved with Justin Rose, Ipswich Town Football Academy and Jean Todt (Ferrari Formula One Manager) – to explore and explain motivation.

Before going on visits to experience Scottish schools first hand (including an option to attend a virtual visit to one of our more rural schools) you will have the opportunity to attend two workshops. You can choose from a selection of ten workshops which either focus on the theme of motivation or offer other insights into Scottish education. Day two will be rounded off with our Gala Dinner where you will dine in lovely surroundings and experience traditional Scottish entertainment. For full details of workshops options visit:

www.esha2012scotland.com —weblink

#### **Day 3 – Working Together, Learning Together**

We will again have two keynote presenters. Our first, Tam Baillie – Scotland's Commissioner for Children and Young People, who will explain how he has worked with and learned from children across Scotland. Tam has conducted Scotland's largest ever consultation of young people – from two years old upwards. He will share the lessons learned from his consultation and his next steps in Scotland.

Our second keynote will consider the ever more important issue of how school leaders and our organisations can use social media as an effective professional tool. Group working will also be a feature of this day – for more details visit the website —weblink. ■ Read more ···

#### Five reasons to come to ESHA2012 in Edinburgh

- High quality keynote speakers.
- A wide range of general interest workshops.
- A wide range of workshops giving an insight into Scottish Education.
- An opportunity to visit a local school (and to experience one of our school lunches!)
- A reception at the Scottish Parliament and a Gala Dinner in the recently refurbished Grand Hall of the National Museums of Scotland.

All of this from £375 (£425 including Gala Dinner)

#### **Booking options**

Click here weblink to go direct to the booking page on the conference website. Here you will find two booking options:

- Attending the full conference (with or without Gala Dinner).
- Attending one or two days of conference.

Partner bookings are made as part of your booking process. If you are booking for a group please contact *gwebster@ ahds.org.uk* for an Excel spreadsheet on which you can submit bookings for your whole group.

If you need a hard-copy booking form please contact *gwebster@ahds.org.uk* with a note of how many forms you need and where you would like them sent to.

Places are restricted at the conference and are even more restricted for the drinks reception in the Scottish Parliament – so please, visit www.esha2012scotland.com today and book your place.

#### Confirmed sponsors and supporters:

Aviva, Scottish Government, The Scottish Office of the European Commission

Confirmed exhibitors: ASDAN, Community Playthings, Crossbow Education, Education Harbour, EDUK8, Lighthouse Financial Advice, Manor Adventure, Outside Classroom Boards, Schofield and Sims, Smart Kids, Speechlink Multimedia, YPO, Zulogic

AHDS (Association of Headteachers and Deputes in Scotland) is the organising body for ESHA 2012. For more about AHDS visit www.ahds.org.uk

# Learning communities and effective schools



BY MARIA GAIDAROVA SCHOOL RAINA KNJAGINJA PLOVDIV, BULGARIA

At the moment the standard education in Bulgaria is directed mainly towards achieving knowledge and the teacher's role is more or less didactic. In practice no individual

approach or team work is present at school, and the necessary moral messages are not sent for building a socially active member of human society. We seek for links between theory and practice, because during the development of the students it is counted more on the professional education and training, rather than the real implementation of knowledge and abilities. All this is not learnt from a formal, externally forced and orientated to the content education,

but from the internal understanding of the teacher, that this empowers students to take their own decisions, to have their own points of view about important matters and their own opinion, and are vitally important elements from the process of learning, teaching and implementation of the collaborative work. In order to communicate effectively therefore pupils have to learn to trust and respect each

'Quality performance of the increasingly important professional role of the teacher requires a continued learning and professional growth of every individual.'

other, as well as acquiring communicative and practical skills in planning, organizing and evaluatgroup-work. Key dimensions of this social pedagogical sub-system include fixed factors such as class size and seating arrangements; the characteristics of groups such as their size, number, composition and stability over time; group work tasks and activities, and the manner in which they relate to the curriculum as a whole (Galton M., Hargreaves L., 2009).

Effective school restructuring requires teacher motivation and action to transform knowledge about change into reality (Hord, Shirley M., 1997). In this connection it is very important to develop professional learning communities. Attributes of professional learning communities are supportive and shared leadership and collective creativity. The new relationship forged between administrators and teachers leads to a shared and collegial leadership in the school, where all

grow professionally and learn to view themselves as "all playing on the same team working toward the same goal: a better school" (Hoerr, 1998, p. 381). Sergiovanni suggested how this may be done (1994, p 99): Leaders plant the seeds of community, nurture fledgling community, and protect the community once it emerges. They lead by following. They lead by serving. They lead by inviting others to share in the burdens of leadership. The learning community is exemplified when people from multiple constituencies at all levels collaboratively and continually work together (Louis&Kruse, 1995), "enhancing their capacity to create things they really want to create" (Senge, in O'Neil, 1995, p.20). Schools with strong democratic practices and expended local participation are more likely to undertake fundamental, systemic change. The results include: reduction of isolation of teachers, increased commitment to the mission and goals of the school and increased vigour in working to strengthen the mission, shared responsibility for the total development of students and collective responsibility for students' success, powerful learning that defines good teaching and classroom practice, that creates new knowledge and beliefs about teaching and learners, increased meaning and understanding of the content that teachers teach and the roles that they play in helping all students achieve expectations, more satisfaction and higher morale, and lower rates of absenteeism( Hord, Shirley M., 1997).

The focus of teachers' professional activities is not only transmitting knowledge but also supporting students in their process of learning and independence. The required changes of the learner's role in modern instruction are not viable without also changing the teacher's role. The adjustment of the teacher's professional role should, however, not only be directed towards skill acquisition, but also to his/her views, convictions and conceptions (Valen, 2007). Quality performance of the increasingly important professional

role of the teacher requires a continued learning and professional growth of every individual.

