

Embedding a Culture of Enterprise and Creativity in the Curriculum

Inner Mindscape and Outer Landscape

© Kerstin Bragby, Bengt Söderhäll & Pär Vilhelmson (eds)

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Preface

With joy I handover this handbook to you, the reader. To me it has been two exciting years working in the EU project Embedding a Culture of Enterprise and Creativity in the Curriculum (ECECC), in which this handbook is one of the results. ECECC has been a developing partnership directed towards entrepreneurial learning within Comenius in the Life Long Learning Program.

The project has been a close cooperation between Söderhamn as coordinator, University of Gävle, ProEduca in Czechia, Fondazione Luigi Clerici in Milan and Cremona in Italy and the University of Portsmouth England. The possibility to create a collaboration between municipalities, universities and private establishments within education has been a challenge, and at the same time very interesting and learning.

I would like to thank the representatives from participating organizations for their endurance, flexibility and good spirit, which have been a prerequisite for the good result of the project. Also I would like to thank the teachers who in their daily work have inspired and supported the pupils and generously shared their knowledge and experiences in the project. The role of the teachers for a successful work with creative and entrepreneurial learning cannot be stressed enough.

Thank you also to those who have compiled the large material for their thorough survey and the theoretical modeling and the results presented in this handbook.

At last some thoughts of my own that have been formed during the project: *We have to see the creative ability with all its richness. We have to see the pupils as the hope for the future they are. We will educate their whole personality in front of their meeting with the future. We cannot yet see it, but it is there and waiting for us.*

Söderhamn June 2012

Sven-Olof Larsson

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Introduction

This book that you are holding in your hands is a result of the ECECC project – *Embedding a Culture of Enterprise and Creativity in the Curriculum*. It is not a handbook in an instrumental sense, but our aspiration is that it will be informative and hands on in inspiring the understanding of how creativity and enterprise can be embedded in the curriculum of schools and regional development, as well as in many forms of educational and developmental praxis's from a cultural perspective.

What are the frames of the project and how have we gathered our examples.

The project is aiming at learning through sharing about practices, and through this identifying and help promoting an innovative, creative, entrepreneurial and enterprising spirit and culture within the school curriculum in Europe. During the project, by sharing examples of interesting practice in a safe environment, teachers have had an opportunity to elaborate and reflect upon their teaching skills and didactic qualities. Also to deepen their understanding about the learning culture and learning environment they are a part of creating, and how this in turn is part of and influenced by a greater societal and educational context.

Learning in these examples, for the great part, does not take place in an isolated classroom. The classroom is expanding into the outdoors environment, the city, and the world. It is deigned in a variety of ways, filled with a manifold of materials, expressions and processes. The Internet becomes a whole parallel virtual universe included in it. It incorporates other actors than just teacher, pupils and staff. The formal educational and informal settings for learning are interviewing and changing. It involves for most parts, the actors in new ways of interacting and interrelating, understanding one-self in the other, and the other in one-self, as creative participant in the world. The transparency of the learning culture and environment is strengthened and also moving deeper within. Everyone is becoming a learner and a teacher in the effort to make learning conscious and explicit, and to perform in the ability to create, learn and actualize.

It has brought us to a crucial awareness about the embedded and layered, as well as the organic and intrinsic, nature of learning and education. The static genre of the classroom scene is being blurred. This reveals the fact that learning is staged in organisational as well as cultural, concrete and abstract levels or layers that are nested into each other. The layered and holistic complexity are moving front stage, with the classical separated parts of content, aim, method, teacher and student as inter-dynamic agents within it. So does also the passionate, curious and adventurous “homo ludens”¹, and the human element of play in culture.

¹ *Homo Ludens* or “Man the Player” (alternatively, “Playing Man”) is a book written in 1938 by Dutch historian, cultural theorist and professor Johan Huizinga. It discusses the importance of the play element of culture and society. Huizinga uses the term “*Play Theory*” within the book to define the conceptual space in which play occurs. Huizinga suggests that play is primary to and a necessary (though not sufficient) condition of the generation of culture (Wikipedia 20120503).

*This special kind of fire, actualizes what might become
it creates new possibilities with others
it is a genuine social form of creativity
new practices through which peoples possibilities to live are expanded
society, life and not just business (and we would add, not just education)
passion that is aimed action*

Daniel Hjort

The project has aspired to give teachers support and tools regarding creative and entrepreneurial learning strategies, which support children's as well as teachers natural creativity and enterprise. The primary target group is teachers in school education. The secondary target group is school managers at the same level.

There has not been a focus on synthesizing general methods, but on discovering the inspiring and specific about how a praxis' has emerged from and within its' own context. And by analyzing what is emerging also understand more about common and specific features that contribute to a creative and enterprising learning culture and environment as well as what restrains, facilitate or sustain it. The focus has been on inquiring into and identifying how the resources for learning are organised. How learning situations and learning journeys are discovered, reoriented, re-created and formed to embrace the subject contents, the curriculum as well as the potential of the humans involved in it, and lead to envisioned teaching and learning qualities. And how the creative and enterprising competences are involved, learned and pro-created in different roles.

The impact of the project on the target group in long term aspect, is said to be: "Deepen and develop the creative and entrepreneurial learning culture both through education possibilities as well as on a more scientific note." And on a short term perspective: "Give teachers in Europe access to training opportunities as well as "hands-on" knowledge concerning creativity and entrepreneurial learning through transfer of know-how."

