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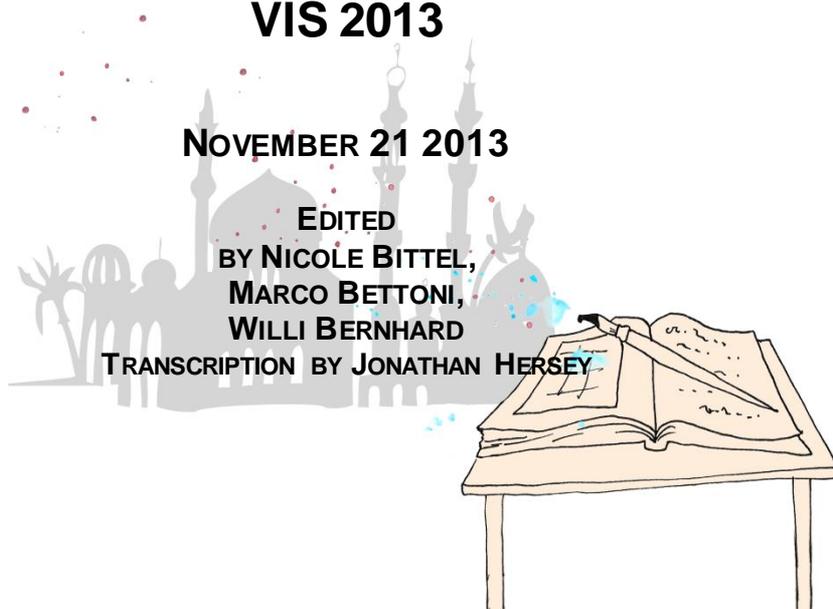
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# **PROCEEDINGS OF THE 1ST ONLINE CONFERENCE ON VIRTUAL AND DIGITAL STORYTELLING**

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## Introduction

I welcome you to an event for exchanging experiences and expertise on the topic “Learning with stories in education and business”. I also welcome you to an afternoon which is hopefully going to be rich of new ideas and discussions. My personal aim for these four upcoming hours is rather simple: I wish that today at half past five pm, each of you can take away at least one thing from this conference, which is useful, new, inspiring but first of all meaningful to him or her.

For a smooth start into this afternoon let me tell you ... a story. Of course, to start a storytelling conference not with a story is like going to a McDonald and ordering a diet coke ... there would be something missing. I invite you to come with me to Amsterdam, to the Prinsengracht 263 and to join me for a little time journey. I am pretty sure that many of you have already been to the Prinsengracht in Amsterdam, arriving in front of an old building, rather well kept and renewed, normally with a rather long queue in front of the entrance.

Well, you stand in front of the Anne Frank house, the home of that little Jewish girl, who became a symbol for the suffering of a whole nation during the Second World War. Entering this house means entering history and it means becoming part of a life story which is symbolic for thousands of others in those days. There is for example this phone, in the middle of one of the rooms and by picking up the receiver you can hear Anne herself talking to you. She tells you about her life, captured as a prisoner for years in this house, always waiting in fear to be discovered and to be taken to a concentration camp. And while you keep on walking through each room of this house, you have the impression that you can still feel not only this fear but also the hopes and dreams of Anne and her family. Each room is somehow flooded by a special spirit until today. It is as if each room in this building would tell you its stories, sharing with you what it has felt and heard during all those years.

And so you end up in the living room of the family Frank, observing some strange strokes on the wall; and at that moment when you realize that these strokes were made by Anne's father in order to record the growth of his two daughters, you really become part of this family, a family who was just looking for a little portion of daily life within the war. And finally, at the very end of your visit, you find yourself in that room where all big dreams of a little girl had their home; you can even touch the original postcards – Anne loved so much and which are still hanging on the wall above her desk. And everything in this room tells you the story about a little girl who just wanted to live, who wanted to become a famous author, a girl that was claiming not more than being allowed to get a piece of the world out there ... beyond the chestnut tree.

Well, we all know that Anne's story is not a fairy tale, and unfortunately it doesn't have a happy end. Anne's family is betrayed in 1944, prisoned and finally taken to a concentration camp where Anne dies at the age of fifteen. And as a visitor, well you remain in front of the exit in front of this building with the strong impression that something has changed, that somehow you are no longer the person that entered this house twenty minutes ago. And in fact you see many people crying in front of the exit. I am convinced, that this is exactly what Anne's father meant when he said: "We have to know the past to build up the future". And I guess we all agree with Otto Frank.

**Stories are a fundamental key to learning** and that is true throughout all ages, not only for kids. And the Anne Frank house is a great example, how learning with stories may work. For my part as I am working for a distance university I am convinced that stories should become more and more part of learning, part of education, especially also of higher education. Thereby I am facing every day the challenge how to facilitate the learning of our students by making use of new technologies. And that is in fact what brought us to the idea for this conference, as stories deserve to be part of every learning, from the cradle to old age.

This e-book is freely accessible as conference proceedings and includes all conference contributions in written form, transcribed from the speakers' oral presentations.

The [recordings](#) and [slides](#) of all presentations are available on the conference website [here](#).

## Conference Committee

Nicole Bittel (conference chair), Fernfachhochschule Schweiz, Brig, Switzerland  
 Marco Bettoni (conference co-chair), Fernfachhochschule Schweiz, Brig, Switzerland  
 Willi Bernhard (conference co-chair), Fernfachhochschule Schweiz, Brig, Switzerland  
 Cindy Eggs (conference co-chair), Fernfachhochschule Schweiz, Brig, Switzerland  
 Nathalie Roth (organizer), SWITCH, Zurich, Switzerland  
 George Eleftherakis (presenter), Sheffield University, Thessaloniki, Greece  
 Giuliana Dettori (presenter), Istituto per le Tecnologie Didattiche, Genoa, Italy  
 Joe Lambert (keynote), Center for Digital Storytelling, Berkeley, USA  
 Luca Botturi (presenter), Associazione Seed, Canobbio, Switzerland  
 Martin Vögeli, Hochschule für Wirtschaft Zürich, Zurich, Switzerland  
 Monica Landoni (presenter), Università della Svizzera italiana, Lugano, Switzerland  
 Nikolina Nikolova (presenter), Sofia University, Sofia, Bulgaria

## Biographies

### Conference Chairs

**Nicole Bittel** has a Master of Arts from the University of Zurich where she graduated in pedagogy, having completed a thesis on storytelling. She is currently a research associate at the Swiss Distance University of Applied Sciences, where she is responsible for the coordination of various research services. She is also project leader in the field of e-Collaboration, focusing on applying storytelling and fairy-tales to learning and knowledge management for business. She acts as the scientific coordinator of the SIG eCollaboration for eduhub (the Swiss community for new learning technologies at Swiss higher education institutions [www.eduhub.ch](http://www.eduhub.ch)) and is a member of the programme committee at the annual meeting "eduhub days". Her main research interests are storytelling, collaborative learning and knowledge cooperation.



**Marco Bettoni** is Director of Research & Consulting at the Swiss Distance University of Applied Sciences where his research focuses on e-collaboration, knowledge management and e-learning. After receiving his Master's degree in mechanical engineering in 1977 from the ETH Zurich, he worked for industrial, banking and academic organisations in the fields of machine design, engineering education, IT management, IT development and knowledge engineering (Artificial Intelligence). In 1991, he became Professor of Knowledge Technologies at the Basel University of Applied Sciences (FHBB). In June 2003, ETH Zurich appointed him as a "guest researcher" to investigate the role of knowledge-oriented cooperation in knowledge management. Since 1981, he has been collaborating with Ceccato's "Scuola Operativa Italiana" by contributing research in Operational Methodology, Kantian Criticism and Radical Constructivism.

**Willi Bernhard** is a Professor at the Swiss Distance University of Applied Sciences and Head of Consulting Services since 2006. From 1984 to 2006 Prof. Bernhard worked as an engineer, lecturer and researcher in industrial and academic organisations, focusing mainly on the field of Enterprise Simulation.

Currently his main research interests are e-Collaboration, Communities of Practice, Serious Games, Creativity & Idea Management, Collaborative Creativity, e-Learning, Technology Enhanced Learning, Simulation-Based Learning and Discrete Event Simulation.



## Organizer



**Nathalie Roth** is a trained and certified translator, terminologist and interpreter. She studied German, French, and English at the University of Geneva in Switzerland and Portuguese and English at the Alumni translation and interpretation school in Sao Paulo Brazil. After working several years as a translator and terminologist in banking and insurance, Nathalie Roth discovered the world of e-learning, when working as an e-learning author for bank training modules.

Since 2009, Nathalie Roth has been working as a community coordinator for the Swiss E-Learning Community eduhub at SWITCH.

## Keynote Speaker

**Joe Lambert** founded the Center for Digital Storytelling (formerly the San Francisco Digital Media Center) in 1994, with wife Nina Mullen and colleague Dana Atchley. Together they developed unique computer training and arts program that today is known as the Standard Digital Storytelling Workshop. This process grew out of Joe's long running collaboration with Dana on the solo theatrical multimedia work, Next Exit. Since then, Joe has travelled the world to spread the practice of digital storytelling and has authored and produced curricula in many contexts, including the Digital Storytelling Cookbook, the principle manual for the workshop process, and Digital Storytelling: Capturing Lives, Creating Community.



## Presenters



**Dörte Resch** is Professor of Human Resource Management and Organizational Behaviour at the University of Applied Sciences and Arts Northwestern Switzerland ([www.fhnw.ch](http://www.fhnw.ch)). She holds a PhD in organizational psychology from the University of Neuchâtel and a Master in psychology from the University of Mannheim. Before her PhD she worked for several years as senior HR-manager with IKEA.

In her research she is interested in constructions of individual and organizational identity and their related strategies of branding, as well as exploring de- and reconstructions of narrations in organizations. These interests are also pursued in applied research and consultancy projects.

**Dr Monica Landoni** is a senior researcher at the Faculty of Informatics at the University of Lugano, Switzerland since January 2007. Previously, she was a lecturer in the Department of Computer and Information Sciences of the University of Strathclyde since 1997. She holds a PhD in Information Science from University of Strathclyde and a Laurea in Scienze dell'Informazione from Università degli Studi of Milan. Her research interests lie mainly in the fields of Interactive Information Retrieval and Electronic Publishing, particularly in the area of design and evaluation of user interfaces for electronic books. Other interests include: Co-design, Affective Computing, Electronic Libraries, and E-learning.



**Chiara Bramani** holds a Master degree in Communication Sciences from the University of Lugano, Switzerland. She worked at the Politecnico di Milano for 5 years in the field of educational technology, engaged in the organization and management of different projects regarding e-learning and intercultural communication. She works as project manager at associazione seed since 2007, dealing with projects in the field of education, communication and technologies.

Since 2007 Chiara also collaborates with two research laboratories, NewMinE lab and Webatelier.net at the University of Lugano in the field of technologies and education.

**Giuliana Dettori** is a tenured researcher at the Institute for Educational Technology of Italy's National Research Council. Her research interests include: the mediation of cultural artefacts (representations, narrative and ICT tools) in teaching and learning; the integration of ICT in the curriculum and its contribution to develop and spread innovation and the support to self-regulated learning granted by technology-rich and online learning environments. She authored numerous scientific papers, collaborates as scientific reviewer with many conferences and journals, and has been responsible for her institute in several European projects. More details on <http://www.itd.cnr.it>.





**Ekaterina Taratuta** is the author of works of fiction, including *One Hundred and One Minutes* (2007), *Fishes and Frogs* (2010), and *The Changeability* (forthcoming), and academic books such as *Philosophy of Virtual Reality* (2007), *Social Sense of Nostalgia* (2012), *New City of the Sun* (forthcoming). She has a degree of Doc. of Soc. Sciences from University of Turku, Finland, and taught social philosophy at St. Petersburg State University (Russia), where she earned her Ph.D. in philosophy. She has also worked as a freelance columnist and writer for journals, newspapers and Internet media.