Collaborative learning (CL) is a personal philosophy, not just a classroom technique. In all situations where people come together in groups, it suggests a way of dealing with people which respects

'My aims as a leader in a school are to develop learning communities and an effective school' and highlights individual group members' abilities and contributions. There is a sharing of authority and acceptance of responsibility among group members for the groups actions. The underlying premise of collaborative learning is based upon consensus building through cooperation by group members, in contrast to competition in which individuals best other group members. CL practitioners apply this philosophy in the classroom, at committee meetings, with community groups, within their families and generally as a way of living with and dealing with other people (Panitz, 1996). CL advocates distrust structure and allow students more say if forming friendship and interest groups. Student talk is stressed as a means for working things out. As the name suggests, the aim of this

orientation is to transmit knowledge to students in the form of facts, skills and values. The transformation position at the other end of the continuum stresses personal and social change in which the person is said to be interrelated with the environment rather than having control over it. The aim of this orientation is self-actualization, personal or organizational change (Myers J.,1991).

Collaborative learning is based upon the following principles:

- Working together results in a greater understanding than would likely have occurred if one had worked independently.
- Spoken and written interactions contribute to this increased understanding.
- Opportunity exists to become aware, through classroom experiences, of relationships between social interactions and increased understanding.
- Some elements of this increased understanding are idiosyncratic and unpredictable.
- Participation is voluntary and must be freely entered into (Panitz).

My aims as a leader in a school are to develop learning communities and an effective school. My practice as a head teacher for 13 years up to now has allowed me to gain many experiences both positive and challenging. I have understood how important are the continuous qualification and training, the collaborative learning, the good practices sharing and the establishment of common value system for the steady growth of the school. It is not easy to put and fulfil these targets without deep understanding of the school processes and analytical look at all these activities from inside. The promotion of collaborative learning in the classroom, conducting of critical conversations in group, continuing professional development, the team work and partnership have a vital role for teachers to validate effective change and realize in practice education based on fundamental culture norms. I try to encourage the teachers to change their view and methods of work, so that students enjoy their work and be more involved and engaged, to become more selfconfident, self-reliant and help them understand their own learning and its importance. I believe that children should be aware of this. To achieve good results, it is of importance the specifics of the

school to be analysed and taken into consideration. Actually the rates of my school compare with other schools showing successful performance in the area of basic knowledge. In comparison with the other schools our school is very effective according to a statistical means of assessing by measuring pupils' progress using their test and examination results. But we need to build a relationship with students based on trust as well. It is our responsibility to give them the knowledge of making the world a better place, to have the necessary skills to solve the problems and to rule the development, to be helpful and peaceful, sporting and creative. The implementation of the collaborative working would be a good approach to reach these aims, to improve the effectiveness and to form the necessary social and communicative students' skills.

So, I formed a small group of 6 teachers by using the following criteria:



- Motivated to experiment and study
- Teach different subjects at school
- Have different professional experience
- Have different professional qualification
- Have different experience in the school
- Teach children from 7 to 11 years old or children from 12 to 15 years old.

The literature review and my practice observation after meeting of the members of the group identified the following questions via implementation of the collaborative working:

- How to make enjoyable teaching and learning?
- How to encourage children to discuss and apply gained knowledge?
- How can we develop the pupils emotional intelligence and have their own opinion?
- How can we improve the quality of our school environment?
- How can we make our own school environment more friendly?

The questions define also the following domains for observation implementation of the adequate teaching methodology, relations between teachers and pupils, subject matter, developing school environment as self-esteem, job motivation and future perspective. I encouraged and organized the teachers from the group to get on with doing the planning, delivering, teaching and evaluating with me sitting in, observing, collecting the data from that process, I interviewed the teachers and we reflected upon what was happening. I realized that it is necessary teachers to feel supported in any moment, everything they share as problems to be guaranteed to stay in the group, thus their sincerity and openness be guaranteed, too. Thus the received data are valid and correct.

We work as a team preparing supervision sessions together, the

briefings where problems can be discussed. It fits well with their support for the concept of lifelong learning in a more general context. It also gives the stamp of approval to what those involved in the process of change in school has been saying for years, that for improvement to take place it needs the active commitment of teachers to change not just work practices but their values. The emphasis on recognizing personal and professional values and making them more transparent is at the heart of this process of professional improvement. (Clarke, Chambers, 2002).

A day conference in school to share the experience of the group. Finally we prepared presentation which submitted our work through the key questions and shown it in front of all our colleagues from the school. The teachers reflected on their own practice and contributed to the development of others by sharing their best practice and insights. The teachers from the group summarized their observations from the collaborative work application during their lessons and answered the asked questions as follows:

#### How to make enjoyable teaching and learning?

- by applying different forms and methods for organizing a collaborative work during lessons. We applied observation and analysis of parts of films, presentations, we organized games, dramatizations, panel games, competitions, solved crosswords, made collages, we received information by given indicators, we found key words and created a corresponding historical text, we defined criteria and indicators for comparison, we made chronological tables.
- we did not forget the rules, which we introduced together with the students in order to guarantee the achievement of the educational and schooling aims.

- How to encourage children to discuss and apply gained knowledge?
  - by applying different innovative technologies. We developed school projects, made thematic presentations connected with the biological diversity and healthy nutrition, the students got used to look for and discover curious information, to structure and prove their opinions connected with preserving the environment and the healthy way of life.
  - we always try to evaluate the students' efforts in a positive way
  - to encourage a personal expression of opinion and inclusion in the group work of each student
  - building such an organization of collaborative work, which guarantees time to acquaint with the set task, analysis, discussion, presenting the solutions and receiving a feedback.
- How can we develop the students' emotional intelligence and have their own opinion?
  - by applying the collaborative work more actively, because that way we give the students the possibility to form their own opinion, to express arguments, to learn mutually to listen and support each other, to evaluate their work.
  - having in mind the age of the students while placing the tasks for collaborative work
- How can we improve the quality of our school environment?
  - we develop the communication skills when students work together on a given problem they change positively their relations, start to ask questions informally, look for additional sources of information by themselves, share what is difficult for them, look for the support from the teacher or friends.
  - we place the student in the center of the educational process –
     we change the attitude to their responsibilities

- we create conditions for a positive manifestation of each student - by the collaborative work the students feel more important, they are stimulated to express their opinion and collect information.
- How can we make our own school environment more friendly?
  - we encourage the students to participate actively in the school's life
  - we stimulate their creative manifestations and development
  - we create an atmosphere of confidence and informality, a wish for support and mutual help
  - we restrict aggression, we educate responsibility and humanity by active implementation on the collaborative work
  - we see clearly our place and role for motivating and increasing the success of the students.