Concepts and our own real learning journey

Initially we assumed that we would look for different connotations and/or definitions of the key concepts of entrepreneurship in school and creative and entrepreneurial learning. Definitions exist in policy documents on different educational managing levels. But we realized that what we wanted to catch, understand and be inspired by was in practice still a moving target. We wanted to learn more about the crossroads between creativity and enterprise and how they can emerge as embedded and incorporated qualities in praxis, rather than different remade concepts to be implemented or searched for in school documents.

It took us some time to get started. But we assumed that it was happening somewhere, somehow, and maybe everywhere in many ways, and that we could find it, not in a generalized sense, but in the specificity of contexts where it was emerging. This assumption we anchored in this model sometimes used to analyze the unique contents in didactic situations – and saying unique we also imply that this uniqueness can shed light on other situations in general:

We argue /.../ that there is a need for qualitative intensive studies within the complex didactic domain of research, where it constantly is shown impossible or problematic to make generalizing conclusions. Didactic approaches to problems concerning teaching – learning are always *complex, contextually bound* and furthermore *historically formed*, which make intensive studies necessary (Arfwedson, 2002, p 7).

First we met in Söderhamn in January 2010 and we stipulated a preliminary operative definition of 'enterprising' as based on a number of statements. These statements are:

- I do
- I can
- I dare
- I adapt
- I innovate

In the search for interesting practices we looked for examples of creative expressions of one or more of these statements in the activities we choose to observe.

Each participant looked for interesting practices in the different contexts we represent. This was strongly emphasized at the Sharing of Knowledge II in Česká Budějovice, Czech Republic (20th of January – 21st of January, 2011).

After collecting these interesting practices we have shared them, analyzed them more in depth and step by step, we have written them up as "free-hand written cases" (as applying a thorough research process has not been possible within the limits of our resources). We have formatively analyzed, reflect upon and tested our insights at an event in Milano (June 2011) and the final event in Söderhamn (April 2012). The results will keep on happening, but the journey so far has a temporal and final form in this handbook for the dissemination of the result of the project. Another ongoing aspect is that this introduction is already part of our summery, and we will ask you to read this beginning again as a part of the end of the book, where we shortly summon up some overall perspectives. But from here on we are already having a conversation with you from the insights, and levels of understandings that have risen on our own learning journey, even though we also share with you how the journey happened.



The outline of the book

We have been looking for concrete example in praxis. The stories from the community of Söderhamn in Sweden, the Schools of St George and St Marks in England, schools and preschools in the Communities around Milan and Cremona in the north in Italy, where the ones we have chosen to present (the examples of Czech Republic and initially also Estonia has been part of our learning journey, but are not represented with particular examples). We present in this introduction a concentrated version of our understandings, frames of analyses and explorative thought on how creativity and enterprise can be embedded into a culture and the curriculum. After that comes a chapter called “A Culture of Enterprising and Creative pedagogy” that present a short historical contextual background and some general perspectives on this focus in education. Then come the different examples and finally a shorter summary that together with this introduction is the whole summery.

The first example described is the one from *Söderhamn* in the middle of Sweden. That example encompass a whole community and describes how an entrepreneurial vision, attitude and approach have been cultivated cross-scale from preschool to upper secondary school including the whole community organisation and business life. It also describes the activity of and relationship to the University of Gävle that has participated with education of teachers in entrepreneurial learning, didactic and pedagogy.

The next example is from the school of *St Marks, Southampton* in the south of England and focus on that entire primary school as an entity and premises with indoor and outdoor environments and its links to the city. The school deliver the curriculum through an open-minded, creative, engaged and strategic deepening and widening of its learning culture and environment.

The next example comes from St George, a school in Newport on the Isle of Wight, 20 minutes from Southampton with boat. It is a school for children and young adults with severe, complex, profound and multiple learning disabilities. It focus on their journey of using an outdoor space, to arrive at turning every situation into a learning situation, and setting up their own business in their own imaginary and artistically created school grounds. It includes the collaboration between the pupils, the staff and the creative partnership with the Eccleston George, a group of artists and artisans. *Creative Partnership* - is (or was) an English organisation for implementing creativity in the curricula through collaboration with different forms of artist, artisans and scientific professionals. It has played an important role in both of the English examples.

The last example presented comes from different schools and preschools around Milan and Cremona in the north of Italy. Their pedagogy has long traditions that resonate with different historical layers of the regional culture. It puts the child at the centre of the learning process as an active player, competent and capable, and listens deeply to the language, aptitudes and expressions of the children. They involve both teacher and children in explorative, artistic and scientific modes of working didactically with the inner and outer environment. Extended learning journeys and self-organising themes are salience. Relationship between schools, families and businesses are explored in an entrepreneurial spirit, but very briefly mentioned in our example.

The interesting examples of practices are “the best”.

As we said the project of *Embedding a Culture of Enterprise and Creativity in the Curriculum* has been aiming at promoting and learning about the innovative, creative, entrepreneurial and enterprising spirit within the school curriculum and praxis in these European interesting examples. We have been in search of how creativity and enterprise can emerge as part of creating, designing and giving form to a school culture and its learning curricula and environment. That includes its rules of engagements, attitudes, approaches, content and ways of structuring and organising its resources for teaching and learning.

The focus of our search had a wide angel, as well as a zooming in on qualities that comes from doing and daring, experimenting and innovating on a small and big scale. The examples have interesting characteristics, but are not better in comparison with others or by a systematic survey of practices in these countries or areas. They give signals about doing something in a different way that gives the school culture, teaching and learning new qualities. These qualities can in different ways be connected to creative and enterprising competences and their performed understanding.