**George Eleftherakis** is a Senior Lecturer and Research Coordinator of the Computer Science department at CITY College Thessaloniki, which is an International Faculty of the University of Sheffield. He is also leading the ICT Research Track of the South Eastern European Research Centre (SEERC). He received the Senate Award for Sustained Excellence in Learning and Teaching from the University of Sheffield in 2014.

Main research work is in the area of Formal Methods, Biologically Inspired Computing, and Serious Games, publishing more than 60 papers, editing 8 books and giving more than 20 invited talks.

He is a Senior Member of the Association of Computing Machinery (ACM) chairing ACM's Council of European Chapter Leaders.



**Dipl.-Psych. Christine Erlach** is founder of NARRATA Consult, a network that is specialized in narrative knowledge- and change management. Since 1998, she is focusing on finding and transporting tacit knowledge and cultural values and beliefs. She uses narrative methods to make implicit, experiential knowledge manageable, and she advises organizations in knowledge transfer processes, when experts leave the organization or major projects are debriefed.

The psychologist is managing the board of the Institute for Narrative Methods and has written numerous publications regarding narrative methods and knowledge transfer.

**Luca Botturi** holds a Ph.D. in Communication Sciences with a focus on e-learning and instructional design. He has been working as researcher and practitioner in Switzerland, Italy, Canada, the US and Spain, and took part in international development projects in Croatia, Macedonia, Ecuador, Mexico and Ghana. Digital storytelling is one of his favourite instructional approaches and professional development tools.



**Sara Corbino** completed an undergraduate program in Communication Sciences in 2008 from Università della Svizzera Italiana, after having graduated in 2005 from liceo scientifico, Istituto Sacro Cuore in Milan. In October 2010, Sara graduated in Communication, Management and Health from the same university.

Sara started working at seed association as an intern, from July to December 2009.

Sara has been working at seed and is currently a project manager, particularly involved in European projects and training projects that are most closely bounded to the healthcare environment. From 2006 to 2009, Sara worked by the Institute of Communication and Health of the University of Lugano as a student assistant for research projects relating to communication and healthcare.

**Nikolina Nikolova** is an assistant professor at the Faculty of Mathematics and Informatics, St. Kliment Ohridski University of Sofia. Her main science research is focused on achieving effective and efficient education in secondary school mainly in the fields of mathematics, informatics and ICTs. She works also on different approaches of integration of education in maths, science, and arts with the use of ICTs.



## Using Storytelling as a Tool for Introducing Narrative Analysis to Students in Executive Education – Or: How Ingvar Kamprad Still Haunts my Professional Life!

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**Short Abstract:** As a researcher I am very much interested in the discursive construction of realities in organizations. How can this topic, rooted in not so easy to understand post structural philosophy, be taught to students? This is the main question to be answered in relation to experiences of a half day course with students in executive education. The presentation will discuss the didactic concept as well as the stories provided by students on the creation of organizational realities and their effects. By first providing and then analyzing their own stories, students get a first glimpse how organizational realities get discursively constructed. It is discussed how stories can be analyzed and thus so called subconscious levels of organizations culture can be made accessible. With the first step of telling and in a second step of analyzing their own stories, different narrative patterns and repertoires are detected, get noted and are then set in relation to paradigmatic foundations of research, later to be applied in their own research projects. Trying to round up a circle, the third step consists of reflecting what a 'good story' entails, and how – or rather if – it can be created to deliberately influence learning processes in organizations. By critically reflecting the danger of over simplification of the rather complex concept in a half day course, the balance between research and application gets addressed, using the business case of Ikea and their story telling practices.

### Presentation

It's a rather complicated title, but what it's about is narrative analysis - a very complex method. The main question is how can storytelling be used for teaching that method to students in executive education? I suppose a more interesting title is "How Ingvar Kamprad Still Haunts my Professional Life!". I don't know if all of you know who Ingvar Kamprad is, but we'll come to that. So what I usually start the course with is not actually the slide I've just shown. The course on storytelling and narrative analysis starts with this wall of stones that symbolises longevity and independence.

This slide with the stone wall is what new colleagues see at the beginning of their first seminar on their first day in their new job at Ikea. Ikea co-workers are shown it first to learn about the storytelling tradition within that company. They don't start with charts of numbers about the company, but with the picture of the stone wall and go on to hear the story of the company dream. The reason for starting with the dream is to connect the co-workers with the company dream, 'to create a better life for the many people', not for the few. So it's a very democratic idea. It then goes on to items created in 1976 with a picture of the founder of Ikea, Ingvar Kamprad. It's called 'The Testament of a Furniture Dealer'. It's a serious business - it's the legacy of a company. I present Ikea and its seminar as an example of how even in its early years Ikea started using storytelling methods to portray its organisation and culture. They start with these simple stories - the legacy that every co-worker should continue to work on, rather than showing complicated charts of the company. The message they're using with the storytelling is the simplicity versus complication of who owns the company, which group does what and so on. Facts that wouldn't be interesting and wouldn't draw the starters into the company and into the culture. The same didactic concept using simplicity versus complication is the didactic concept I'm also using for this seminar. I'm using the relative simplicity of storytelling versus the complication of narrative analysis for the half day seminar. That's how long that seminar is - just a half day.

As you can see from the agenda of a typical half day seminar, I spend a fairly long time on storytelling - and on the reflection of storytelling - and then it goes on to the complication of epistemological groundings of narrative analysis. I start the seminar with the Ikea story and then go on to ask people about stories told about their companies as it's executive education and people have experience of storytelling. But I'm not just asking them for the stories, but what messages they think are transmitted through such stories. You can see that with the green card on the right hand side of the picture. That's the first step towards thinking 'what does the story do?', 'what's the function of the story?'. So, it's not just telling it, experiencing it and thinking what's great about it, but also what does it do. Because stories are not innocent - they do things, they portray things. And thus I first get them into an analytical frame of mind. I also like to get them to reflect on their experience of starting storytelling by asking them 'when are you listening?', 'what makes a story a good story to you?', 'what are elements to you of a good story?'

And responses come such as humour, clearness and simplicity. The first part will be how do I construct a good story? A story needs central events - which is the core event, which is the turning spot? But also, a story is not just telling an anecdote. A story has a message and and a crux for that message you also have to pay attention to the context of your listeners because not every story works in every setting in the same

way. After doing that I get them to think about what stories do, what facts they contain, thus making the connection to the foundations of storytelling and the construction of narrations. Stories often tell things that are otherwise hard to communicate and narration becomes the important point now and the link to narrative analysis. Narration's order is established and sense-making is made. Storytelling means to make conscious and expertly informed use of stories in organisational life, but they also create realities within organisations. They're not innocent - they have a message about whoever is portrayed and have a certain use for the organisation and to find out that use for the organisation, one can use narrative analysis to deconstruct those stories to find out what's actually being told, what message comes through. Stories at work also do work - they have a purpose. To find out that purpose is the foundation of narrative analysis: the deconstruction of stories. Of course there is a vast background from Derrida on the linguistics of deconstruction. In the seminar I don't go into this, I just want them to get the first glimpse of deconstruction and to dissect stories. By deconstructing stories it gets reflected *how* order gets constructed and what kind of sense gets produced - the hidden sense-making processes are revealed and can be made available for further analysis, but in organisational life it can also be made accessible for change. The flow of actively first constructing stories, thinking about construction and then afterward reflecting the active construction, the first step of deconstruction and by that, narrative analysis, gets done.

All this very much connects this with the way I'm using it to the linguistic term. So what we do is reject the concept of language as a mirror of reality where signifiers are connected. Instead, language means to create realities and allocate meaning that is not fixed but is for a changing world. That's why the context becomes so important. Stories create realities and the analysis is done in order to understand the creation. The focus of the research is always on how realities are narratively and linguistically created. And that's a very different research question to the usual positivistic research on 'what is it?'

Here the question becomes 'how are realities created?' Of course the main tradition I'm relating to there is discourse analysis, here taking a quote from Boje seeing discourse as "an extended expression of thought or knowledge on a topic that happens in a disciplined way." So it's not arbitrary how stories are told, how they're constructed, but there's also a play of differences in meanings enacted and connected to certain hegemonic practices. The collective dynamics of storytelling also construct power and knowledge relationships in organisations - what's in, what's not.

In the case of Ikea you can say you mustn't cause waste of any kind: we're frugal, we're not a company that goes on first class trips or anything like that. By the analysis of narrations and stories and discourse analysis - these are always seen as embedded in larger activities and contexts. Discourse refers not just to the spoken or written rule, but also to metaphors for presentations, images and stories that produce a particular event. Epistemologically - and that's the most complex part of the course - you can see in the top left square a dissensus technique which analyses concepts and problems from a certain very concrete context. It's a postmodern deconstruction of dialogic studies and that's the point in the course where there are usually the most questions. But then simplicity starts again. I reconnect to the stories that participants have told before.

How can storytelling be used as a tool for introducing narrative analysis to students in executive education? Warning: challenges ahead! Firstly, by replicating the simplicity versus complication mode of stories by connecting to and starting with individual experiences in organisational life; by limiting the theoretical complexity; by also giving examples of applied research; by always reconnecting to individual stories. Challenges from my point of view - and it is just a very narrow glimpse into the complexity of narrative analysis - are that I do see a danger of oversimplification of rather challenging methods in qualitative research.

The last question remains: how does Ingvar Kamprad still haunt my professional life? Well, for picking out the stories on Ikea I used the book you can see here which I got when I worked at Ikea. It's on the secret of Ikea. I hadn't taken it off my bookshelf for ten years and when I did I could see the stories told in it from a very different point of view.

## Discussion

*Peter Böhnlein: Are there examples of how to apply these concepts?*

*Dörte Resch:* There are examples of narrative analysis in the literature, including my book *Soziales Miteinander in Organisationen* and for more examples on discourse analysis, send me an email and I can provide other recommendations of literature. I do recommend Yiannis Gabriel & Dorothy S. Griffiths and Jaber F. Gubrium & James A. Holstein

## Building Digital Stories with and for School Children

**Dr. Monica Landoni**  
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**Short Abstract:** We are presenting the findings of a project called PADS, PAper and Digital resources in Schools, funded by the Hasler foundation, where we developed a tool for supporting digital storytelling by working with primary school children and teachers. Teachers and children acted as co-designers in a formative evaluation approach that produced a number of prototypes from low to high definition. For our final experiment children were asked to work in groups over a number of meetings and offered to use a tablet-based prototype that would ensure they would follow the genre appropriate structure, as previously explained by teachers. We are now analysing the stories they produced with teachers' help and are looking for where children got their inspiration and how the resulting plot has been influenced by the guidance provided by our prototype.

### Presentation

Let me take you through the experience we had mixing paper and digital technologies in schools. We worked closely with local schools in Lugano - public and private and following both the Italian and Swiss curricula. We noticed over the years how students and teachers alike were very much at ease mixing traditional tools such as paper and pen with technology to express themselves and their creativity. So we thought why we don't look at this in a more organised fashion. We wrote up a project and the Hasler Foundation was very happy (and we were very lucky) as they decided to fund us.

We started this study to investigate how mobile technology - technology in general - can help formal education and transform the experience into something very valuable. Of course, keeping paper there as something we are very much used to. You can see our children here, using a variety of tools among which are tablets and paper and pens.

The focus of our study is digital storytelling and we embrace Bruner's definition: "the narrative plays an important role in mediating the construction of meaning and a child's organisation of knowledge". We worked with children in local primary schools from the age of 6 to 10-11 - a very interesting age.

Our research questions were: How do we support children working in groups and creating stories by using mobile technology in a formal learning context at school? What are the main features we should pay attention to in order to build good mobile applications for a primary school? The focus was on literacy skills.

In the case study we focus on specific storytelling in school as part of the curriculum and we noticed how storytelling is part of Primary 1, 2, 3, 4 and 5 to enable children to develop their linguistic competencies and to help them write different types of stories, starting with fairy tales onwards. The steps we took within our project were as follows. We went around collecting observations and analysing how teachers and children would go around building stories in the classroom. Then we were looking to introduce a different type of application, a different type of technology so compiled a list of requirements for building our new tool before designing it and finally evaluating its impact.