#### We have made photographs from evidence in the classrooms connected with the implementation of the collaborative work. The photographs have been made in different classes in connection with the implementation of the collaborative work. We used them as a medium to create spaces for reflective learning:

#### Developing of the emotional intelligence of the students.

The students make dramatizations of the texts, express emotionally the feelings of some main literature characters, construct models of favourite story heroes. This way they observed and analysed parts of books, presentations, organized games and dramatizations. The teachers successfully stimulate their creative manifestations and development by enjoyable teaching and learning.

#### Giving students' voice.

The students discuss and summarize proposals for improving the school conditions, describe what is for them the dream school and classroom. We encourage and educate responsibility and humanity to the students, so that they feel more significant. This way practically we are giving students' voice to express their personal opinion and collect information.

#### • Showing students engagement and better motivation.

The reflective learning and collaborative work for effective learning and teaching is very important. In this way the students change positively their relations, start to ask questions and analyse, share what is difficult for them, look for support from the teacher or friends.

The challenge of learning is learning to think (Lyons N.,2010). We effectively use the collaborative learning and we make contemporary efforts to include reflective inquiry as a critical element in the education.

#### Analysis of what has been learned by pupils and teachers about developing collaboration in the classroom:

After an analysis of the conducted interviews, observations, discussions and the presented by the teachers presentation with answers to the asked questions we can make the following conclusions regarding the described above domains for observation:

#### • Implementation of the adequate teaching methodology.

Regardless of the subject they teach the teachers from the group managed to apply the collaborative model of work in the lessons. The teachers studied together and applied different methods of collaborative work. The teachers with less experience provoked the others in the group also to advance by applying new and unknown for them methods, the conservative opinion of teachers with more experience, that they know everything necessary and there is nothing new to surprise them, has been overcome.

#### Relations between teachers and pupils.

The students have created their own personal, positive attitude to the school, very active, mass and with pleasure participated in all activities. A mutual confidence is created and everyday support is fulfilled at each school initiative, a real partnership between teachers and students is created. The application of the interactive

'It is necessary to encourage teachers to actively apply collaborative learning in the classroom and to support developing professional learning communities.'

methods and technics has led to improvement the level of self-preparation, activation of the interest both of students and teachers. The psychoclimate has been improved, the aggressive attitude has been reduced. A collegiate and tolerant atmosphere for work and manifestation has been created.

 Developing school environment as self-esteem, job motivation and future perspective.

Once students become reasonably conversant, they are ready for collaborating, ready

to discuss and assess. We understand knowledge to be a way for forming social skills and learning a social process, in which the students are involved actively and encouraged to work in groups. We work on more than 10 international, national and municipal programs and projects this year. We achieved mass participation of the students. We encourage talented children and ensure system support of children with difficulties. We developed a system of



school trainings / Who am I", " What I like in you", "The language of the body", "Friendship"etc/, competitions "Best student of the class", in literature, mathematics, English and conferences / "On the Steps of History", "Mathematics around us", "The monuments in my quarter"/.

Students and teachers put common efforts to improve the school media, so that the students could feel and keep the school as their own house. Permanent places have been created, where the students present their attitude for important events with their own best achievements - essays, paintings, poems, photos, received diplomas. Internet access in each classroom is available. We are renewing of the computer hardware and transforming the library into a library-information center.

The received practical results - the creation and application of new knowledge and good practices, building of competences for applying the collaborative work and respecting the person's autonomy, including the opinion of the student and forming a position on actual themes created new possibilities for purposeful study, which does not come from books or experts, but from our work and our life. The environment improves, when values and believes become clearer to the student, when he is empowered to be responsible for his own study and development.

It is necessary to encourage teachers to actively apply collaborative learning in the- classroom and to support developing professional learning communities, because thus the following is achieved:

- clear and objective landmark for the necessary direction of development what exactly we want to achieve in our everyday work and what activities it is necessary to plan
- effective management and leadership of the educational process is conducted

- grounded and aimed educational politics is formulated, conformed both with the concrete specific conditions and the European directions for development and study during all life-time
- Improvement of the school media and stable development.

The implementation of the reflective practice during implementation on collaborative work is a good way to improve the effectiveness, to form the necessary social and communicative students' skills and to support developing of the professional learning communities. As a result we improve the psychoclimate and respond to specific needs of the school, stimulate the application of innovations, exchange of information, experience and good practices, motivate the teachers to distinguish the need of own development, to work in a team and in a spirit of cooperation. Overall I view the collaboration students-teachers and students-students as very important for successful learning. So, as a head teacher I will seek every opportunity to encourage and involve them in collaborative learning process. Together with the teachers we will continue to review, evaluate and improve our practice. I hope we will also involve other head teachers from different kinds of schools and parents more actively as partners in our future work.



# Dutch Schools on the Move

BY KOOS EICHHORN

#### **Proud to present**

During the past decade Dutch educators and technology experts have travelled to most parts of the globe to look at best practice in 21st century teaching and learning and the role technologies play in supporting, enhancing and accelerating learning.



The knowledge gathered has been disseminated nationally and has helped shape innovation in pedagogical practice and curriculum design in Dutch schools in a way we are very proud of.

Responding to requests from international colleagues interested in seeing for themselves the transformational nature of education in the Netherlands we are pleased to announce our first International Study Visit, with the theme of "Dutch Schools on the Move".

The study visit will be based in The Hague from September 25th to 28th 2012

The invitation is extended by 'Dutch Schools on the Move' - a private-public partnership involving School Boards, leading technology companies and national innovators in education. The Study Visit will provide a unique opportunity to visit some of the most



innovative schools, institutions and companies (offering traineeships for students) in the Netherlands and experience what learning in the 21st century can look like.

#### Visit summary — What will you experience?

Although based in The Hague, delegates will visit centres of excellence across The Netherlands. Delegates will be given a 'grand-tour' of some of the most innovative, dynamic and exciting schools and institutions nationally and meet leading policy makers, curriculum design specialist and experts in child centred and adaptive education. Presentations and meetings with key decision makers and nationally recognised education specialists will give delegates opportunities to share thoughts and ideas on how the needs of 21stcentury learners might be met.

#### **Delegates — Who should attend?**

'Dutch Schools on the Move' would like to extend the invitation to International policy makers, school leaders and innovative thinkers. The Study Visit is limited to 80 delegates on a first come, first served basis.