These practices have taken on, are handling and facing many types of challenges and difficulties from inside and outside. They are not ready made and successful in a completed way. They are ongoing experiments, which have to some extent, stabilized and made new praxis's come alive. Simultaneously they are struggling with their historically formed, situated and complex points of departure. They are confronted by challenges of changes in educational policies, outer structuring forces and of the future in an unsettled world. These examples are interesting because they have the courage to share and make transparent their own learning journey.

They can tell us and teach us something about their dynamic and challenging ways of creating new relationships between dreams, inner motivation and building learning power. They share something about how to design the social climate and organising resources for learning with full meaning and purpose. They can role model how to experiment with the use of all the senses, connecting emotional and mental aspects as well as intelligence of heart, body and sprit. They show unique ways of combining the scientific and artistic mind with cultural, social and economical entrepreneurship. All this in the quest of co-create collaborative ways to interact and exchange.

They are working in new constellations of and relationships between pupils, students, teachers, head masters, creative partner, parents, politicians etc, etc. They exemplify ways of delivering and make curriculum and assessment happen creatively. They use inner and outer environment as a “third pedagogue” in different ways. They can give us a hint about how to cultivate sustainable, creative and enterprising learning environments cross-scale, over time and in relation to a vision of the future. Together they form contours of an emerging “inner mindscape and outer landscape” of creativity and enterprise, including the joint inner logic of its actors as well as the outer logic of the structuring and framing factors (Lindblad et al, 1999). How their visions will impact or is impacted by the direction of the educational stage and its performance in the 21:th century is in the hands of all of us.

Understanding creative changes and transformation of learning cultures and environment

Without lingering too long and get lost in the theoretical and scientific jungles, we give you this following passage to digest. It concentrate on how we gradually have been inspired to frame our thinking and analyse, in relation to the understandings revealed about how our focus of interests are operating in the examples. So this is just as much a result and a summary conclusion, as it is an introduction to the scientific note that we have promised. We have chosen to explore it in the form of a dialogue between theory and praxis, flavoured with philosophical heat. If you have the apatite for it as an entrance course, you can read it now. Or you can jump directly to the section Focusing Questions below and then on to the main course and read the examples. And then you are invited to come back to it and devour it as a rich chocolate cake for desert, or both. Check it out.

Paradoxical challenges

To understand how paradoxical challenges can be met creatively, and how change is used and operates in complex and transforming processes is not easily reduced into rational logic and simplistic terms. Nor into bits and pieces that neatly let you control and describe how all the parts are interacting. It is easy to get lost between the effort of systematically define and analyse the parts, and to grasp the whole.

Everybody in the educational system knows a lot about this when it comes to the dilemma of monitoring and evaluating uniqueness with the help of standardizations and the qualitative with quantitative measures. The qualitative whole - its complexity and consciousness layers – easily get reduced, distorted or even excluded when fragmented and de-contextualized into standardized objectives, measurable compartments and sets of criteria that are quantifiable. Everyone in education has experienced this paradoxical structural conflict.

*Not everything that counts can be measured
and not everything that can be measured counts*

Albert Einstein

Teaching and learning in praxis includes unconscious, chaotic and irrational processes as well as qualitative complex changes in understanding and performance, that are managed by involving a holistic and intuitive approach. It also uses rationally logical structures with separated discernable elements to differentiate, analyse and form judgement, strategy and conscious choices. But the challenge we see is to apply a deeper understanding of the exchange between those two models of logic and thinking. And above all to be able to apply their constructive, optimal and enhancing interacting rules of engagement. This is one critical suggestion to understand their pro-creative inter-dynamic.

*The Intuition is a divine gift
and thinking rationally
is a god servant,
but we have created a society that have made the servant the master*

Albert Einstein

One core clue to handle this equation in an artful way seems to be to let the intuitive hold the front stage and make present the overall perspectives and heart of the play. Then use the rational thinking to focus the illumination of the parts and details, that needs to be differentiated and reconnected in order to improve the inner connections and outer expressions of the performance. But not to let the rationalisations take over, or let separate de-contextualized parts be the stars. When we feel that we can draw on the whole experience of our practice to organise the overall teaching component in supportive schemes and explicitly spelled out and conceptualized understandings, it supports us. When the instrumentalisation, conceptions and regulations are forced upon us and starts to rule, distort and separate us from being able to cultivate our performance, we know things are some how turned upside down.

One of the core challenges we see in the actions to create new teaching and learning strategies relates to letting go of inhibiting and contra-productive planning, control, and outer discipline. And to learn to trust inner motivation, interest, spontaneity and improvisation, to let the experiencing in the now be the driving force. Yet not neglect to stage and structure the learning arenas wisely, receptively and creatively, nor lose the active dynamic and strategic direction and devising of the process that actualize results, including assessments.

*Entrepreneurship creates and uses possibilities
it puts people on fire
but it also introduces that directional instilling interest
that orchestrates resources and gather its power
surrendering it to the aim*

Daniel Hjort (our translation)

So of course we can learn to design the relationships between the components involved in a culture of education with a greater diversity of beneficial relationships, that takes us to the goal. Still there will be the challenge of ethics to make situational choices between short, term and long term goals. That involves a concern and inclusion of not just me as an individual, us both in this conflict, us as a group or school or our educational aims, or us as a region, a country... in the end it will be a “glocal” conscious thought and action that is called for. No matter how organised and effective we get, we will still be challenged to act wisely in relationship to the whole and the part on different levels of interaction. We will have to use our *Creativity, wisdom, and trusteeship: exploring the role of education* (Craft et al, 2008) as the title of that book implies.