"PADS" the journey I'm talking about is actually the final leg of a four year study in a primary school in Lugano, Switzerland where we undertook observations in the writing laboratory where storytelling was done by the teacher. The meetings were two hours a week with each class with children from Primary 1 to Primary 5. So we collected quite a bit of data! We started by getting children inspired with a school trip. Our children went to an aquarium in Genova. There was preparation for the trip and when they came back the children were asked to write stories inspired by the trip and present them with posters. We used that experience to find out how the narrative activity model would fit into that situation with the first stage of exploration then inspiration, production and then sharing. So, how the stages followed one another and how long it would take - how long the children would spend on each stage.

We use the insight into the role of technology to understand how we could make the teaching/learning experience richer, how to better support the understanding of educational content and how to encourage creativity in children. That is the most daunting part. All these considerations, observations and feedback became the requirements for producing Fiabot, our tool. The name was given by the children.

Fiabot is a tool that allows children to define the kind of structure or plot of their stories and enables them to gather different kinds of media content to put in their stories and edit those. It also allows them to share what

they're working on with the class and publish the stories so that they can be shared with other stakeholders such as relatives so that the child gets positive reinforcement from people outside the school.

When it comes to plot and structure, it's the part we focus most on. With teachers and children we had different types of requirements. Some were requirements of the curriculum such as having to cater for a typology of stories - different kinds of story from fairy tales to myths and legend and this list would grow as the children progressed through school. We also had to make sure the 'architecture' for each story would follow a very clear path. We'd also be asked to provide a list of ingredients to jog the creativity of the children. For example if you're writing a fairy tale you need a hero, an antagonist and a magical object. So this was just to make sure the children complied with the typology of the story. We also provided character archetypes and allowed children to access external stimulation for the creation of stories and guess who else the children wanted? Help with checking spelling and grammar so they could focus on the creation of the story and not worry too much about what they were writing and the spelling.

When it comes to video creation and editing, we have to say that in our experience over the years, children are very good at that. They are not phased by technology and have a natural sense of how to combine different kinds of media. Nonetheless we had tutorials for them to make them familiar with the application and we provided a tool that was mobile so they could be inside and outside the classroom. We also made it so that the one tool was used for creating, assembling and editing the story so that the children didn't have to move between platforms. We also made it possible for them to capture content in analogue forms, so if they liked to draw an image with paper and pencil they could capture that image which they preferred to just creating it on the screen. We also enabled them to go on the internet and look for material that inspired them and encouraged them to extract media such as audio or video for their stories.

The sharing function, which is very important to the children, made it possible to share the work and make it visible to the others while doing it - not just waiting until the project was complete. They saw they could get feedback straight away on their presentation. The publication was even more important because it was when other stakeholders would see the wonderful work they'd done and provide them with feedback. So it was important for us to make the story available in different formats.

Also at the beginning of November we had Night of the Tale (notte della conta) where a group of children presented their stories to their parents and classmates - a very successful event. It's all part of the storytelling experience. One idea was to put the stories on a virtual bookshelf for the children to browse later on for children themselves and teachers to rate the stories and understand the value and let the authors reflect on the whole process.

Here is Fiabot. It has four modules: one for establishing the story structure and plot; one for media creation and editing; one for sharing and one for publication. We got children to work in pairs (and in different combinations and also comparing how pairs were better than groups) to produce stories for the teachers to evaluate. They could also share their stories with classmates and friends and on special occasions such as the Night of the Tale and they could reflect on the process with their teacher and amongst themselves.

Teachers provided feedback to us which was important for our analysis and evaluation and graded the stories according to a grid we produced together. Therefore our goals and their goals would be accounted for. The three main outcomes for the projects were: a set of guidelines for the design of digital technology to support class-based activities The development of instruments for the analysis of the impact and experience in the class from using the new technology. And a model for explaining the different roles a teacher can take for introducing technology in the classroom.

When it comes to the procedure and criteria for the design evaluation, we looked into the different stakeholders involved, taking into account their needs, and applied different techniques for the different contextual inquiries, we ran focus groups with teachers and children, used questionnaires (different questionnaires for children and teachers) and evaluated the resulting stories. We also monitored the way the other stakeholders were performing during and after the process. As for the instruments of analysis, we found that the most rewarding, interesting and complex part was coming up with the criteria that would drive our design and also our evaluation and, with help of teachers and literature available, came out with four main criteria.

Level of creativity; how to access the level of collaboration between the children; the level of literacy the children were acquiring during the process and the quality of the story in terms of adherence to the type and agenda and the consistency of the story and how creative it was.

Here are some examples of the data we collected and how we are analysing it across five criteria - four you just saw with the quality of the story being opened up into two criteria so that we can see how a story does according to the criteria requested by us and the teacher.

Here is the model we use to interpret the different approaches or attitudes teachers take in terms of being engaged or disengaged and proactive or passive during the process. So we have the proactive teacher, facilitator, manager and the follower. The teacher can change role according to the situation.

In conclusion, our focus was on how to make the teaching and learning experience more rewarding, not just on introducing new technology into the classroom for the sake of it. We used a process of formative evaluation for the design of the prototype, but we also used 'technology probes' - we took different applications to the class and other stakeholders involved. We had a definition of design recommendations to support all the narrative activities steps. We hope that the project we have done is of interest to other people doing similar work. The evaluation is still ongoing and we hope that the data we are still getting and that are being analysed according to the criteria that we listed are going to be of use to other people in this area. We found this project rewarding because working with teachers and primary school children is very rewarding.

## Discussion

*Nicole Bittel: There has been a lively chat discussion during your presentation where participants are discussing whether storytelling is a skill you are born with or whether it's something you can learn. What could you tell us about that based on your experience?*

*Monica Landoni: I think that children like to tell stories. Our experience of e-books among children shows that reading and writing are two sides of the same coin. Children love telling stories and take inspiration from the most amazing places and with some encouragement children can be very productive and creative. In many of the classrooms we visited there were children there with books ready to share and read and that's important.*

*Marco Bettoni: Could you say something about the integration between the children's paper-based and digital activities?*

*Monica Landoni: We deliberately kept paper and digital technology together in the same classroom, in the same process, in the same situation. Children would move seamlessly from one to the other. I don't think one is going to take the place of the other. They are both equally valuable and important to children.*

## Stories as a Bridge over the Ocean

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**Short Abstract:** Seed association has implemented several projects based on digital storytelling and aimed at improving the educational and pedagogical offer of schools or educational centres, both at local at international level. Digital storytelling workshops have involved trainers and students in Mexico, Brazil and Croatia, as well as middle schools or special school in Switzerland. Also the project called COBRA (Como-BRASilia: <http://comobrasilia.wordpress.com/>) involved digital storytelling and international cooperation, but its peculiarity was allowing the interaction between two groups of pupils of the same age: one based in Brasilia and one based in Como. The project took place in spring 2012 and consisted in 3 main stages:

- The two groups introduced themselves to one another .
- Each group produced some parts of a digital story, which were then united into one video.
- Each group promoted and spread the story in its own environment and community.

### Presentation

‘Seed’ is engaged in developing social projects on local and international levels dealing with education, technology and international development. Among our activities for the past few years we’ve been developing digital storytelling methodology that we use in different projects with different groups of people such as young people and teenagers.

Across all these different projects there is one common aspect: the aim to develop communicative, expressive, relational and technological skills. This runs across different contexts such as working with children with special educational needs, disadvantaged children.

In 2012 we decided to use digital storytelling methodology to create a bridge between cultures. So what happened?

At the two sides of the bridge are two instates we have been working with in recent years. One is Istituto delle Orsoline di San Carlo - a primary school in Como in the north of Italy. The other one is an association dealing with children from a disadvantaged area of Brasilia. (Associação Nossa Senhora Mae Dos Homens for Portuguese speakers!)

The name of the project comes from the two locations: ‘Co’ from ‘Como’ and ‘Bra’ from ‘Brasilia’ gives us Cobra. Don’t worry - it’s not about snakes but a bridge between Como and Brasilia.

What did these institutions do? We already had experience with both institutions for digital storytelling so we decided to twin them, bridging the two realities from March to June 2012. The digital storytelling methodology was the common means to build this bridge.

The project had three main stages. First of all the children in Italy and Brazil had to present themselves, their city, school and food to the other group through the common blog created. All the teachers and children could communicate through it.

Here you can see some photos the groups shared of themselves and the foods typical of their regions.

From these first steps they started to get to know each other. It created a common working group. Then, coordinated by the teachers and educators, the children had to jointly create a common story.

They created, illustrated and edited a joint story using the digital storytelling method.

It has been a common goal process with the children in Brazil creating a part of the story and then passing it over to the group in Italy. The group in Italy then carried on writing the story before giving it back to the Brazilian group.

This carried on for several more steps in order to arrive at our final story.

Here are photos along the way of the children creating pictures and then capturing them on camera to use digitally. There are screenshots of the shared blog and still of the video they made together that was recorded both in Italian and Portuguese. So you can hear it in one language with captions in the other.

The third phase of the project was the promotion of its results. Both institutions organised a final event - a party with videoconferencing where the children from each institution could see the children from the other. So they could meet, at least virtually.

What can we say about these experiences? The results were really surprising for all participants and stakeholders for two main reasons. First of all, it's been a great example of how educators working in a socially and economically disadvantaged environment learning a new training methodology which they could integrate into their ordinary teaching and educational activities and feeling so confident about their new capabilities that they can work together with another school on the other side of the world.

Second, this experience shows a deep cooperation between children living on opposite sides of the planet, of the ocean.

Although we've not had the chance to watch the story today, there are links for you to go to the blog at <http://comobrasilia.wordpress.com/> and you'll see how it's possible to see which parts of the story came from Brazil and which from Italy.

It was a precious opportunity for children to come into contact with people of the same age living in completely different contexts and perspective and to learn that they have so much in common - much more than they could imagine.

To see all of the processes and final result, do please visit the blog. The most important part to see is not the final result but how they cooperated.

Thank you.

For these last few minutes I've prepared a question for discussion by the group: how do you think digital storytelling can foster integration and intercultural dialogue?

## Discussion

*Cindy Eggs: Do you have plans to use this procedure with adults?*

*Chiara Bramani:* We've used the digital storytelling with adults and it's been very productive. We used it with immigrant women, with refugees and also for promoting cooperation in other contexts. It works! One example is a project we're involved with called Story Shop where the idea is to use digital storytelling to tackle issues around working in healthcare for elderly people, for example nurses. It's not an easy job from a psychological point of view, they have a lot say and so we're using digital storytelling to support them in this field. This is a new project so I'll be able to tell you more about it in the future.

*Monica Landoni: How can you measure the progress or what indicators do you have to show it works?*

*Chiara Bramani:* First of all, we don't use the methodology directly with the children. We always work with teachers and educators because they are the experts in working with children. So it's the teachers who provide observations and feedback at the end of the project which is our first indicator. It's a qualitative not quantitative result. Then the final result is the story which we also incorporate into our evaluation. Of course, the stories are not academic indicators that can be measured as such so we mainly work on observations, especially from experts such as teachers and educators.

## Constructing a Story World: What Contribution to Learning?

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**Short Abstract:** Narrative is a powerful tool to enhance learning: conceiving a plot implies gaining awareness of logical constraints among events; narrating it entails developing expression skills, and narrating with digital tools adds the ability to suitably use different codes as expressive means.

But what if we construct virtual interactive stories? In this case the story creator does not conceive a story plot but a story world: a set of somehow related events, within which (partially) different plots emerge, at every run time, from the interaction between user and story-environment.

In this contribution, I will report my own experience with conceiving a story world, highlighting how this type of construction implies a different mental activity than traditional stories.

Discussing the experience will start from questions which are relevant for the educational use of any kind of digital narrative:

- Can such activity be beneficial for learning, in school or in work environments?
- What appears to be its main source of learning potential?
- How does it compare with other kinds of narrative activities?

### Presentation

I am a researcher in educational technology. Educational technology means the tools and methods for improving learning processes. Tools are not just technological but cultural, for example narrative.

Narrative learning is one of my fields of interest in educational technology.