The Dutch Education system is made up of a range of institutions using a wide variety of pedagogical approaches from traditional models of learning to highly individualised curricula requiring autonomous, independent learning.

#### Back ground — What makes the Dutch Education system different?

Dutch schools are given a high level of autonomy. There is no prescriptive National Curriculum. School leaders are recognised for their professional expertise and are trusted to customise student experiences to meet their individual needs. Schools however are challenged to meet rigorous national standards identified by the government and monitored by a National Inspectorate.

The Dutch constitution also provides for groups or consortia to set up and start their own schools. The Dutch Education system is made up of a range of institutions using a wide variety of pedagogical approaches from traditional models of learning to highly individualised curricula requiring autonomous, independent learning. All schools are challenged to equip students with the knowledge and skills needed by young people in the 21stcentury.



### ESHA General Assembly Meeting Ljubljana

The first 2012 working meeting of representatives of school leadership associations in ESHA was held in Ljubljana, from 2nd to 3rd March 2012. The meeting in the Slovene capital was attended by 47 representatives from 18 countries.





The GA meeting was opened by the keynote welcome speech of Mr Ton Duif, the President of ESHA. On the first day of the meeting we discussed the financial report for 2011 and the financial plan for 2012, as well as the upcoming conference in Edinburgh, together with the ICP (International Confederation of Principals), the World Education Forum, the ESHA website, and the expansion of ESHA membership. As ESHA connects more than 85,000 leaders in 49 European countries, it was recommended that representatives of associations encourage their members to visit the ESHA website www.esha.org as often as possible. All national association members were also urged to become actively involved in creating the ESHA magazine, which is published eight times a year on www.eshamagazine.org and is free of charge.

The second day of work consisted of workshops, related to three EU projects: The European Policy Network, LL Wings, and Entrepreneurial Leadership. There were group discussions about the main questions: what is the connection of this programme to each association in ESHA; how can each association contribute to the programme, and what kind of activities can it develop. Projects perform the substantive research about the autonomy of the school systems in the EU countries, and the selection of people and the specific qualifications for school leadership. They also debate on what the best learning practice is and discuss competing with the school next door, etc. Throughout discussions it was common to all the latter that the budget cuts and financial conditions throughout Europe do not affect the important goal of all principals and teachers which is to give students the best possible education and to prepare them for the global life in the 21st century. It was concluded that any association may get involved in one project - according to its interests.



The conclusion of the meeting was dedicated to the topics that should be discussed in the future to provide greater value for ESHA members. Bringing education of all European countries on a higher level, creating links between delegates from schools of a similar size and sectors from different countries, as well as providing the exchange of ideas, are certainly benefits of the ESHA membership.

Everyone was invited again to participate in the ESHA biennial conference in Edinburgh from 29th to 31st October 2012 – www.esha2012scotland.com — with the theme "Connecting Leadership".

Leading schools is almost daily becoming a more complex and demanding job. Connecting Leadership and the nature of learning with the qualities of leadership makes schools authentic places of learning. A review of what we can claim "to know and not know"

Leading schools is almost daily becoming a more complex and demanding job.

about learning, leadership, and inter-relationships, as well as what it means to lead schools in the right learning place at this time, is the matter of global thinking and understanding of school management.

# Will 'Web 2.0' lead to 'Teaching 2.0'?

There is no set definition of Web 2.0. However, almost all descriptions refer to the ability of people with no specialized technical knowledge to create websites, to self-publish, create and upload audio and video files, share photos and information. These tools are usually called social media platforms.

BY FRED VERBOON

These platforms have changed the way the e-generation communicate, search for information and even socialize. Platforms like Facebook and Twitter are extremely popular.

These tools also influence the way the e-generation learn. Tools like Vimeo and Youtube enable people to create and publish videos, animations etc. The YouTube search engine is the second largest search engine (measured by number of searches) in the world, just after Google.



This shows that new generations are highly visual. Let's look at an example.

Wikispaces. I can tell you that Wiki sites are web sites that are built so that every person visiting a Wiki site can also publish information and change the content. Most Wiki sites are community driven platforms. I can imagine that you are frowning when you read this stuff. When I tell you that Wikipedia is an example of a Wiki site and that it is the largest and most used encyclopedia in world, you probably get the picture. However, I can also ask you to watch this video: Wikis in plain English — Did you experience the difference? This is the way the e-generation learns: they prefer animation and graphics, colors and sound.

In the video, we learned that Wikis are about sharing and collaborating.

For students, it means that learning will become a group process and every individual contributes to the final result. Together, students create knowledge and not just consume information. So, will it change the way we teach? Let's look at an example. Mrs. A teaches geography. She has prepared her lesson and at the end, she asks her students to prepare a report on Italy. The students go home, search the internet, cut and paste and prepare a report. Mrs. A grades the work and the learning goals were met.

Now the social media way. Mrs A. has prepared her lesson. However, this time, she does not focus on details, but she focuses on some inspiring stuff. She then asks the students to form groups of 4 to 5 students. She asks the groups to build a "Wiki site" about Italy. This time, the students will jointly prepare a plan, divide the work, post their part on the Wiki site and jointly finish the site. Mrs A can still judge the individual contributions

The main benefits are that students will learn from each other and be motivated by their co-students. They need to act because their work will be visible to the world. In this process, the teacher, Mrs A will be a learning coach.

I realize that most of the readers of the ESHA Magazine know about social media. You probably use it yourself. However, you may need to convince your colleagues to do the same. We need to give your colleagues the most powerful tools available. The list of social media tools helps you to inspire young students and empower teachers.

The important thing to remember is that this isn't about providing you with these sites. It's much more important to ask, 'What will you do with these sites? The ICT section of the ESHA portal —weblink includes a number of useful teacher communities. These communities include contributions of teachers and school heads and may very well be an interesting starting point for you, or your colleagues.

### List of social media tools



Animoto provides an array of tools for creating videos and presentations. It offers free tools to make 30 second videos and a free education version offering unlimited use for teachers



User friendly tool to create (photo) books with turning pages.



Edublogs lets you easily create & manage student & teacher blogs, quickly customize designs and include videos, photos & podcasts.



Flickr is a platform to share and publish photos



Forvo is a pronunciation dictionary, providing words from over 200 languages



Go! Animate enables students to make their own cartoons and teachers to make very interesting lessons. It also includes a gallery of lessons.