The paradox of the call for the educational system as well as society to educate for competencies that can handle and create future jobs that cannot be planned for in relationship to an unknown future contains a seemingly illogical and creative jump. The great paradox and challenge for teachers that we perceive is that they have to start to actualize these competences in themselves together with the pupils now, including reconditioning the educational context according to that, for it to be part of a future. In the long term we see the same competencies and understandings to be required from all the actors on all societal and educational levels of organisation. And the faster we all get it, the more sustainably and wisely we can transform and develop the

educational system and the future of our children together and as joint forces.

One aspect of the model that “didactic approaches to problems concerning teaching – learning are always *complex, contextually bound* and furthermore *historically formed*”, is that a pedagogical case example or activity occur on and between different dimensional levels or layers cross time and scale. There is always a relationship between the tiniest part and the all encompassing whole. And that is a challenge in itself to grasp and handle in its complexity both practically and theoretically.

Using the two models of thinking

As we set out to analyze, understand and construct the stories of our examples. We understood that we intuitively interconnected, but obviously also were confused by, the two models of thinking. Our rational model of thinking has been supported by system thinking in levels and scale - **atomic, micro, meso and macro** - that discern the dynamic interplay of different parts and agents (Holling 2000, 2001 Dumont et al, 2010), as they differentiate themselves as different levels or layer on different scales of a whole (se fig 1). The holistic perspective of change and transformation as perceived as growth, has more easily been grasped as interfacing layers, as organic intrinsic dynamics and exchanges, as a producing process (se fig 2). The holistic experience is preferably expressed poetically, in metaphors and in stories.

We started to realize that what we wanted to understand and analyze was both the inner and abstract dimensions and logics of learning processes, environments and cultures as well as the outer concrete forms and structures of organisation, and their logic (se fig 1). And most importantly we found ourselves experiencing, struggling and elaborating with the creative and changing interface between them. The concept of transformative cycles of change (se fig 1 & 2) has helped us to picture how complex processes are happening in small and rapidly as well as slowly moving cycles depending on the scale (learning situation or the whole school culture) they are operating on. Each level or scale though is interdependently nested together. And the transformative cycle of the whole culture is happening simultaneously on all levels.

To be concrete (se fig 1 & 2); a learning situation in an outdoor environment for example is involving the inner atomic level of the individual and how s/he is receptively and actively engaged in it. The interplay with others is a microlevel scale of that situation that can reveal how inter-relational qualities take part in learning. If we scale up further, we can also understand what is happening on the level of the learning activity, how it is organised and structured and how that regulates the learning relationships. We can include the meso-level of the learning environment (in this case not always a traditional classroom), and inquire how that mediates the learning. We know that the macro level is present in many dimensions, the learning culture that conditions and sets the superior premises from which the situation is emerging. And that learning culture is historically formed and contextualized, influenced by the surrounding world as a whole, as well as the present micro-situation in the now. This way of thinking in transformative or adaptable cycles that are nested together in levels are inspired by the Panarchy theory developed by Holling (2001, et al 2000). But we have made our own refinements and reconfigurations to adjust to this material and the purpose of our analyses and understandings of how learning cultures are generated.

The embedding happens in layers and a diversity of interconnections

Finally at the end of our leaning journey was created an overall three-dimensional graphic to help us share and make explicit our understandings and perspectives.

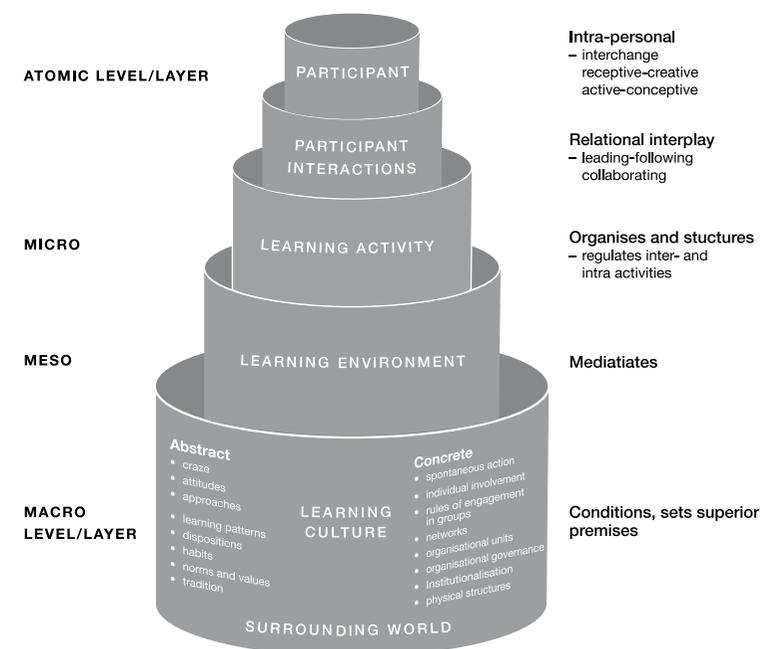


Fig 1. An Adaptation of a Panarchy (Holling, 2000, 2001) applied to a learning culture by Kerstin Bragby 2012.