I'll skip this first slide as I expect you are all expert enough in this area to know this part and so I'll move on to concentrate on my exploration of the areas of learning for which storytelling could be useful.

The term 'interactive storytelling' is used in a technical sense to mean the construction of stories which are made in conjunction between a human user or users and a digital system. So it's a kind of hybrid story that comes out of it.

They're not like a finite product that you can show around like when we ask our students to make a story via digital means or multimedia means which gives us an artefact that we can show around.

In this case it's a kind of system that is used online - a story that emerges as a result of the user interacting with the system.

This interactive storytelling is a relatively recent field and has been studied in increasing depth over the past decade. It's still an object of research because to create a story in collaboration with somebody is difficult and requires a lot of technical means.

Why propose this as an educational activity if it's so technical? Well, we don't need to have a complete product. There's one part of the creation of such stories which is the conception of how the story should be developed - an activity which can be conducted without much technology or technological competence and which in my opinion, very much offers a mental stimulus.

Let me say before going on that in terms of engagement in interactive storytelling, there are two possible roles that a human user can take: to design the story environment or to use it.

I'm going to be concentrating on the design aspect, the effort required to come up with this environment.

My experience is in a dialogical story. This means the story exists as a dialogue among participants. This may seem restrictive in some way, but if you think about it, it isn't. Think about the many games that children play based on dialogue, when they pretend to be different people such as Mrs Green and Mrs White talking about their children which happen to be dolls. So the story comes out of the dialogue.

If you make a representation of that then you've created the background and represented the dialogue of the background and it's immediately a story. Before going into detail, let me tell you about interactive storytelling's main issues.

What arises from the interaction should be a real story - it should be believable and interesting. It should be truly interactive and not just have a few branches and points where the user can choose to send the hero in one direction or the other as we've seen in recent years since the invention and diffusion of hypermedia. It should come out as a different story every time as it has resulted from interaction. For this reason, the stories should be pre-designed and not pre-scripted. We can design the possibilities.

Interactivity in this case is important because if there is a lot of interactivity, then it's more difficult for the system to control story development. But if a system is too controlling of story development then the user is scarcely engaged which is no fun for him or her.

I gained this experience at a summer school organised by the Iris network, a network of excellence funded by the European Commission, completely devoted to interactive storytelling. I worked on the preparation of two of them as they asked us to prepare a possible plot before entering the school. Then I worked in a joint exercise during the school. So I had two experiences: my personal one and one shared with group mates. We used a framework that you can find on the internet, but to design a story you don't need any particular software.

What I can say is that planning unscripted dialogue is very tricky because we're used to thinking of stories as a sequence of events. So it's tempting to plan a sequence of events and let the user choose from them. But this is not real interactivity. You need to imagine certain possibilities but you cannot plan all possible dialogues. This means it's necessary to give a background.

You design a background in which the dialogue or adventure will take place and it's wise to give the user a precise role to play within that background so that he will be led to behave in expected ways and says things for which you are prepared with some possible answers. Then you need to construct your set of sentences which make sense by themselves, but are small enough to be combined easily within the dialogue. Because the dialogue arises from what the user says and the sentences that you have prepared will be offered by the system you are using to keep the conversation going.

Then you need to classify your sentences in groups like greetings, general topics, about topics that are the focus of the story such as trying to find out information on a specific subject. You need to plan for conversations to be restarted and also for there to be more than one character in the system. You also need to make sure that these sentences can be said by the characters in the story, e.g. by a lady or a worker. This means you'll have alternative forms of all your sentences to be used in different situations and to avoid repeating the same thing and to adapt the tone of the discourse to a synthetic character. You need to design conditions in which each group or sentence will make sense. The system will know - at every moment - what kind of things could possibly be started.

This implies the defining of a number of variables describing the development of the story. Variable is meant in a conceptual sense, not in a technical sense because I'm not talking about implementation at this point. I would add that the research group I mentioned have designed a card-based game with possible actions and conditions in which they can apply these and how this application changes the conditions which can be used - maybe by children - to play a story without the need for a computer.

It's a different kind of process, but is it worthwhile? In my opinion it is. First of all it makes participants reflect a lot on the importance of the sequence of actions, on the possible different ways to express things. All of which complement and further develop the benefits brought about by digital storytelling activity. For all this, I suggest that many more educators both within and outside schools should take into consideration the idea of implementing an activity of this kind.

## A Secret Door to Foreign Language: Storytelling from the first 30 Words You Acquire

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**Short Abstract:** This is the tool I have experienced myself as a first-year student of philology. 20 years ago, and since then I have never come across a better way to enter a new language without meeting something called a language barrier. Thereby, this was in September, and this was Latin, the beginner's course. Prof. Rizhskii, the famous Russian historian and historic philologist, was 83 years old. At the end of our first lesson we have got a home task. This was a list about 30 words, nouns, verbs and adjectives. We were supposed to make a story out of these words and tell it on the next lesson in a week. This became one of the best my experiences as a learner... as a lifelong learner. I analysed the experience and found some of its essential traits which make it applicable to studies of not foreign languages only.

### Presentation

I am a philosopher and social scientist and also a fiction writer so have a combination of experience from all those fields. I agree with Giuliana Dettori that dialogue is the most important aspect of storytelling. This is also the case for what I am going to talk about now. The case is based on my students' experience and is something I then experimented with myself as a teacher.

Professor Rizhskii, our professor of Latin, started our group's first Latin lesson by asking us to write or tell a story. He gave us a list of just 30 words and example models of how nouns and verbs can change. By doing this exercise we realised that it's an excellent method - it did something novel for students. It created some kind of sanction on the language. By this I mean that when you study a foreign language, you need some reality in it. That's why it's so popular to go to that other country to learn the language, for the immersion. That's how you get the real experience of living with this language, real experience of live communication in it.

After this, I realised that I no longer understood Latin as a dead language, even though I only did one semester of this course. Far from being a fluent speaker of Latin I realised that it was the storytelling element that made us feel the language in quite a different way. At the same time we had classes in Ancient Greek, with very traditional teaching. We could really feel the difference. While the professor of Greek was highly knowledgeable, we didn't get the same access to the language as we had done with the Latin storyteller.

It's also important that this story had been very simplistic. If you only have 30 words and these are words like 'girl', 'star', 'flowers', 'sailor', 'island' it becomes important that the story is very schematic. Because when you're trying to make a story more personal, or come up with some lyrics, you head straight into that same uncertainty you have when you approach a foreign language. How can you speak in this new foreign language about your deep feelings?

With these inherently simple stories that are inherently not about you and your feelings, you suddenly get this sanction. A language sanction. You acquire a proficiency in this language. When you're a proficient storyteller, you can come up with any story - not just something to put across your own opinion or experience.

I went on to experiment extensively with this method. While I mainly teach philosophy and social sciences, I have experience of teaching languages like English and Russian as a foreign language. So I could experiment and find proof that this type of storytelling allows a student to what you could call 'expert voice' in a language. Immediately. From the first words. If he or she is asked to do this task, then he is automatically in this position. Being made a storyteller gives you very powerful tools.

Storytelling and language learning always have this issue of sanction, some sort of live access to something real - to real language, real storytelling. As far as I know, even professional writers tend to think about and question whether the story or the telling of it is real. This is a very similar situation for learners of a foreign language. This is how storytelling can help learners of a language.

This got me to wondering whether this would work the other way around. Could learning a language help storytellers? Could it help them improve their storytelling, help them make the stories really live.

## Discussion

*Marco Bettoni: Can you imagine that this approach could be transferred to teaching subjects other than language learning?*

*Ekaterina Taratuta: Storytelling can help with any subject, including mathematics I suppose. As for these sanctions that are suddenly authorised for you in your field - I'm not sure how this would work in other subjects. Because there's always something else other than just telling stories. For instance when I teach philosophy we get some illusionary or elusive sanction or criteria of wisdom. With languages there is the language barrier which is very much embraced by the storytelling. Whereas with philosophy, students should feel themselves authorised in wisdom and so I haven't noticed whether storytelling works as well with that as with foreign languages*

*Nicole Bittel: I thought you could use this approach for creativity or within change management. If you get 30 words and you have to come up with a story for solving a certain problem, helping you to find a different solution path to the one you'd normally take - it could also be useful. What do you think?*

*Ekaterina Taratuta: Yes, storytelling works really well in those situations and also in coaching where there are personal development issues. When you're talking about academic situations such as teaching philosophy as I just mentioned, I'm not so sure. But for personal development and growth and goal achievement, storytelling works really well.*

## Using Storytelling to Improve Engagement of First Level Students in Programming Course

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**Short Abstract:** Probably the hardest achievement for any educator is to make the students engage. Of course the subject plays an important role and thus for some topics and disciplines it could be less or more hard. In Computer Science one of the most challenging units to teach, and at the same time one of the most important for the discipline, is introductory programming. Diversity of students towards their attitude regarding programming makes the challenge even greater. The use of a tool called Mentor that simulates a software robot moving in a 2-dimensional tiled world resolved many issues. It allowed the introduction to the language in the first lecture and disguised the awkward syntax of the programming language. It also enabled the use of understandable problems to solve using storytelling, fairy tales and sci-fi stories. This played an extremely important role towards minimizing the effects of either technological or cultural level diversity of students, and enabled the focus to the important computation skills that should be developed in the beginning of such course. The coursework now is based on fairy tales and sci-fi stories and has two main parts that had an extremely positive effect regarding student engagement, allowing students to unfold their skills and demonstrate their creativity. The results were really promising providing many directions for future development and research and at the same time potential for the future.

### Presentation

Could stories and tools that enable their visualization and/or serious games based on them be used in education to improve student engagement especially tackling diversity issues? I'd like to talk about the experience I've had teaching first year students computer programming. Storytelling techniques and narrative analysis aren't my expertise, but I'm going to tell you about how something emerged when I used virtual storytelling and managed to achieve something special in one of my courses.

Let me set the scene and explain the problem we had and how we resolved it by using stories to improve the community feeling among our students. The goal of an educator is always learning. We have to understand that today we live in a world of international relations - we have students from many different countries and many different cultures. There's a lot of diversity in terms of males, females, young people, old people - there's been a lot of diversity in the classroom over the last decade.

We also have people who are very smart (but who can also sometimes be very weird) and some people who are not so smart. The problem we face is that we have to put all these people together and let them feel that they somehow belong to the same community. So doing something really fun together within the education could really help. Many people fear diversity, but if you've got all these colours available, you shouldn't be afraid: you should use them to create something nice. This is the way I was perceiving things in my class a few years back. I wanted to use this diversity, to get something good out of it while at the same time including people and helping them learn.

The problem I identified was that ignoring the students' previous learning styles, educational cultures and, most importantly, knowledge and skills inadequacies results in the formation of minorities that do not engage, are discouraged and eventually abandon their studies. It happens a lot in computer science. People think they're going to learn about computers so they start the course and then realise it's not easy to keep going.

The solution I came to was teaching diverse groups of students requires focusing the aim and learning objectives of every taught unit - and curriculum in general - and rethinking ways, techniques and tools used to achieve them. First of all you have to give them a chance. If you prepare something really complicated because you want to teach everything to your students, you're not helping at all (as we can see in this picture). If you want to teach something you have to avoid all the unnecessary details so that you can give the students something that they will be able to cope with. That was the approach I tried to use.

Of course everything should be simple, but not 'simpler' as Einstein stated. [*"Everything should be made as simple as possible, but not simpler."*] If you have to use examples when teaching, it's better to avoid using complex examples as they simply add to the complexity of what you're trying to teach and you'll create a bigger problem.

Instead of having to spend the rest of your life avoiding the students entirely, it's better to use 'fantasies' to achieve what I call the 'Yippee Effect' as demonstrated by Sponge Bob here.

So that's how I perceived the problems and then I was always trying to dream up ways of giving examples when teaching programming to first level students. Examples from maths - how to solve quadratic equations. Most of them boring for most people.

To be able to give them an assignment like this: "Plagued by voices at night, our hero believed he has gone insane until old friend Jhary-a-Conel advises him it is in fact a summons from another world." The whole story is inspired by 'Corum' a book by Michael Moorcock. I'd really rather give something like that as an assignment to my students and the first time I did, no one could work out the connection with the programming course.