The Kerpoof website is owned by the Walt Disney Company. With Kerpoof, students can make artwork, animated movies, make drawings, printed cards, t-shirts, or mugs.



An online language learning community, offering language courses.



Mahara provides users with tools to create a digital portfolio of their learning, and social networking features to allow users to interact with each other.



An online tool for creating presentations



Skype is the world's leading free video conferencing platform. Great for student collaboration or just to "call home" while you are on holidays



A social networking and blogging service, enabling its users to send and read messages called tweets



Video sharing site, alternative to Youtube



A simple, user-friendly platform for creating wikis



Creates word clouds from text, blogs or RSS feeds. The clouds give greater prominence to words that appear more frequently in the source text



YouTube is the largest platform for discovering, watching and sharing originallycreated videos

### Interactive Whiteboards

During the last few years, a substantial number of schools have bought interactive whiteboards (IWB). Countries as England and The Netherlands are leading the pack. In these countries almost all schools are using IWBs. Why are interactive whiteboards so popular and what has changed?

BY FRED VERBOON

The past decade, the internet has digitalized education. Teachers are increasingly using e-mail to exchange information and interactive whiteboards are very common in our class rooms. Many teachers got enthused by the possibilities of of these "digital whiteboards". Even though there was a lack of digital content suitable for interactive whiteboard in non-English countries. We are teaching the internet generation. This web generation has grown up in a picture culture. They prefer sound, images, hyper links and color. Color, signs and pictures contain much more information and is much more attractive than text only. They have become intuitive visual communicators (Oblinger&Oblinger in: Veen&Jacobs, 2004) and remember visuals better than text.

General opinion is that interactive whiteboards have enriched and even improved education because it offers a rich learning environment. IWBs offer many opportunities for knowledge transfer and knowledge building. Available research does show that the ability of teachers and their experience in using IWB play a crucial role. This report deals with factors that need to be taken into account when a school decides to invest in Inter Active Whiteboards

The success of interactive whiteboards highly depends on the abilities and the motivation of teachers. Training is a crucial element to get the best results. Training should include instructions on how to best use IWBs and, more importantly, instructions on how to include IWB content in their curriculum. Research shows that if this training is conducted properly, teachers show a positive mind change and become more motivated in education. (Voogd 2009).

### Intentional training

Teacher training should be focussed on intentional use. How to include web content, films and pictures in the curriculum, where content can be found and how this can be used to enrich their lessons. Teachers themselves should decide how to best include IWBs in their day to day lessons. Example given: with an interactive whiteboard (or just the beamer!) it is very easy to show a film. However, teachers should decide to show or not if films support the learning objectives and not because IWBs are more convenient.

The best way to use interactive whiteboards is to focus on learning objectives and use IWBs in situations that lead to better class room achievements. This means that IWBs should not be treated as a multi media device but as a means to improve education. The available digital content, suitable for class room instructions, is crucial in the successful implementations of IWBs. In general, we differentiate two types of content providers:

- Educational portals: Portals offer content that teachers may include in their class room instructions. A portal offers teachers an overview of all available content that can be used. In The Netherlands, Kennisnet is a well known portal where teachers can down load share relevant content with others. Teachers highly value the exchange of IWB suitable content. In The Netherlands, www.schoolbordlessen.nl offers an overview of all relevant online sources that a teacher can choose from. This portal significantly reduces the preparation time for teachers.
- Publishers: Many publishers focus on creating supplemental instructional materials specifically designed for interactive whiteboards. They regard IWBs as an opportunity to market additional services and content to schools. Next to the traditional publishers, new content providers have become known for their multimedia tools. Microsoft and Google are among them. Microsoft Encarta en Google Earth are examples of highly interactive platforms to be used in all geography classes. Google has recently announced an application called Body Browser that includes complex 3D graphics of the human body. Using Body Browser, you can explore different layers of human anatomy by moving the slider to rotate and zoom in on parts that are of interest.

### The advantages of Interactive Whiteboards

Overall, the following advantages of IWBs have been identified:

### Lively presentations

IWBs can be used to give lively presentations. Interactive Whiteboards can easily combine different sources of visual information in an interactive way. Research (Glover & Miller, 2001) show that combining different sources of information (multi media) will lead to better academic results because the human brain can deal with more information if information is delivered in different formats.



### Different information sources

It is very easy to combine web sites, applications, films and notes and into a single lesson. Together with the instructions that are offered by publishers, teachers can develop class room instructions themselves and share them with colleagues.

Teachers also find that by storing lessons, the time needed to prepare for lessons will decrease substantially over time. More than half of all primary school teachers has pointed out that the usage of interactive whiteboards reduces the time needed for preparation of lessons. (Intomart, 2009).

### More interaction

IWB can significantly chance the interaction between students and teachers. It may even change the role of teachers. (Kennewell e.a., 2008). The teacher can formulate questions, write down students' answers and discuss them. According to Levy (2002) this will also increase the quality of education. The teacher then becomes a knowledge facilitator

### Monitor the students more closely

Another interesting device is class response systems. Voting boxes will enable teachers to run knowledge quizzes. Students generally like quizzes and it stimulates all students to take part in the lessons. It also enables the teachers to monitor the development of students more closely and on an individual basis. Another plus is that these quizzes stimulate the exchange of ideas and discussions. (Wall era. 2005)

### Better collaboration

Interactive whiteboards improve the communication between students because it encourages students to share their ideas and listen to others' opinions. Students tend to better understand each other. It increases their motivation to work together on projects. (Levy, 2002).

### Motivated students

Many research reports have pointed out that proper usage of interactive whiteboards will result in motivated students. According to Kennewell (2008) this is because:

- Lessons are enriched with different sources
- Content is highly visual
- Subjects can be easily interconnected
- Students are motivated to listen to each other.

In general, students highly appreciate interactive whiteboards because they prefer sounds, images, films, hyper links and color. They are intuitive visual communicators en remember visuals better than text. The appreciation of interactive whiteboards will even further increase if students work with it themselves for presentations and discussions.