Levels and inter-dynamics

The learning culture - emerging in and from the inner world of its participants as well as the surrounding world, is depicted as a whole at the bottom level of this wedding cake. Different levels that are scaled from, macro to meso, to micro to atomic – of an educational culture are rising out of this **ground – all encompassing – level of the learning culture, immersed in the surrounding world** with different dynamic functions; the **learning culture** is setting the superior premises that conditions it, **learning environments**, which mediate the learning process, **learning activities** that organises and structures it and regulates intra- and interactions, **participant interaction** that creates relational interplays of co-creative collaboration, leading-following etc, and the **individual participant** in its intra-personal interchange between a receptive-creative and active-conceptive involvement.

Elemental factors generating the culture

It marries together both the abstract and concrete poles of the elemental factors that constitutes and historically recreates the culture over and over again by setting its superior premises and conditioning it. The elemental factors are differentiated into abstract and concrete poles in a spectral way. Their spectral field describes the abstract and concrete side of the elemental factors bottom up – from the ones with solidifying qualities over to a more rapidly changing nature. The abstract component are in its most solid abstract form named **traditions**, that change the slowest and viscous, and has its concrete counterpart in **physical structures**, next comes the abstract **norms and values** that are often made concrete in **institutionalisations**

that can be transformed a bit faster but yet over longer periods of time. It continues with more rapidly but still incorporated and long lived changing elements; *habits* - organisational governance. Next comes *dispositions* - organisational units, *learning patterns* - networks, *approaches* - rules of engagements in groups, *attitudes* - individual involvement, *craze* - spontaneous action.

In reality the abstract and concrete elemental factors interface, and are depicted in a dynamic interchangeable interplay as the transformative cycles. They operate on each levelled scale and are being nested into each other. And this is a model for how eventually creativity and enterprise as we attempt to trace in this cases, and all matters gets embedded into the culture or the curriculum. A blow-up of the transformative cycle driven by the elemental factors is seen in fig 2.

Levels or layers nested together in transformative cycles

The graph is an attempt to give you a more tangible realization of how the atomic to macro levels or layers (if we could have depicted it as a holistic sphere) of a learning culture, its environment, activity and participants are embedded in each other. And how their de- and constructive activities on each level are nested together in transformative cycles. We will discuss from an overall focus how the levels and layers interact. We will also look deeper into how the dynamic factors, abstract and concrete that constitutes the whole learning culture function as a transformative cycles. We will give you a first introduction to the general concept of transformative cycle and how it has been adopted to analyse the embedding and constant release - reconfiguration - reorganisation and conservation of culture.

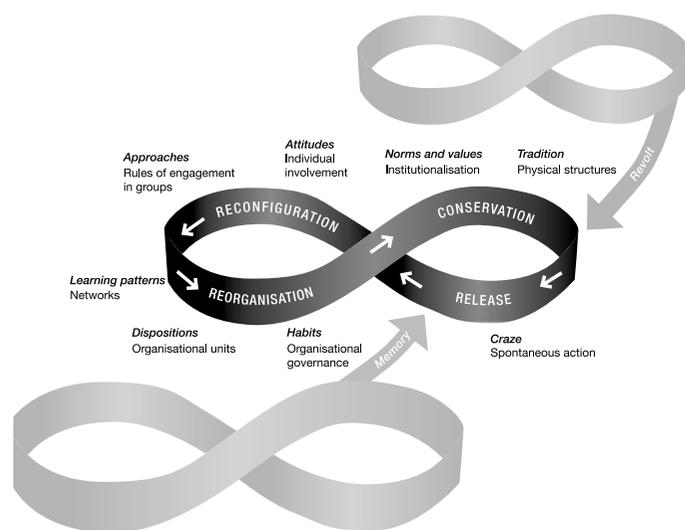


Figure 2. Adaptation of a transformative cycle (Holling, 2000, 2001) applied to a generation of culture by Kerstin Bragby 2012.

We have identified a suggestion of different abstract and concrete elemental factors, identified in this context to be involved in a regeneration - de- and reconstruction - of a culture. It has been overlaid the general dynamic of a transformative cycle. A culture can work in conforming patterns by repeating what is, as well as renewing patterns by repeatedly reproduce and refine the new and therefore invent. The general cycle consists of reconfigurative and re-organisational faces that happen after a release. The release is a de-construction or challenge of already conserved forms in the culture. Transformation happens in a generative tension between conservative and renewing forces within and between the levels. But first we will picture a renewing cycle of cultural transformation as a single progressive loop.

Spontaneous actions and craze's are often part of the face of releasing the old. That is also new attitudes and approaches. New ways of getting one selve's involved and engage together are involved. That can start to release old ways of thinking and doing things, and reconfigure, try out new ones. It builds new learning patterns and can involve new ways of interconnecting networks of people, thinking, and places. What happens starts to pattern a new context. If that is getting more substantial, and start to reconfigure and form the learning more consistently, it becomes dispositions for learning and acting which build and re-organise the new features and organisational units of the learning culture, maybe it is identified as a method. That can become a steady habit that govern the way learning resources are organised. It can become the norm that holds and express values and becomes more institutionalised. Finally it is a tradition that also influences how physical structures to support it is manifested and conserving it.