The problem that we had was that at the college where I work - the CITY college, part of the International Faculty of the University of Sheffield in the UK and I'm located in Greece - we've had huge diversity of students and learning experiences across our cohorts over the past ten years. It led us to redesign the Computer Science Level 1 introductory programming and make it accessible to a much wider audience.

We achieved that by really trying hard to abstract out everything but the essential computational skills in the first half of the semester; by introducing an educational tool I was inspired to create and that you'll see soon - one that could be used by those who had no programming experience when they joined the department and by integrating the curriculum with carefully designed extra curricula activities. I realised that the tool would have to enable visual and immediate output of the efforts of the students; be easy to use with a few minutes of training; have a fun factor and allow students to use it in a creative way.

So I created Mentor. Mentor helped inspire me to set up a company that can help education. With it I enabled students to learn how to program in half an hour. It was really a side effect that it simulated two dimensional worlds where you move around and try to achieve something. When it came to the assignments I had the idea of using the science fiction story mentioned previously, then fairy tales later. Then a further assignment when I saw the potential of the tool where I wanted to see the creativity of the students. I got them to build their own problem and try to solve it. The students really proved to me that they're very creative and came up with whatever you can imagine.

For example here the Super Mario story where there was a princess and you had to write the word 'Mario' and get flowers and so on. The results were a real boost to the students' creativity and highly promising. Even the students with no background in programming managed to use the tool to do amazing things and those with some experience were able to create very beautiful stories and put a huge amount of effort in.

You can see here how the students interact with the tool inside the labs, creating competitions and so on. I noticed that working with these novels and fairy tales created a sense of community among the students. Stories and tales are ingrained in every culture so maybe they were able to find some common ground and work together. They were working together, presenting stories and having a lot of fun. The results from my last four years of teaching have been very balanced cohorts by the end, using the diversity in a good way - to achieve results.

Here is some food for thought. Could stories and/or serious games that enable their visualisation be used in education to improve student engagement, especially tackling diversity issues? This is something to explore. Could we address similar problems with diverse groups in terms of background and skills and cultural differences looking for creative, technology-enhanced solutions that invest in the power of stories and fairy tales to bring people together? Many people have already answered this question to me with their interesting work. Could Mentor be easily used across many disciplines, not focusing on developing computational thinking skills, but any other - discipline-specific or not? I want you to regard this presentation as an initial step for exploring potential interdisciplinary collaboration and research.

## Discussion

*Martin Vögeli: What is the group size? Do they use their own notebooks?*

*George Eleftherakis: We are blessed that we have very small cohorts. We usually have 30 students at most and when we go to the labs, maximum 15.*

*Marco Bettoni: What happened to the community feeling in other subjects - did the students transfer it to other subjects?*

*George Eleftherakis: Yes, this did happen. We saw the students take this community feeling outside of the classroom, not just to other units. Because I collaborate a lot with my students and spend a lot of time with them I noticed that in the library they were forming groups and discussing things. They're a very coherent cohort now.*

*Monica Landoni: Could this be a way to get more girls into informatics? Could we use Mentor with high school students?*

*George Eleftherakis: Yes, we're trialling it not just with high school students but even younger. We have some girls who go out into high schools to teach using the Mentor tool, especially to girls because girls are in the minority in computer science so they want to give them the chance to learn more about technology.*

*Eberhard Zartmann: How deeply involved does the lecturer have to be in order to appreciate the results?*

*George Eleftherakis: The truth is I'm using it myself so I'm very involved. Right now I'm planning some research where I get more results about how the tool is used and how the competing works.*

*Marco Bettoni: Is the tool that you used freeware or open source?*

*George Eleftherakis: The tool is not open source yet but I hope it will be at some point. You can freely download it from the website that you can see there [<http://www.city.academic.gr/csd/eleftherakis/>] [<http://robotseducate.us/>]*

One last thing. My vision is to use the tool with preschool children. If anyone is interested in researching this then I am open to any suggestions. My aim is to combine this tool with actual toys so that the children will play with toys and, at the same time, will program.

## What Fish are Swimming in the Pond and how to Catch them – Transfer Stories for the explication and transfer of the tacit knowledge of experts

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### Short Abstract:

*What is the presented Solution / Tool / Material about?*

Experts in organizations collected many experiences during their working life. These experiences formed deep knowledge and competencies in their profession. But this expert knowledge is hidden “in their heads” and very often it is unconscious even to the expert himself! When experts leave the organization, they take their knowledge with them – therefore it is important to find methods for transferring the expert knowledge to other people in the organization. The so called Transfer stories are a tool for knowledge transfer of expert knowledge in organizations.

*Which Objectives are Pursued with the Solution/Tool/Material?* Transfer Stories help to explicate tacit knowledge assets of experts and to give to them words and images for the knowledge transfer to other persons. Transfer stories are needed, when an expert leaves the organization and his successor didn't have enough time for getting to know all facets of the expert's tasks and roles.

*Who are the Target Groups of Users?* Experts and their successors; top management and shop-floor; project teams.

*How does the Solution/Tool/Material Work?* Since it is very difficult to detect tacit knowledge assets, the Transfer Stories use narrative interviews, systemic inquiry techniques and visualizations to support the expert in explicating his/her tacit knowledge. Socio-scientific text-analysis helps to find the hidden knowledge structures. Narrative elements such as metaphors, archetypes, visualizations, and other storytelling-tools are used to transform the tacit knowledge in an “experiential story”. This story is used in “Transfer Workshops” and is able to transfer the expert's knowledge to other people in the organization. It is a context-rich storage of the expert's knowledge for further successors.

### Presentation

I'm a consultant that goes into companies afraid of losing their critical knowledge, for example if experts leave the company and take their knowledge with them. The company would lose that person's knowledge. That's the point where we go in and use storytelling to help the company preserve this critical knowledge. So, what about these fish in the pond?

I want to introduce you to the method of transferring stories. There are many similarities with fish and ponds so let me explain it now! Imagine you are a fisherman (or fisherwoman). You're standing in front of a nice little pond. You want to find out what different sorts of fish are swimming in this pond, but it's murky and you can't see any fish. What could you do? You could use a fishing rod with a tasty fly on it as a lure to catch the fish. I'm sure after a while a fish will take the bait and you'll catch your fish. But you'll never get your answer to your original question as to what different kinds of fish are swimming in the pond. It might be that the trout likes the bait, but the salmon don't like it at all. This is the same thing when you ask a question. Imagine each question opens a scope of possible answers. If you think about fishing with the fishing rod, this is like asking specific questions and the scope of possible answers is quite narrow. However, if you tried fishing with a net: this is like listening instead of questioning. You're not asking much and if you do ask something, you're using open questions like 'why', 'what' and 'when' and just begin to listen. Now the scope of answers is broader. To conclude on this point, when you don't know exactly what kind of expert knowledge the expert has, then stop questioning. Begin listening.

Let's have a closer look at what fish are swimming in the pond. Of course, expert knowledge consists of factual knowledge to an extent, but is also made up of experience. Every expert in a team or a line manager has a wealth of experiences in his head. They rule his behaviour. They make him competent. These experiences are based on values and norms and beliefs - all things that determine his behaviour but he isn't really aware of them. They're deep, unconscious rules and attitudes that normally people don't know about. These experiences feed into his intuition which helps him tackle difficult situations. He can build up rules of thumb, special behaviour that allows him to act very fast in critical situations.

This is what expert knowledge is about.

One issue with expert knowledge is that it isn't documented. It's not even put in words for someone else. It's invisible, even to the expert. It's hidden in distant memories - many memories of the company where he's been working, burying the one we might be looking for. He doesn't know which to select as many of his

memories seem to be obvious to him and might not seem worth mentioning. Much of his experience is not conscious to the expert.

It's these experiences we're looking for when helping companies preserve their critical knowledge. We can summarise this point by saying expert knowledge is mostly complex, unstructured, invisible, hidden and therefore tacit. Then how can we find this expert knowledge and make it visible with words and symbols? Here I'd like to introduce the storytelling process, the basis method for the transfer stories we were talking about.

This storytelling process can find hidden, tacit knowledge and it can dress like with clothes but using words and symbols in order to make it visible to others - to make it transferrable. Let's have a closer look at the different steps.

Step 1: finding and analysing the expert knowledge. It's like the fishing trip we had in the murky pond. You have to work out how to find the fish in the head of the expert without knowing what you're looking for. We use narrative interviews for finding what's invisible. We question less and listen instead. If we ask anything, we ask open questions. Through this appreciative listening we start a reflection process in the expert. He starts thinking more deeply. We can find hidden patterns in the stories he talks about. Look at the two people on the sofas as an example. She's some like me, doing the listening. He's a project leader for a huge construction company, building a huge, complex, hi-tech production unit where the company would produce a part of a jet engine for aircraft - all requiring a lot of technology. When we sat together he was talking about the building phase. Many of these sentences shown were used by him ["I didn't get any positive feedback about my work." "It's just because of my decision to lead the project that we were able to finish the project properly!" "We wouldn't have needed a partner!"]. They were using a partner company - a contractor - to help with this building phase. Trying to find the invisible is done with narrative interviews and listening.

The second step is trying to find a story for the words of the expert. What's most important for a story? A hero. Here we have our hero. This is Udo Alfaran - the archetype for our project leader. The sentences you see here you saw before. The things he said in the interview. We can now categorise them with the hidden patterns that we found:

Appreciation: "I didn't get any positive feedback about my work."

Roles: "It's just because of my decision to lead the project that we were able to finish the project properly!"

Cooperation: "We wouldn't have needed a partner!"

We found the words for the rules, norms and beliefs for each area, such as cooperation. This is the core scene for the topic of cooperation. You can see Udo Alfaran in the left van and in the right hand van - the grey one - is his partner the contractor. In real life he had the job to plan and monitor the building phase. Here he's stopped because of a problem in the project and tried to plan how to proceed (the cows in the road are the problem). But Udo didn't stop; he just speeded up and is shouting out of his window "Get out of the way! We don't have time for this in our schedule!" In real life he truly thought his behaviour was ok because he delivered the project on time, but he didn't really cooperate with his partner - the contractor. But it wasn't ok. It wasn't appreciated by the leadership.

In the third step we have to find a way to bring the story back to the company to trigger learning and change. We do this in transfer workshops. Here you can see in real life Udo Alfaran going to the workshop with all his other colleagues. The main question in the workshop is what other colleagues and project teams can learn from my experiences. They talk about the story, reflect on it so they can learn about how to treat contractors and find words and symbols for talking about their behaviour towards contractors. So it's possible to bring change into the organisation.

Stories find words and pictures for hidden expert knowledge and to put it back into the organisation in order to trigger organisational change and learning. This is what we experienced in this project and this story, the "Cow Problem" as a word still exists across all levels of this organisation. They say "Hey, you have a cow problem!" when they mean "You're not being very cooperative in your attitude towards the contractors". For German-speaking participants there's a book recommendation for you on the different methods for transferring knowledge: Wissenstransfer bei Fach- und Führungskräftewechsel by Christine Erlach et al.