### The interactive whiteboard further explained

An interactive whiteboard (IWB) is a large interactive display that connects to a computer and projector. A projector projects the computer's user interface onto the white board's surface. Teachers control the computer using a pen, finger, stylus and the buttons of the IWB. Basically, an IWB acts like a mouse. When text input is required, user can invoke an on-screen keyboard or, if the whiteboard provides for this, utilize handwriting recognition. Thus, an IWB emulates both mouse and keyboard. The user can conduct a presentation almost exclusively from the whiteboard.

In addition, most IWBs are supplied with software that provides tools and features specifically designed to maximize interaction opportunities. These generally include the ability to create virtual versions of paper flipcharts, pen and highlighter options.

### Common types of operation

The majority of interactive whiteboards sold globally involve one of five ways of interaction between the user and the content projected on the whiteboard. These are:

### Infrared scan (IR touch) whiteboard

An infrared interactive whiteboard is a large interactive display that connects to a computer and projector. The board is typically mounted to a wall or floor stand. Movement of the user's finger, pen, or other pointer over the image projected on the whiteboard is captured by its interference with infrared light at the surface (sides) of the whiteboard. When the whiteboard surface is pressed, software triangulates the location of the marker or stylus. Hitachi Starboard, Cleverboard, Legamaster eBoard and Mimio I-Board are examples of IR whiteboards

### Pressure sensitive whiteboards

A touch-based interactive whiteboard feels somewhat soft. In most common systems, the surface deforms under pressure to make contact with a back plate. The touch point location can then be determined electronically and registered as a mouse event. For example, when a finger is pressed on the surface, it is registered as the equivalent of the left mouse click. This leads to the claim of pressure sensitive whiteboard manufacturers that such a whiteboard is easy and natural to use. SmartBoard is a well known brand on the market. Hitachi is another well known manufacturer.

### • Electromagnetic whiteboards

An electromagnetic whiteboard uses an array of wires behind the solid board surface that interacts with a stylus tip to determine the horizontal and vertical coordinates. For instance, when close to the surface of the board, the mouse pointer can be sensed, giving the board mouse like capabilities. An Electromagnetic IWB can potentially handle multiple inputs. ACTIVboard, Communicator, Focus Board, Slimboard, Interwrite, HDbord, Penbord are all vendors that market electromagnetic whiteboards.

### Interactive projectors

An interactive projector has a camera built into the projector. The projector produces the user interface and detects the position of an active IR light pen when it contacts the surface of the board. This solution, developed in 2007 and patented in 2010 by U.S. manufacturer Boxlight, is a new highly interesting technology. Next to Boxlight, Hitachi has also recently developed a new kind of board that combines a whiteboard and an image sensor.

### Touch screens

Touch screens are like giant Ipads. When large size LCD screens become affordable, this technology may very well be the successor of the interactive whiteboards as we know them today.

Well known vendors are: Bordwijs, Focus Touch, Legamaster e-Screen FLEX, NEC Icd Touch, Starscreen Touch and Samsung Touch

### Integration with a learner response system

Some manufacturers also provide classroom response systems as an integrated part of their interactive whiteboard products. Handheld 'clickers' operating via Infrared or radio signals offer basic multiple choice and polling options. More sophisticated clickers offer text and numeric responses and can export an analysis of student performance for subsequent review.

By combining classroom response with an interactive whiteboard system, teachers can present material and receive feedback from students in order to direct instruction more effectively or else to carry out formal assessments. For example, a student may both solve a puzzle involving math concepts on the interactive whiteboard and later demonstrate his or her knowledge on a test delivered via the classroom response system. Some classroom response software can organize and develop activities and tests aligned with State standards.

### Wireless tablets

A wireless tablet enables teachers to remotely control interactive whiteboards. Most interactive whiteboards vendors offer wireless tablets

### The I-Visualize

The I-Visualize is a camera that projects everything that lies underneath. It can project all non digital content like books, pictures, insects, etc.

### Which interactive whiteboard to choose

In The Netherlands, most schools have chosen Activboard. This electromagnetic board has a solid surface, is child proof and is operated using a special pen. In England, the majority of schools have opted for Smartboard. The pressure sensitive screen has a soft surface and reacts to every touch. However, large touch sensitive LCD screens may very well become tomorrow's choice. Only very few schools use wireless tablets. Visualizers are often used in colleges.

The majority of schools that have purchased interactive whiteboards often just use the presentation capabilities of interactive whiteboards. Research of the University of Nijmegen differentiate two stages of interactive teaching

In the first phase, classroom instructions are enriched with films, internet content, pictures from different sources, etc. In this phase, the interactive whiteboard itself is not used very often. A computer and a beamer will enable teachers to enrich lessons, include multi media and multi sources. Google Bodyscan can be used for biography lessons, geography will benefit of Google Earth, films can be shown and web sites can be included in class room instructions. When traditional whiteboard are used, comments can be added as well. Compared to the more traditional class room setting, a beamer and a PC will be very useful tools to enrich lessons.

The interactive whiteboard itself is an intelligent input device. Using an IWB will enable the teachers to control the PC, store comments and add the interactive experience to the class room. However, if funding is not adequate, or if teachers are not very IT aware, using a computer and a projector will be a very good first step.

### Sources

### **Reports**

Een onderzoek naar de inzet van digitale schoolborden: Marion Agterberg en Per Theeuwes (2007).

Meerwaarde van het digitale schoolbord: Kennisnet (2010).

Haal meer uit het digitale schoolbord: Lynn Voogt, Radboud Universiteit Nijmegen (2009).

The interactive Whiteboard as a Force for Pedagogic Change: The Experience of Five Elemantary Schools in an English Education Authority: Miller, David & Glover, Derek (2002).

### Web sites

http://www.ictopschool.net/infrastructuur/digitaal-schoolbord

http://www.bbc.co.uk/schools/

http://www.digitaalschoolbordonderwijs.nl/

http://www.digibordopschool.nl/

# Mobile Devices: The Learning Disconnect

BY ROB STOKOE



Today there are about 35 billion devices connected to the Internet, soon, there will be so many that we'll stop counting. (Eric Schmidt, Google)

Mobile is the technology which has promised so much for so long now, effectively this is the technology which has cried wolf for over 15 years. The long wait is now over, today things are moving quickly, so much so that we now effectively have a LEARNING DISCONNECT. This is when a student says: "Every time I go to school I have to power down"

This just doesn't add up for us as educators. On a daily basis we acknowledge, encourage and celebrate the fact that our students learn in different ways. Students, even the very youngest are arriving at our doors with higher levels of digital skills, able to access, communicate and collaborate, accessing the net, their learning patterns are not fixed by history, time or place. We need to connect with these skills and attitudes, with what they can do, accepting them as multi-tasking, connected, collaborative, 21st century learners. To be successful we will need to weave digital learning opportunities into the fabric of our curriculum until they are regarded as ordinary.