As these transformative cycles happens on different scales atomic- to macro, that in themselves changes faster or slower. One can say that transformation happens specifically on each scale, but are also influencing each other as they are nested together. On the smaller scale, that can experiment faster than the bigger ones, is often created revolting novelty, that influence the deconstruction or release, and it often challenges the culture on a bigger scale. And the memory in the traditions and different forms of embodied and manifest knowledge and structure on a bigger scale often conditions the reorganisation of the smaller ones. But in a long term sustainable dynamic, as we shall se, the levels can support each other and the culture to renewing itself, learning from within the experiments, at the same time holding a stable platform for continuity.

In a system of dynamic (not static) balance it is all about pace and timing. So resisting change as well as over-implying it can create unproductive unbalances. Habits for example can at times strongly slow down change and give the solidification a dominating power as well as accelerate change once a new habit is in place. Changing habits or organisational governance principles too fast can create an inflation of change. That gives volatility a dominating power and uproots the ability to anchor and reconnect the system in a balanced way. This goes for the relationship between all the elemental factors.

The transformative cycles in general

Within each level or layer the culture is being de-and reconstructed in transformative cycles that are generated by the tension between conservation and creativity, tradition and renewal, continuity and learning (Holling 2000, 2001). It happens through a revolt in relation to what is conserved as past experience and understanding. This can be a generative destruction of old traditions, values, norms, habits that at the same time hold a long term perspective for the new to be tested within and against. In our understanding the conservative stances need to be able to perform an open-minded release of the known-how that are no longer valid in the face of the future, and help condition a reorganisation of explorative ways for new attitudes and approaches in individuals and groups on a smaller scale that produce new learning. That learning can be conserved as remembering and incorporated into new structural elements. The new understandings and innovations have to take on the challenge to be tested and validated for novelty to work long term. This is where the conservative force and the experienced role-players of a culture have its wise function. That is in theory how an organic renewal of a healthy system or a sustainable cultural dynamic is operating and being generated. Not understanding your own role in the whole, and therefore not your balancing functional use of change in different situations, can cause a stagnation or demolition of the whole system.

The relation between the levels

The bigger cycles operate on a bigger scale, in our example the entirety of the established school culture, and on a smaller scale in a separate school, or even smaller scale in a certain learning activity or situation, etc. The basic idea is that the cycles on a bigger scale transforms slower as they are more established and traditionally incor-

porated in many ways. But they, being interconnected to and invigorated by the faster changing and more flexible cycles, operating on a smaller scale, can renew them. If the cycles in the different levels and layers that are embedded in each other, are connected they can inform and support each other in a healthy and balancing process. But they can also block each other out and disconnect, and by that reduce the level of complexity and consciousness handled. Which is not an uncommon experience in mal functioning organisations. The depth of learning and mastery of performance is at stake as well as the sustainable dynamic of the system. This reduction or enhancement of manifoldness, variation and opportunities are crucial to support the long term functions of resilience in the dynamic of cultural evolution.

How this operates within our examples

The smallest micro and even atomic level and scale in our examples happen in the "classrooms or different learning environments" in a learning situation, within a learning activity. Here the learning culture, when allowed, is inspired by new ideas, attitudes and approaches in teachers, pupils and other actors involved. Teachers (as an individual also incorporating different levels and elemental factors of the system) starts to listen more deeply and attentive. Children (agents of, not yet so established understandings and patterns of actions) actively participate and feel invited to use their passion and interest, to use their natural inclinations and aptitude for curiously and energetically explore and learn together and with the environment. This ignites and inspires openhearted communication. Together they agree upon and shape the rules of engagement that improve the learning climate. In this they confront historical layers of educational structures, habits and traditions that are still operating on different levels in the outer as well as in their own internal context.

The atomic inner and internal as well as the micro and intra-personal level is made explicit. Communicated and intended through meta-cognitive strategies, both to support the "building of learning power" as well as "the ability to create". It make transparent and enhance the relational interpersonal interplay between all actors as a socio-cultural constructive learning ground. Teachers and learners start to share and support each other to learn by mistakes, and dare "not to know". They experiment in order to make concrete their visions and learning aims. They use critical and creative reflection, in action and in retrospect, to be inspired to invent the new as well as to see through and change traditions and habits that inhibit them. They become competent to intend and create learning by discover and travel in the all encompassing contextual now. Especially in the example of Söderhamn it is made visible how the interconnectedness of the different levels are supported and made transparent and interchanging in balancing ways and with long-term wisdom. The teachers are sharing in their everyday practice, and arenas of exchange in the whole community are being created.

Levels and interaction supporting each other in rewriting history

The atomic and micro level and scale moves and changes the fastest. It is the most instable, flexible and not yet formed. Especially when the personal level of meaning and experience of young learners and open-minded teacher, is allowed to have an inspiring impact. Their engagement and understandings then becomes the substance

and form of the future through letting that impact the next level of organisational context. The framing and determining of the interest that is awakened are organised into themes and learning focuses inspired by the learning aims. That is how the content of the curriculum is catalyzed and built into the wisely framing forms through which it can inform learning in connection to the meaningful interest of the participants. In other words; the regulations, policies and overall structures in education needs to be flexible enough to align with what is emerging within the educational settings. Outer goals has to be but in relevance and relation to the individuals personal goal (Falk, 2011, p 66). This means that the upper more dense and institutionalized levels or outer layers can also actively set up, condition and create a guiding governing dynamic that is a creative devising mean, holding space for the experiments happening that test out the future. Or it can suppress these layers into conforming and thus reducing the complexity and create stagnation in the learning culture.