## Discussion

*Marco Bettoni: Can you imagine that your narrative interviews could be applied also in the classroom, in teaching in higher education?*

*Christine Erlach: I think the problem in schools would be the same as our problem in companies. When you begin the process, the people don't really know what to do with this open situation, the very broad scope of possible answers. So people are shy about talking and getting into the storytelling. If you have a good briefing with the person and explain how long the interview will last and what it's for and what happens with the results, people begin to relax and talk. I'm sure if you get a good briefing as a teacher or student you can apply this method in learning settings.*

*Luca Botturi: What kind of companies ask for this kind of service?*

*Christine Erlach: The bigger ones - the DAX listed companies because in the smaller ones the people still talk to each other. The bigger ones need methods for bridging the gap between people and for finding a cure for anonymity. These stories help them find their own identities and a way to talk about each other and their attitudes which they couldn't really do without having any symbols or words to hand. This is what we do - we print the stories as books so they can talk to each other about the story.*

*Petra Kauer: Is this applied by HR managers?*

*Christine Erlach: It's applied mainly by HR, but we often work with planning and engineering companies. So it's often not the HR people, but those in control - the project leaders - who ask for us. They might have been working on a new industrial plant for three years so they contact us to help them preserve all this knowledge they acquired over the years.*

## Teachers Learning from Stories

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**Short Abstract:** After having applied digital storytelling to projects in different fields of education and development, working with children and young people, and producing fictional stories, seed association staff members are currently learning to deal with such a powerful educational resource from a different perspective. Thanks to the project X-story (Exchanging stories for social development), funded by the Swiss Hungarian cooperation program of the Swiss Confederation, seed is exchanging competencies and expertise with a Hungarian organization, which also has a rich experience in applying digital storytelling to the educational field, but from a different point of view. Differently from seed association, Anthropolis staff members are experts in applying digital storytelling to the training of adults, and in helping them producing personal stories, related to real life experiences, in order to foster self-reflection and self-understanding, for example to foster integration.

### Presentation

I'm not going to say that much about how we do the storytelling, but will focus on one particular cooperation programme we worked on. I work for Seed - the NGO that works with technologies for education and development. This project is called 'X-story' and is about learning different methods for storytelling.

We've been using stories for five or six years to enhance communication, expression and understanding for communities at risk. They might be people with dangerous livelihoods - people from developing countries - or children with integration problems. We use stories for the development of the imagination. Poor living conditions lead to poor imagination: people cannot even think about living in a different way or being able to make plans for the future to change your situation. We use digital media for enhancing self-expression and for making these stories shareable, reusable - communicable to other people in the community.

That's why we started digital storytelling. So far in the project we have produced a method of storytelling for development which is the one we used for COBRA - the project that Chiara Bramani presented earlier. We use it for social development. This is a centre in Mexico where we train educators to use digital storytelling to work with children at risk. We use it for integration projects, to help children with special educational needs to work with regular school children or to help to integrate immigrant children. We use it with children in lower secondary school to help them reflect on immigration, religion and culture in their society.

We've gained quite a bit of experience in the formal educational context, using fictional stories. We do not ask children to tell their own stories. Why? Because if you want to work on deep values it's easier to work with fiction because when you're not talking about yourself, you're removing barriers to get to the issues and you're projecting issues, problems, conflicts onto fictional characters so we're free to explore the possibilities. We met another organisation [Anthropolis] similar to us - between an NGO and a social enterprise - who use a whole other method to tackle the same problems. Mainly with adults but also with children and teenagers. They work on self-understanding, professional integration, self-esteem and self-reflection. They work mainly on personal stories and real life experiences. We call this a biographical approach. They help people give shades, give meaning to their own stories - very different from creating a fictional story.

This project was funded by the Swiss Directorate of Cooperation and Development between Hungary and Switzerland. We did an exchange at a workshop in Budapest where we learnt the methods of Anthropolis and shared our method with them, biographical and fictional. We're running projects finishing this month in Hungary and Switzerland that apply both methodologies with adults and children. What's been most interesting to me in this project is learning what goes around a method. As the previous presentation mentioned, it's not easy to get people or children to tell the story.

As an example, in this pilot we worked with children in secondary education on fictional stories about meeting the world of work when they leave school and start looking for a job. These were young people at risk of leaving school early, leaving without complete secondary education.

The topic was selecting a character - a boy in Brazil - who's in a different context but facing the fact too that he has to start working. In groups of four they worked for five minutes to complete the rest of the story. The first child told a story where a talent scout for a very famous football team picked the boy when seeing him play and the boy gets \$1m for playing in the first league. That's not a story at all - it's just a bit of magic. The second child tells the exact same thing - an observer comes, sees the boy and the boy gets rich. The third child says the same and the fourth the same again. This shows how it's difficult for people to think of a story that makes sense for them. This is just fantasy. A bit of magic saves everything. It's not a story, or it's a boring story.

So what we worked on with Anthropolis are the methods which are used to bring people to share the stories. These include the increase of warm-up exercises or activities where you start using a narrative approach working with words, telling simple stories about your own name - very simple stories. We're actually very shy when it comes to sharing stories because we think we cannot express ourselves. When we're children we're used to creativity but when we start growing up - 12, 13, 14 - the only time we tell stories is for making other people laugh. So for telling a serious story, we're challenged. So we worked on this.

In the same way we worked with adults. How do you get somebody with a very dangerous past with loss, with migration to tell their own stories? Again from Anthropolis, we learnt a number of steps we can take to guide people towards a safe zone where they feel safe to tell their stories even when they're heard by other people. This is what we've been working on and the pilots will be put on our website at the end of November. Email us if you would like us to send you the materials used. Based on the guidelines received from the organisers we tried to focus on three things, three issues.

Have you ever dealt with stories as a tool for learning something, instead of teaching? We often use stories for teaching, but have you ever made up a story yourself for learning something? Have you ever customised a training methodology based on stories to different contexts? You'll have a very different experience if you run the same workshops in, say, Mexico, Macedonia or Switzerland. What changes when you change the context of a story-based teaching and learning method? Finally, what do we think we can actually learn from stories? We've had presentations about learning about expression, knowledge within companies. What can we actually teach and learn with stories? These are three elements that have come in this project for further reflection.

## Discussion

*Willi Bernhard: What time-form do you use, past or present?*

*Luca Botturi: When we work with fictional stories, people usually just go to the past, unless they're very young. If they're very young - 4, 5, 6 - they use the present. Style is a tricky question because if you have people making up complex story, the problem is that they never finish it. So what we do is give them one sentence that's very generic for the beginning of the story. This sets the period, style, as many adjectives as you want to use. This makes it all easier. For biographical stories we always use the past.*

*Marco Bettoni: From your experience do stories help increase self-confidence in what the student is learning?*

*Luca Botturi: If what the student is learning is about relationships, social competencies, yes - it helps a lot. I think it's completely different if you work on a story for subject content. For example, in one project we work on local history using stories. In my experience you can manage to teach subject content if you frame the storytelling activity within a larger activity on the topic with an introduction and then debriefing afterwards.*

## A Never Ending Story - Sheherazade: Storytelling in Adult Education and Training

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**Short Abstract:** In our presentation we deal with work that was done in the context of the European Grundtvig project *Sheherazade*; here we found that in most of the European countries the storytelling method is only partially or not at all present in the curriculum of pre-service and in-service adult trainers. In order to fill the gap, the Sheherazade project aimed to develop a working methodology and based on it a curriculum and courses for adult trainers. To achieve the mentioned project objectives, each project partner country had the goal to pilot the storytelling method in a real adult training. In Bulgaria, the pilot was run by the Sofia University "St. Kl. Ohridski", by a joint team from the Faculty of Education and the Faculty of Mathematics and Informatics. The application of the storytelling in adult training in that pilot and the results of it will be presented here.

### Presentation

From my experience on the EU Sheherazade which focuses on storytelling in adult education. I'll be following a similar pattern as Luca in his presentation by looking at our pilots and what we learnt from them. The main target groups of this project were trainers and educators of adults. And the end target groups are people excluded from society. The focus is on using storytelling as an approach for developing their self-confidence and to build social inclusion. This project mainly uses non-digital storytelling, but you will see some examples of digital storytelling in it too. We looked at what comes from popular stories and popular traditions of the countries covered by the story. After some research this resulted in a methodology and examples of good practice.

How did we use this experience for our project? So, to the dialogue of our first story. Let me tell you the story of our first pilot and let ask you, are you an expert? Are you an expert in anything? We started the pilot by asking this same question of our project participants. As unemployed people with low self-confidence they felt that they weren't expert in anything. Here you can see me and my colleague Sylvia as storytellers asking them about their expertise and they were very quiet. But then as a guinea pig she presented herself as an expert managing her children's lives! After this, you can see all these people being open and sharing their stories and expertise - not related to their professional lives. We continued this education with three positives versus three negatives. We asked the participants to give evidence of three positives about themselves by story and a different perspective on three negatives, again by story. We finished this pilot with a job interview which made for a good experience in this area. We asked the participants to choose the positions they were applying for and to provide evidence for why they are the best employees for this position - by story. We were very pleased with the results. Here is photo sent to us by one of the participants a month later. She said that she had found that her dream job was as a professional photographer.

The second pilot was organised for trainers. It was intended to show the power of storytelling as a teaching tool for trainers of adults. The background briefly: you'll see how the small number of people at the beginning changed by the end. We started again with the story of one's name and moved on to discuss the power of storytelling and what had happened with our participants and partners in the Sheherazade project. We spoke about our belief in the power of storytelling to improve the motivation of learners and to develop their creativity skills. You can see here example for state of the art finding from countries like Ireland, Austria, Belgium, Norway, using storytelling in formal and informal ways while in countries like Bulgaria we have no such experience. They have drawn up some stages or phases of education where storytelling constitutes a learning or technical activity. As an example of our new story telling: think about your favourite dish and telling a story about it. This was the preparation for thinking about different activities and examples of contexts when storytelling can be used in the learning process. Here are some examples from the methodological guides and at the end of this second pilot there was a story about a man selling an elephant to his neighbour. We put our learners in the role of the seller, asking them to sell something by story. We then continued with practices from our partners on the Sheherazade project and from our own participants.

Although in Bulgaria storytelling is not all that developed within education, it's starting to gain attention at university level. We found that many of our participants have experience but use it in a more intuitive way. So, together with them, we tried to draw together techniques for successfully using storytelling in educational processes, especially with adults. You can see here the outcomes of this process as compared with the outcomes from our partners on the Sheherazade project. The conclusion is that careful preparation; strong

attitudes during the storytelling and deep analysis afterwards are the key points for the successful use in education. All these studies were focused on non-digital storytelling and my students asked me why. So they prepared a video - I'll share a part of it now - a digital story of mathematical phenomena in nature all over the world. You can see geometrical shapes, hexagons, the Fibonacci spiral etc. My students tell the story of numbers using fruit and vegetables. This was their way of proving their thesis that storytelling in a digital form is as powerful as oral storytelling.

The final part of our pilot was an exercise where we asked our participants to write character experiences of education on different cards. We mixed the cards and asked the participants to pick three at random and to then tell a story based on these three keywords about their feelings and reflections on this training. They felt that this wasn't the end, but the beginning of a never-ending story, provoking us to share this experience with you.

## Discussion

*Egon Werlen: At the beginning of the conference we discussed if everybody can tell stories. Most people do, but not all are good storytellers. So do we need training to be expert storytellers or do we just do it and get experienced?*

*Nikolina Nikolova: We can teach storytelling because we can provide techniques with examples and practices. However each storyteller is unique - there's no recipe for using storytelling in all contexts but you can use the experience of others. So we can share techniques and exercises. There are so many things that can be discussed such as body language and interaction. This discussion itself is also a tool for teaching!*

## Keynote: The Seven Stages of Story – Coming Out of the Cave: Evolution, Identity and Story

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**Short Abstract:** Joe Lambert, founder and director of the Center for Digital Storytelling, will discuss the ways in which story informs our perspective giving capacity as humans as we move through life, through a number of core metaphors of human experience, including our bodies, our creativity, and our relationship to nature. How does working on your own story with great depth and powerful insight help you to evolve to greater levels of self-awareness and emotional health?

### Presentation

First of all I would like to thank VIS for having me and for the invitation to do this discussion and to thank Luca Botturi and the group I have met before with the work I've done in and around Europe. It's been a big pleasure of mine over the last few years to come many times a year to Europe to talk about storytelling and to help projects out and see the kind of differences in the approaches between the American models that have evolved over the past twenty years and the European models. I was looking at the chat and a lot of the discussion was about if story is a deeply human activity, how do we decide this border between good and bad storytelling?

I want to go back to go forward. This discussion is definitely about my thoughts about what it is in the human process that leads us to more 'powerful' stories - and I use that word rather than 'good'. Stories that have rich meaning, stories that move us - stories that affect the way we see the world. I suggest we go back. This image is from a cave in Somaliland. The suggestion is that this comes from ten thousand years back and that this is the beginning of the visual storytelling world that the human imagination created. If we listen deeply enough, we can still hear the echo of the very same stories that have been told over this then thousand year period using image, our own voice and the ambient sound of a fire crackling in the background.