We've had computers in schools for nearly thirty years, success and growth have never really matched the promise and potential of these technologies. Many teachers have struggled to come to terms with ever changing technologies, the majority have continuously identified opportunity and challenge although all too often individuals and schools were working in isolation or in small interest groups. The internet came along and things got a lot closer. Originally the internet was more of an activity, however this context has been turned on its head. Free platforms and low cost components have created a perfect storm, a storm which is fuelling rapid change, and a lot of disruption. This revolution in technology has transformed the way we can find each other, interact, and collaborate to create knowledge.

There used to be a comfortable logic to the way we interacted with people, places, and things.

You wanted knowledge, you went to a library; you wanted to be social, you went to a club or café. You wanted retail therapy, to be a consumer, you went to a shop. These behaviours were imposed upon us by culture, society and geography. Everything has and is continuing to change, as the internet imposes itself upon the lives of every individual. Today a company can go from concept to market in four weeks, the Rockchip Android Tablet PC is a good example



of this. Our positive response to these digital devices and the increasing power of the web is imperative, we need to ask ourselves as flexible, creative educators what are we capable of achieving if we truly embrace digital devices and connectivity?

Events, threats and

opportunities aren't just coming at us faster than ever before, they are also less predictable and they are converging and influencing each other to create entirely new and unforeseen paradigms. The internet has given us a world of connectivity, a world of new learning potential. Connectivity which allows us to 'be' in many places at once. Online with friends in the UK, scheduling a meeting in Doha, re-charging in Dubai. Our lives and our learning are connected by millions of invisible threads. Which brings us to the present, we don't go to the internet anymore. The internet is now an intricate part of our lives.

Digital technologies are transforming the way we can facilitate learning for our students. To our students these technologies are trivial. For our students and for many adults the boundaries between the internet and life are so porous as to be meaningless. People reach for the internet using whatever device makes sense to them at that moment. As educators we need to embrace the multitude of opportunities now available to us to empower our pedagogy with digital technology to enable our classrooms to be boundless. Advocates also say that the availability of technology that can call up the knowledge of

Digital technologies are transforming the way we can facilitate learning for our students.

the world's best thinkers with the click of a mouse, that can graph in two seconds what once took hours, and that can put scientific instrumentation in a pocket-sized computer shows

that the shift isn't coming--- it has already happened. IT IS NOW. If we are capable of leaving our comfort zone and focus upon developing and creating new strategies for learning, we will redefine ourselves as potent 21st century educators. The questions we need to ask of ourselves are: Are we willing to change? To risk change to meet the needs of the students we serve? To accept that we are Learners first and Educators second. Because when we think we know it all, that's when the serious learning begins.

It's time for us to POWER UP!



## Curiosity; a condition for learning

BY ROB STOKOE



In the words of Thomas Edison, "the greatest invention in the world is the mind of a child," and every mind is born with the instinct of curiosity. We all come into the world curious, an innate gift which newborns demonstrate as soon they are born when they look around.

As young children, we are wonderfully curious about everything. Curiosity is the natural inquisitive behavior that engenders exploration, investigation and learning (Wikipedia). It is an openness to experience new things, trying to find answers to the whys that we've asked and continue to ask throughout our lives. Yet research tells us that curiosity declines as we progress through our education systems.

The fact is that young people are curious about everything; they have an unrestricted desire to understand. (Henman 2009) At five years of age 98% of all children have no problem thinking divergently. Not surprising really, three year olds, on average, ask their parents about one hundred questions a day, every day! However by the time they are ten to eleven years of age they've pretty much stopped asking. Of even greater concern is that by the age of twenty five only two per cent can think outside the box, curiosity seldom survives into adult-hood. (Keen 1973). As we grow up, we start believing the answers are more important than the questions. Yet adult creativity is still powerful, there is just not enough of it, it can be said that the creative adult is the curious child who survived.

Fostering the scholarly attribute of curiosity in learners is an important task; one which is at the heart of education and effective learning as it challenges and promotes active participation in learning. As educators our challenge is that curiosity and curriculum are antithetical concepts with the curriculum often acting to limit student

empowerment rather than enable for the most part. As educators we need to embrace curiosity and discovery in our thinking and planning. However, this is easier said than done, predominantly the curriculum dictates the teacher's planning rather than the individual ideas or questions of the student. Our deliberate and thoughtful consideration and actions have the potential to empower our students, provoking and extending their engagement, learning and thinking. We need to plan in a thoughtful and purposeful way, creating an environment of possibility where the concept of the child as the architect of their own knowledge is valued and built upon. In essence we will be attempting continually inspire not require. The reality is that curiosity is the driving force behind lifelong learning as Gentry and McGinnis (2008) argue, learning to learn (or to be curious) is the most essential skill that they can acquire. Curiosity and discovery never age and are so powerful that they create learning; continually building upon itself. allowing our minds to open up as they grow and develop.

Why is curiosity so important? We would all agree that curiosity instigates intellectual activity and is a central ingredient to a fulfilling life. (T Kashdan 2009) Our purpose must be to nurture curiosity in our students, and to do this we will be required to develop a thinking curriculum which requires the verbalising of questions, a curriculum where the search for questions far outweighs the search for answers. Therefore curiosity becomes the *cutting edge of knowledge, which is not in the knowing, it is in the questioning.* (Adapted from Thompson 2009) Educational growth and the excitement of learning are not confined to the powers of recall, it is not about knowing what is, but creates a greater expectation of deeper learning and a higher level of understanding; it demands that we all aspire to be better than we thought we could be.

The important thing for all students is not to stop questioning because what is essential for their current and future learning is the ability to ask questions. The acquisition of knowledge and learning derives its

energy through questioning. If we are to affect real learning, which can never be a one-way channel, learning must be an interaction between the teacher and the student. We must step away from any consideration that it is time consuming to foster a student inquiry, it is actually time efficient in that it has the potential to inform learning within and beyond school, supporting anytime, anywhere, lifelong and life-wide learning.