If these two ends small- and big scale can meet, it helps create reconfigurations in and vitalise the learning culture and environment, in a participatory, resilient and sustainable way. Renewing the personal attitudes and approaches on a micro and atomic scale is then interrelated and interconnected, with the attitudes and approaches, the habits and traditions in the **meso and macro** levels and scales of organisation and institutions. Educational policies and regulations, headmasters, politicians, all represent and are agents for these upper levels or outer layers. This is how the inner abstract logic of the participant and the outer logic of organisational structures interface. Both participants and structures are determined by the "building of cultural learning power" through the interchange of slow and fast moving elemental factors and layers.

The book *Disclosing new worlds - Entrepreneurship, Democratic Action and Cultivation of Solidarity* (Spinosa et al 1977), use three concepts for the transforming process - *articulating, cross-appropriation and reconfiguration*. The concepts describe a history making process that raise consciousness about one's own starting point and the influences under which it is active and how it stand in objection to those influences. The process is than described as one where you first acquire an understanding of the strategies that works "within the dominant regime" and than you start to recreate conditions on your own terms. It corresponds to the function of revolt and memory. The description of the book writes:

Disclosing New Worlds calls for a recovery of a way of being that has always characterized human life at its best. The book argues that human beings are at their best not when they are engaged in abstract reflection, but when they are intensely involved in changing the taken-for-granted, everyday practices in some domain of their culture--that is, when they are making history. History-making, in this account, refers not to wars and transfers of political power, but to changes in the way we understand and deal with ourselves. The authors identify entrepreneurship, democratic action, and the creation of solidarity as the three major arenas in which people make history, and they focus on three prime methods of history-making--reconfiguration, cross-appropriation, and articulation.

We see in these examples, which are also confirmed by theory. That what benefits the process concerning the roles of macro levels or expanded layers of organisation and tradition is when they adopt the same challenges within their functions and personal roles as on the atomic and micro levels, but from their perspective. People in leadership (as well as everybody operating on different levels) need to wake up from their

automatically determining power to conform by being ignorant agents of repressive and contra-productive dominant regimes of truths and governing structures both in creating policies and performing through their own habitus (Foucault 1975, Bourdieu, 2004). But especially people that operate on macro- and meso- levels need to be consciously open-minded and receptive to how they can perform and understand their function in the whole in new ways. They as well need to incorporate that in new attitudes, approaches and habits of thinking and doing and regulating on their level. They need to help stage the favourable conditions and be a supportive environment for the experiments that bring about novelty from the smaller scale.

This can be anything from how teaching is scheduled, reflection time build into working design, open arenas are created for sharing results and processes (connecting an making transparent the activities between layers and levels), to connections made that coordinate means and goals. The examples whiteness about that it takes time to build up a shared body of knowledge and experience that is alive, dynamic and resilient² and that it requires tolerance and endurance. To build cultural learning power is an individual and collective challenge that is calling for an art, closely related to the art of living life itself.

An intended **macro** scale involvement with a wide range is represented in the Söderhamn example. Here the political level of steering and supporting is outspoken, supporting to direct and stage for a more enterprising work in the municipality as a whole. Older values and habits about work, school and the general cultural norms are challenged. The faster changing experimental attitudes of the younger generation in the schools are used as a driving force for change, while the superior roles and organisational levels are being open and receptive to give up the old and co-create the new ways of educating and organising professional development and work in the society (Drivkraft). The visions - in the whole community of Söderhamn as guided by an entrepreneurial spirit that permeates all levels, of the whole school of St Marks as “a village that rises a child”, of making “every situation a multi dimensional learning situation” at St George, and the courage to “let the capable child take the lead” in the examples of the north of Italy - are all big and small scale conditioning values and normative that set new premises for the everyday experiments to be supported and grow.

Transparency and manifold in and between levels are crucial components in a sustainable development of culture

When there is a transparent openness and exchange between all levels and they are filled with a manifold of alternatives and opportunities, the system as a whole can have a dynamic resilience, that use inner and outer change and unpredictability's constructively. This is how creativity and enterprise from a system thinking perspective is being embedded in layers nested together. They interact in building a renewed culture and environment by the bigger, slow moving scale and levels containing with wise and guiding conditions the testing and incorporation of the small, faster moving levels of experiments. The small-scale practices are being learned from, and transmitted step by step, without threatening the integrity of the whole system (adapted understanding from Holling, 2001). And the whole system is adopting and renewing itself through incorporating and using inner and outer changes. And when the passions, dreams and deeper inner motivation is allowed and respected as a driving force,

a raw power, that can inform the learning, teaching and organising process on all levels, something original is starting to happen that has true value for everyone.

*Life is not linear - it is organic
We create our lives symbiotically
as we explore our talents
in relation to circumstances that they help to create for us*
Ken Robnsson (youtube)

From a holistic perspective (that is intimately shared and described in the St. George story) an educational praxis culture is organically growing and built up from the seeds of practice that are rooted in its core of human beings. The already existing experience and know-how in us is holding a space, or containing the process while the creative risk-taking is dissolving it. In system thinking this layered interconnection is displayed as a Panarchy rather than a traditional hierarchy. Where the mythical and holistic creative and unpredictable energy of Pan or Dionysus that creatively deconstruct are served and held wisely, not controlled, and combined with the rational structuring energetic in thinking inspired by Apollo.

The fast levels invent, experiment and test; the slower levels stabilize and conserve accumulated memory of past successful, surviving experiments. The whole panarchy is both creative and conserving. The interactions between cycles in a panarchy combines learning with continuity. That clarifies the meaning of sustainable development. Sustainability is the capacity to create, test and maintain adaptive capability. Development is the process of creating, testing and maintaining opportunity. The phrase that combines the two, sustainable development, is therefore not an oxymoron but represents a logical partnership (Holling, 2001).