In the last several years, it seems that this issue of storytelling has become something that is not only discussed from the side of the humanities, from the interest we have in our literatures and creative writing and voices that we've created with the invention of writing, but also from the understanding of the evolutionary biological reason that we tell stories at all. Brian Boyd from New Zealand in his book on the origin of stories suggests that there's something inside of us that is very particularly orientated at using story to keep if not ourselves alive, then the community of our little tribal gathering ten thousand years ago - to keep *them* alive. Jonathan Gottschall suggests a similar thing about the relationship between the impulses of meaning-making that cause collectivity versus the impulses that cause conflict. That the storytelling animal was an animal that learned how to come together through story to make greater and greater civilisation possible. Then in *'The Art Instinct'*, Denis Dutton suggests that there's something fundamental in our desire to process beauty, to see the world through heightened awareness of the way our sensory apparatus observes the world by replicating in some way that calls attention to the meanings that we soak in on a daily basis through these sensory apparatus. What this suggested to me is that while it appears that the hero - the best hunter, the best warrior, the most athletic - increased the evolutionary chances to mate as the result of his endeavours as did the storyteller. At a basic level we needed someone who could return from the hunt and re-strategise the process through story. Likewise we needed wise women who could make stories out of the process of gathering plants to enhance our meals, to heal our ailing bodies. Perhaps, most of all, the originators of tales, legends, myths and cosmologies that became our religions and sacred narratives knew that we could hold the value systems, the ethos of our cultures through these complex stories. Stories made the world more imaginatively full, we were more than just ourselves in our small worlds - we were part of a larger world, a cosmos that connected us to everything. We became alive to all of this through story. And it taught us the mechanics of the passage through life. This is really what my lecture is about.

As I visit this cave in my mind - and in my heart - I imagine conversations familiar to all of us: how to make it through, how to keep the family intact. Obviously at the essential level of food and water, but also at the level of imagination, of aspiration, of value. It extended beyond my family to my society. More than these caves, these humble beginnings are the essentials of our psychology and the role that story plays *within* that psychology. It's all here. So I want to present at least one paradigm for understanding the evolution of our

stories as we go through life. In the last four years I've been working on a new book that I'm happy to say that will come out in a week's time that's called '*Seven Stages: The Story in the Human Experience*'. The context that it presents - central to the argument of the book - is the work of a Harvard psychologist [Robert Kegan] from the late 70's early 80's though he's continued this work in all sorts of fields since that time, that was called '*The Evolving Self: Problem and Process in Human Development*'. What was unique about this model for me was that he was borrowing from a Swiss person. He was taking the educational theory of Piaget and connecting it to the thinking about life development that is more associated with Freud or Erik Erikson or the Freudian camp of psychology that suggests that one of the things we do as we get older is have moments of change of understanding of the way the world works. In Piaget's format, that's a discussion of how we learn to construct our learning process and that we go from these phases of being able to do a certain thing to a phase of being able to *look* at the thing we did and understand that it was a process - it wasn't just something that we were subject to, but we could make object of that.

What Kegan has done that I find extremely useful for storytelling - let me articulate this - as he suggested as we move through life, we swing from needing to have a high level of self-knowledge - of knowing who we are and what our agency is in the world, how do we move through the world, what do we know about ourselves - to a need to be embraced and connected to and desired by the other. The other in this case is everything outside ourselves - not another person necessarily, but the whole world outside ourselves. That we move as we go through a psychological process just as we do through an educational or learning process, from these relative needs to work on ourselves to a relative need to understand ourselves in the context of the world outside ourselves. That as we move from early childhood where it's kind of clear that when we're born we think of the world as whole: our mother and us are one thing. We learn eventually (very quickly actually) that the mother is different than us - we exist outside the mother, we are something more. Then we move into what he calls an impulsive stage of trying to see what our role is in relationship to the world. We test the world - we throw balls, we play with our food - but we also test how much our moms' or parents' or siblings' responses are affected by what we do. At some point we come back to understand that the world is not just what we feel and what we react to, but it actually has to do with the way that we can manifest our own identity in the world. This is the early beginning of education. *That* world is where we learn rules and we learn to push our limits, to compete, to connect to others inside a social framework but with our own role within it. Are we an alpha child or are we a beta child? Are we likeable in one way but not so likeable in another? We work those things out. Moving on to adolescence we learn to relate to other people by understanding that they have needs - as our needs - and we can hold both. 'Institutional' where we realise that sometimes we hold others' needs to the extent that we are not taking care of ourselves - this is kind of the mid-life - to what he calls 'inter-individual' which he broadly argues to be an ability to hold the idea that you've created identities and that you can have multiple ways of knowing yourself in relationship to the world, which he considers a very sophisticated way of knowing.

How does this relate to storytelling? We are in the middle of a world in which we are trying to understand how to connect the stories of what we go through in our lives to the stories of the experiences that we consider narrative experiences. For me, this idea of the relationship between the early childhood stories of coming to be are reflected in the many stories I hear about celebrating family or ancestry or just the warmth of the crèche that we came out of. Or, by contrast, what didn't quite work in that earlier stage, in all the work that we do with people who were adopted children or who faced early childhood trauma. Those stories emerge out of this early part of knowing and if it went well, they are celebratory. And if it didn't, they are stories of recovery. That continues through this evolutionary cycle where the 'react story' becomes the positive place. One's own ability to connect and be sensual in the world, and on the negative level it becomes that we don't know where our borders are - we never found our borders and we still have trouble with things like addiction or the ability to connect to people significantly over time because we haven't really found the ways to deal with impulse and support effectively.

I can't tell you how many stories I hear that are stories about coming to be in early childhood and not quite knowing who one is and needing to continue to decide what is the acorn self - as psychologist James Hillman would suggest. What is the essential me? Who was I when I was seven years old? Am I still the person who wanted to be who that person wanted to be? And similarly as we move forward, the 'reclaim stories' about how we have effectively expressed compassion and connections to others. There are love stories gone right, love stories gone wrong.

As we move that sense of connection to a sense of our own role in the world as an adult, they can become stories of a broader social connection, of a greater awareness of the way our lives manifest in the world: not

only in relationship to one person or our immediate family, but in relationship to the whole society. Then as we move through those stories, we're moving into stories of deep insight and wisdom. I argue in my book that there's a seventh stage that's at the highest level of knowing, but that in this context this is a lot about being able to understand what it is that one needs to do face death. Arguably all the great storytellers would tell you. I'm going to share with you all now through the chat function a link. And I'd like you all to click on this link: [http://www.youtube.com/watch?v=P\\_aZtIsziU](http://www.youtube.com/watch?v=P_aZtIsziU) "The Gift of Nonviolence - a digital story by LeRoy Moore". And we'll watch a piece that was done here in Denver - where I am today - called 'The Gift of Nonviolence'. It's a three minute piece. I want us to watch this piece and then talk about it in relationship to this particular model that I've presented earlier.

#### *Transcription of The Gift of Nonviolence*

*The last night of my junior year in high school, when I was 16 years old, I put an end to my father's beating me with a garden hose. He'd escalated to this weapon for his wholly unjustified punishments some years earlier. When he brought that hose whooshing down on my backside, the purple welts that rose in my flesh hurt deeply for days after. On the night in question, as I made my way through the darkened house toward the room I shared with my brother, I sensed my father's presence before in the dim light discerning him with that hose in his hand. He ordered me to lie down on the bed as I had always done, but it suddenly came to me that I didn't have to take this any longer. My refusal triggered a struggle in which he tried to force me down. I responded by wrapping my arms around his neck and lifting my feet from the floor so that I hung deadweight down the front of his body, absorbing all his energy. Within seconds he went limp with exhaustion. I took my arms from around his neck and stepped back. Three decades later in nonviolence training for my first civil disobedience at Rocky Flats [Nuclear Weapons Plant] we did a role play called 'Deadweight' in which you contain someone's belligerent behaviour by hanging yourself deadweight down that person's torso. Tears burst from my eyes. Amazingly, what I'd done spontaneously at age 16 was being taught in carefully designed nonviolence training. My father, I realised, without knowing he was doing so, had made a great gift to me. For he had planted within me the seed of nonviolence. An eventual fruit of nonviolent resistance by many ways ending production at Rock Flats, of nuclear bombs - the extremity of violence.*

So how does this work? I mean everybody in the chat was talking about this idea of helping people make digital stories, helping people with creative writing, helping people work through narratives on the level not of psychological counselling and support, but at the level of mentoring people through any creative process where there's a connection to their life experience. How does this work if you relate it to what we're talking about in this model? My argument is fairly simple. In the story I just shared there was a moment in this man's life which is not an unfamiliar moment for most adolescents - at what point they can sort of stare down (in that Freudian sense an 'oedipal moment'), stare down the king, your father. You stare down your parents and say no, your story is not my story and I'm going to make my own life.

Good storytelling is not just talking about that generally, but it's actually saying - as I heard someone suggest - the imagistic part of storytelling, the show-it-don't-tell-it part of storytelling is to go to the moment. Take us to the bedroom, take us to the moment where he was going to whip you one more time with the rubber hose in this violence of a family narrative and you said no. And you grabbed hold of him and held on until he collapsed. In that moment you are eliciting in us an awareness that we are all travelling through phases in our lives and we may still be working on the material of the early phases of our lives when we faced the need to move from one understanding of self to a new understanding of self; from one understanding of our relationship to others to a new understanding.

Great storytelling always turns on the decisive moment just when we're moving around the evolutionary cycle to get to the other side. A lot of storytelling in the workshops that I teach is about people being stuck. In a group process of listening and I think again that Luca Botturi was talking about the degree of the connection between us in a listening circle changes the way we think of ourselves as storytellers. We hear for the first time that meaning, perhaps profound meaning exists in our struggle about moving from one way of knowing to a new way of knowing in relationship to a life process. Since all human beings and perhaps all mammals - all sentient creatures - have these same struggles, it is immediately held inside our bodies the feeling of what that must have been like if we're brought through the mystical use of descriptive language, or in a digital story we get the nice mixture of language and image and sound and music, we follow that. I realise that most of my audience today may not have been able to understand everything this colleague was saying 'cos he's from the town I'm from - Dallas, Texas. Back in Texas we ta-al li-ik thee-is [exaggerated Texan accent] and sometime it's hard to understand people in another country when they're deep inside a

Texas accent, but I think you got the idea that he grew up with violence, but violence taught him the absolute necessity to end violence. And he became a lifelong activist in the movement for nonviolence and a lifelong activist that took that energy to struggle with - as he says - the greatest tantamount violence to the human race has visited upon the world which is nuclear bombs. The idea that the story from his youth had meaning for him not as a kind of conscious process, but the first time he did this nonviolence training and realised that he had instinctually shown his father how to stop a cycle of violence. And he broke that cycle himself knowing instinctually that he didn't need to hit his father to make this cycle stop; he needed to grab him and take his power away from him, basically to go into passive resistance.

To me, those kinds of awarenesses can be found in all of us. All of us go through a cycle from being subject to our lives - that is the story is telling us our lives and we can't control what's going on - to actually I have choice here. I'm going to turn around and I'm going to look at the life I'm in. And I'm going to say actually I have a choice. Here's where I made a choice. And life wasn't living me, I was living my life. My life story wasn't telling me, I am now telling - I am able to tell - my life story. When you think about this idea of a story presaging an evolutionary phase, it is also about the idea of the 'aha'. Of what Piaget called the zone of proximal awareness. Meaning when we're learning maths and somebody asks can you tell stories about maths. Well, any learning process has this thing of you sitting inside of an algebraic problem and you don't get it. And then suddenly you get it. And maths isn't something that's being done to you by your teachers, but you are doing maths. Any learning process has these 'aha' moments, these zones of proximal awareness. Good teachers set it up so that that's possible. (Good teachers influenced by Swiss educational theorists.) The idea being that when you do that with your storytelling, anything becomes an instance of 'take me to a moment where I didn't understand something and then I did'.