All active learners need the freedom to question and we need to encourage them to initiate more often. When we embrace the notion that questioning is a special kind of learning we will engage our students in the intellectual process of questioning more often. Research has indicated that students stop asking questions over time. Students don't stop asking questions because they lose interest, it's the other way around; they lose interest because they stop asking questions. As educators we have a direct impact on student performance, it is our function to maintain curiosity and actively support student inquiry as much as it is to deliver any given curriculum. If not will we continue to be guilty of unintentional neglect? (Henman 2009)

All too often we are missing the opportunity to cultivate the individual's quest in favour of curriculum delivery and the need to get through schemes of work. More often we need to adopt thinking around mutual respect within our learning environments as well as actively listening to our students. We need to create contexts where curiosity stimulates situations where active participants embrace the mode of inquiry. Where teachers facilitate or guide collaborative or individual learning rather than maintain the teacher as the focus of it. As educators we must satisfy student curiosity with explanation, creating learning environments which are continuously accepting of and encouraging curiosity.

As highly valued knowledge professionals, we create incredible learning for others. As learning leaders we generate human growth, learning and cultivate ideas. To be what we can be as educators

our primary role must be to maintain, to nourish, and to celebrate each learner's individual curiosity and sense of wonder. Every day we need to create an atmosphere where students feel comfortable about raising questions and let our students know that their questions are not only valued, but have an important place in our learning environments. We can be highly responsive to our students needs and continuously challenge students to develop skills and gain new knowledge and understanding. Within our classrooms we need to nurture a genuine attitude of exploration and deep interest in everything, ways of thinking and being. This has the potential for our students to become more confident and flexible, adaptable and active learners.

Curious people will learn how to learn and repeat the process again and again. As often as possible, we want to leave the ideas, the solutions, the suggestions, the purpose, the questioning, and the



excitement where it belongs — with our students. Activities which allow more student choice is a start. We can encourage students to learn through active exploration. Encourage questions such as, "What would happen if...?" We can also model curiosity, ask questions, engage in exploration alongside students to resolve the questions they pose, we can demonstrate our enthusiasm for curiosity.

Maybe we just need to stand back and ask ourselves the question: Are we like our students, are we driven by the unrestricted desire to understand? By personalising the experience of learning for each student we can encourage them to connect with their own intellectual passions, as well as providing authentic relationships between educators and learners. By focusing upon their curiosity we will continually encourage their desire to learn. Daily we will have the opportunity to inspire curiosity in our students, to make them engaged and independent learners. Put simply, if we want to improve the quality of our students' thinking we must learn to support them in improving the quality of their questions. Ultimately we will engender in our charges more active and reflective thinking, happy learners in classrooms driven by passion, curiosity, and the occasional dream. If you tell me that curiosity killed the cat...I would say that curiosity was framed! Curiosity merits our attention. ■

### **Biography Rob Stokoe**

A passionate educator with over 25 years in educational leadership across all phases of education. My career has been varied ranging from Primary to Higher Education, currently Director of the JESS schools in Dubai. My educational philosophy is, and always has been focussed around the students I serve, my aim being to encourage them to becoming better learners than they ever thought they could be, with every classroom within our schools being environments of possibilty.



### Flipping Classrooms

BY FRED VERBOON

There is a number of interesting ICT enabled projects that offer teachers chances to rethink education. Most of them enable teachers to offer a more individual and self paced way of learning. One of the most promising movements is called "Flipping Classrooms".

The Friday Institute for educational innovation (www.fi.ncsu.edu) study ways of effective education and differentiates the following levels of rigor: remember, understand, apply, analyze, evaluate, create and publish. According to Dr Lodge McCammon, teachers traditionally spend the vast majority of the available classroom time on delivery and review of content. Only a small percentage is spent on application. This application of content is usually done at home. Traditional education therefore offers only the first two levels in the class room and the third at home...

Another interesting argument for innovation is that in the traditional classroom setting, teachers focus on the middle group of a class. Students just follow the pace that the teacher offers. This leaves a group of higher Flipping classrooms is a new concept where students view their lectures at home and spend class room time on the application of knowledge like open ended projects.

level students unchallenged and a group of struggling students that does not receive enough effective remediation. There clearly is a need for differentiation.

How does ICT fit in today? Most teachers use digital content as a supplement to the traditional class room experience. However, the pace of the curriculum is still offered in a kind of lock step pace where every students moves through the curriculum in the same time.

Flipping classrooms is a new concept where students view their lectures at home and spend class room time on the application of knowledge like open ended projects. You may want to call this a flip, because the basic idea is that students listen to the lectures before getting into the classroom.

Initiatives like The Kahn Academy (www.khanacademy.org) (4 million users) offer lectures, so that students watch, rewind and pause the lectures as many time as they need, post questions on line to the teacher or class mates, look at basic concepts if needed or just go ahead and listen to additional lectures. One of the main advantages is that students work in the class room at their own



pace and ask for assistance when they need help. Teachers themselves may want to consider taping the lectures and publish them on the internet.

Flipping Classrooms empowers teachers to be more interactive and focus on the application of knowledge, mentor them directly and it frees up class time for more open ended creative lessons. This is where the teachers can be at their best; guide students to solve open ended, more creative projects. Consequently, class rooms can be divided into groups, divided by their level. The groups work at their own pace and focus at exploring new ways of applying knowledge, that is when they are the most likely to get stuck. The role of the teacher shifts from lecturer to a knowledge facilitator. An interesting video on Flipping classrooms can be viewed here —weblink (http://www.youtube.com/watch?v=26pxh\_gMppE).

Flipping Classrooms enables teachers to offer self paced learning, really focus on understanding the basics 100% and master concepts before moving on. Teachers can use readily available material, but also record their lecture s and offer it online.

Another interesting video weblink (http://www.ted.com/talks/salman\_khan\_let\_s\_use\_video\_to\_reinvent\_education.html) is posted on TED. In this video Salman Kahn discusses his initiative that enables Flipping Classroom projects.

For further information on Flipping Class rooms, please visit the ESHA portal —weblink http://eshacommunity.wikispaces.com/Flipping+ Classrooms and view the resources.