I didn't understand the reason why my parents were the way they were, but now I kind of do. I didn't understand what was important to me about taking the first job I took, but now I do. I didn't understand why I chose a certain discipline, I didn't understand why I listened to a lecture by Joe Lambert, but now I do. Maybe not this minute, but in ten minutes or half an hour. None of this has to be about trauma. It doesn't have to be sad stories of what was done to us. But I argue that because so many of us have so little time to do any kind of creative work, so little time in our adult lives to any creative work unless we are just that kind of person who must, that often when you choose to do a story that's important, while you could tell a wonderful story about your reflections on your wife's shoe collection (if you're a guy maybe you don't understand why your wife has so many shoes), but you might want to do a piece about understanding something of the context of your past wives which made it hard for them to give you everything you might have wanted when you were a child because maybe you haven't told them the story.

That becomes emotionally powerful for you, for the loss of a parent or somebody important to you - if you haven't done the work, if you haven't told the story, if the story is still telling you, then frankly the work to tell those stories is what our work in storytelling is about. Again that doesn't mean you look for trauma. We don't have to be survivors of human rights abuses or sexual assault or other really bad stories, but we can tell a life where we didn't understand something and we need to understand that thing, it's very important to us. What we've learnt in the story circle process is quite easy, that if you stop and listen to each other, what we really want to talk about, then inevitably someone in the group will say, 'you know what I really want to talk about? My mother died four years ago and I haven't really dealt with that. That's what I really need to talk about'. I don't care whether that's a formal writing group or you're at dinner with friends and they finally get to the right point and say 'you know what I really want to talk about....I really need to talk about this thing' and the room hushes and people listen to each other they start writing or sharing beautiful stories.

Thank you everybody for listening.

## Discussion

*Martin Vögeli:* I completely agree with you and there are no questions. Rather there are new insights being conveyed.

*Nicole Bittel:* I've seen a really interesting input from Egon Werlen saying that great storytelling creates images, but: what does ordinary storytelling do?

*Joe Lambert:* Again, these judgements are all relative to our expectations. I'm an old theatre producer. When I produced a piece of theatre and you paid \$30 to come and see it, you expect thoughtfulness, a kind of technique that must be developed over time by experts. When I go to see a film at a big movie theatre I expect certain things. Having said that, if I'm sitting out at the part, and an old man begins to talk to me, he

may not use the most descriptive language, he may not be a wordsmith and have technical prowess in the way that he is communicating. But if he starts talking to me about his old dog that he was with for a long time as a child and that at this point in his life he misses, I don't care what language he uses because I'm hearing it in a humanness that's going to go piercing from his heart into my heart. And is that good storytelling? Well of course it's good storytelling. It's contextual to my ability to be present to that person. And my expectation that I wasn't about to hear a great story by a man who I thought was talking to himself - I did not expect him to share his humanness at such an intimate level with me as a stranger, and it becomes a profoundly affective experience. I prefer to not put on any of us the idea that technical literacy and skill is a prerequisite to story sharing. That what is prerequisite is an awareness that you're telling an honest truth from inside yourself, you're going to get to me. If you're simply telling me what I already know, what we call cliché, even if it's very highly descriptive and well done cliché (which I argue is what you'd see in a lot of writing by young students), I'm not listening. Because you're not actually trying to tell me what's going on. What are you working through? What matters to you? Where is the meaning? And that to me is the distinction between technical prowess and emotional awareness. Emotional awareness is also something that some people are also gifted with and can get to really quickly. While other people have to exercise as with a technique, they have to learn to be emotionally vulnerable and inside of that vulnerability to share from a sense of knowing, that they work through because they've thought about the story they reflected on. I think it's a good point, Egon, because bad stories are when we know it already. When I teach young people I say, 'but I know that already! Anybody could have written what you just wrote!'. It's not that 'cliché' is such mean term, all it means is that I knew that already - you're not giving me something about a part I didn't know about you. Give me that. All of us have a deep well to tap. That's the unique creative experience that we're processing whether we tell it as cold fact or turn it into fiction. It's still an insight into some part of who we are, knowing ourselves. Thinking back to the beginning of the humanist writers three or four hundred years ago and they're writing about themselves or an insight about how people relate the world. We don't really care whether it's fact or fiction - a lot of fact *is* fiction. It's just how we use it. Good stories are unique is a good way to put it.

*Eberhard Zartmann:* We were talking about what stories tell about people, about 'me'. We have to see that the text, the picture, anything that emerges about 'me' gets into space and is received by someone who's listening or watching. My told story, heard by someone else, isn't my story any more. It's heard by his ears, constructed in a new way. We have to discuss, get in a circle, a dialogue, not just one way: I send you my story, you hear my story. You don't hear my story, you hear my story in your way. We work with our students, making them create their portfolios. In between that they reflect on biographical themes or events and we make them discuss how did I understand your picture or piece of art that you made to tell me about your life and we make them see that it's a very sensitive thing, hearing from clients as a social worker stories, information - very personal information.

*Joe Lambert:* We've had the same experience, the same exchange. In some ways there's a whole world of expressive art-making, from the therapeutic dimension. People may be familiar with that literature or not, but implicit in that like in the work of certain kinds of facilitators is a kind of deep silence, a deep listening. Almost a non-statement of judgement, but simply asking questions once the person has presented their art. 'Tell us more about what that means,' and letting the person unpack those feelings is a kind of facilitative modality that takes you out of judgemental work, meaning I'm still a teacher or writer and implicit when I talk is that I am making judgements. What I mean by depth, give me more of that. But in expressive arts approaches and a lot of educational contexts it's very wise to remove judgemental language completely. And basically say, 'what is your process? What is the meaning you take out of this? Share again'. It's in the sharing and listening as you're presenting your art - listening to the way that you're being heard - that you unpack your own meaning. It doesn't happen without you trying to answer the questions and think about what is inside this drawing of a tree. When I did it, it was subconscious, but now I'm making that subconscious conscious and to me that's a great educational model. It can't be done when you're presenting work or trying to put on a show - you need to try and protect everybody's creative awareness by giving it form, but for a lot of educational environments you can do it as a listening and sharing process without judgement.

I'd just like to thank everyone again and say do please get in touch to discuss anything [joe@storycenter.org](mailto:joe@storycenter.org) I love answering email!

## Conclusion and Outlook

*“Good story telling creates images.”*

By sharing their experience, expertise and ideas, the conference speakers created rich insights into the diversity of learning with stories in educational and professional settings. Use cases, best practices, challenges and questions on the subject were presented and discussed, highlighting stories and their impact on human beings’ minds, souls and social lives from heterogeneous perspectives.

**Dörte Resch** reflects in her presentation on experiences with a course on storytelling and narrative analysis within a half day course in executive education. By rejecting the concept of language as a mirror of reality, she is able to see how stories create realities and that narrative analysis allows understanding that creation.

**Monica Landoni** reports about her research on how to support children working in groups and creating stories by mixing paper and mobile technology in a formal learning context at school. The tool developed in the course of her research, called Fiabot, has four modules: one for establishing the story structure and plot; one for media creation and editing; one for sharing and one for publication. The combination of traditional and technologically supported ways of learning is a very important subject and children are particularly interesting in this regard because of their natural sense of how to combine different kinds of media.

**Chiara Bramani** presents a project called COBRA in which children from Italy and Brazil created, illustrated and edited a joint story using the digital storytelling method. They had a shared blog and made together a video that was recorded both in Italian and Portuguese. It was a great experience of how storytelling can foster deep cooperation between children living on opposite sides of the planet and make them confident about new capabilities in using technology for learning.

**Giuliana Dettori** reflects on her own experience with interactive storytelling, a relatively recent field where a basic element are story worlds (environments) in which a human user (or users) by interacting with a digital system can generate stories. Designing such story worlds implies a different type of techniques and process than traditional stories. Why is this worthwhile? Because it makes participants reflect on different ways to express one single event or situation and on the importance of sequence of actions in a story. And this can be very beneficial to digital storytelling in general.

**Ekaterina Taratuta** analyses a storytelling experience from her time as a student that was unique, one of her best experiences as a learner. She discusses the essential traits of this storytelling experience in order to enable the transfer of the method to other learning subjects than languages. A relevant aspect is, that this method created a live access to the learning subject, something that she calls a “sanction”, and provided the student with a kind of “expert voice”.

**George Eleftherakis** tells the story of how he came to use storytelling in the course of his search for ways of how to make students of a basic programming course engage, particularly in the case of classes with the challenge of integrating students from many different countries and cultures. How to use this diversity in the best way, how to include all these people, how to give them a chance? He created an educational tool, called Mentor, that simulates a software robot (moving in a 2-dimensional tiled world) and, most importantly, enabled the use of storytelling (fairy tales and sci-fi stories) for formulating assignments that are understandable and engaging. The tool was a success, working with novels and fairy tales created a sense of community among the students, they began working together, sharing their stories and having a lot of fun!

**Christine Erlach** introduces her application of storytelling as a knowledge management method for transferring tacit knowledge from experts to other people in the organization. One challenge is, that in many cases you don’t know exactly what kind of expert knowledge the expert has; asking the expert does not help because much tacit knowledge is not conscious even to the expert. Stop questioning, begin listening! She suggests an appreciative listening that starts a reflection process in the expert from which he becomes able to tell his or her experiences. Based on this material the

method asks to create a story which conveys the rules, norms and beliefs contained in those experiences. Finally the story is brought back to the organization in order to trigger learning and change.

**Luca Botturi** explains first why his organization started with digital storytelling: for enhancing self-expression and making the stories easily shareable and reusable. In their projects they mostly train educators to use digital storytelling with children; here they avoid personal stories. Then he presents a project in which his organization met another organization working with a very different storytelling approach to tackle the same problems: they work with adults and mainly on personal stories. The two organisations did an exchange of their storytelling methodologies and run projects applying both methodologies with adults and children. From their partner they learned especially how to bring people to share interesting stories that make sense for them and how to get people with a difficult past to tell their personal stories.

**Nikolina Nikolova** builds on her experience in the EU project Sheherazade and presents two pilot projects, one with adult educators and trainers and one for people excluded from society. In this second case storytelling is applied when these people are asked to share their stories and expertise with the aim of developing their self-confidence. Moreover, in the simulation of a job interview people are asked to use a story for providing evidence that they are the best choice for the open position. On the other side, in the pilot project for trainers, the goal was to show the power of storytelling as a teaching tool. Together with the project participants the project team collected a set of techniques for successfully using storytelling in adult education.

Finally, keynote **Joe Lambert** from the Center for Digital Storytelling in Berkeley completed the first edition of this yearly online conference by talking about the 'Seven Stages of Story'. In order to go forward he says that he wants to go back and reported research on the origin of stories in the time of the cave man when telling stories allowed keeping tribal communities alive. By storytelling the cave man learned how to come together through story to make greater and greater civilisation possible.

For understanding the evolution of our stories from those humble beginnings until today Lambert presents then a paradigm that he developed for his new book "Seven Stages: The Story in the Human Experience". An essential aspect of this paradigm is the idea that we all go through a cycle from being subject to our lives - that is we can't control what is going on and we could say "the story is telling us" - to being able to make choices, to turn around, to look at the life we are in and to make choices. Then we could say that our life story is no longer telling us, because now we are able to tell it.

To summarize, what is that binds together the presentations of our conference? We have seen that stories can help eliciting and transferring knowledge in organizations and classes, we have learned how they can be created by mixing technologies (traditional and new ones), that they can be generated by interacting with a system and that we have further watched examples of how they can foster cooperation, can make confident in new capabilities, can create a live access to a learning subject, can help in using diversity in the best way, can promote inclusion, can create a sense of community among students and last but not least that they create reality.

**"Stories are a fundamental key to learning"** - this claim that Nicole proposed in her introduction may be considered as the common denominator of the great diversity that has marked our conference and which may now appear even more convincing thanks to the supporting arguments and points of views provided by our presentations.

Given the broad interest and lively participation, combined with the fact that the conference's online setting allows full freedom and flexibility to the participants, the VIS will go into its second round in 2015!