Creative ways of creating

The micro and atomic levels in the examples are strongly supported by the meso-level that helps staging and holding structural conditions for it. In the examples creative ways of structuring the learning environment into contextual learning situation, processes and journeys in the moment and over time are supported by many strategies and varied forms. Among them aesthetic, artisan and different forms of inquiring, designing and prototyping processes. They have concrete and manifested goals that can be infused by the personal contexts of meaning and purpose as well as general themes, and learning aims. They easily interface themselves as pedagogical and didactic spaces that can organise and orchestrate a contextual incorporation of different subject matters and personal meaning. These kind of processes can therefore also involve in transforming and innovating many of the levels consciously in the learning situation. Not just the reproduction of established knowledge and understanding, but a dynamic and creative de- and re-construction of it as well, in relation to new circumstances. This also goes for personal development and group collaboration. Eisner's (2002) in the book *The Arts and the creation of Mind*, states as the title of his first chapter “The role of the arts in transforming consciousness - Education is the process of learning to invent yourself”. He continues:

² One entrance to understanding the the concept of resiliens is that it is an ability “in a system/culture or an entity with many interrelated connections” to handle disturbance while maintaining developmental capacity (Walker et al, 2004)

The arts, I argue, can serve as models of what educational aspiration and practice might be at its very best. To be able to think about teaching as an artful undertaking, to conceive of learning as having aesthetic features, to regard the design of an educational environment as an artistic task— these ways of thinking about some of the commonplaces of education could have profound consequences for redesigning the practice of teaching and reconceiving the context in which teaching occurs. (Elliot 2002, p xiii)

The **meso** level or expanded learning environment, traditionally used to be organised and happen in a rather isolated classroom with fragmented, de-contextualized and standardised procedures. In these examples it is evident that there is an interface between that traditional classroom form and its teaching and learning characteristics with an extended and varied environment that organise new resources for learning in different ways. It is here that the curriculum is finding new creative and enterprising forms to be delivered through, as well as being organically shaped into those forms and conditions that allow it to happen in that new desired way. Here is where new habitual patterns of teaching and learning are established and coordinated. The new culture takes on a more solid and extended form than just isolated incidents. All the examples show and share these levels, layers and scale.

The core of this paradigm shift

Research often studies the school from the point of view of the given culture, which often limits the possibility to see what needs to be seen (Falk, 2011 p 14), and to make research illuminate how to create ILE - Innovative learning environments (Dumont et al, 2010). That approach often support identifying and trying to solve problems within the same frame of consciousness and conditioned thinking that structured, regulated and causes them in the first place. So we have humbly and in small scale tried to raise our consciousness about how to use and construct the analytical frames that allows us to see and be aware of how the old is transformed and conditioned in the creative and enterprising new ways. We have supported and experimented with our holistic and intuitive understanding of how to perceive and actively write up the expressions of the examples, from a creating and transformative perspective and orientation. “Transformability is the capacity to create a fundamentally new system when ecological, economic, or social structures make the existing system untenable” (Walker et al, 2004).

A creative versus a reactive-responsive orientation

We have, as we said realized on our journey in conjunction with other researchers and practitioners in our own and other fields (ILE, Holling 2000, 2001, Fritz, 1989); that if you are creating something new, you are not just operating in reaction or response to the old sets of conditions - regulations, structures, thinking or habits that constituted or created the circumstances in which the old ways of operating was manifested. So what are you operating from? And how can that be enhanced?

One theory that mirrors interesting and important aspects of the strategies used in these interesting examples comes from Frits (1989) and his book *The path of least Resistance – Learning to become the creative force of you life*.

The creative process has a structure different from that of reacting or responding to circumstances, one that resolves rather than oscillates. Just as reacting or responding to circumstances can be an orientation, so creating can be an orientation. [...] There is a dramatic difference between the two orientations. In the first, you are always subject to the whims of circumstances. In the other you are the predominant force in your life, and circumstances are one of the forces you use in the creative process (Fritz, 1989, p 56).

He also says that there is a radical difference between solving problems and creating:

There is a profound difference between problem solving and creating. Problem solving is taking action to have something go away, the problem. Creating is taking action to have something come into being - creation. Many of us have been raised in a tradition of problem solving and have little exposure to the creative process. For this reason many people confuse the two. It does not help when some “expert talk’s about “creative” problem solving. They think that the creative process and problem solving are the same. They are completely different. The problem solvers elaborate schemes to define the problem, generate alternative solutions, and put the best solution into practice. If this process is successful, you might eliminate the problem. Then what you have is the absence of the problem you are solving. But what you do not have is the presence of a result you want to create (Frits, 1989, p 31).

This deeper understanding is aligned with the Swedish research and experienced shared in the next chapter from the book *Entrepreneurial pedagogy in school, driving forces for students learning* (Falk-Lundqvist et al, 2011). Boredom, restlessness, misguided talkativeness, alienation, disobedience, distress and lack of focus to successfully perform in learning the subject matters as well as achieve all the curriculum goals is a reality for many young people today.

And if understood and interpreted, not through an old frame of reference, as a failure on the behalf of the students. It is understood as the pupil’s reaction and responses to the educational environment and culture that fail to have rules of engagements that invites them into a deeper and meaningful participation. Student does not indulge in entertainment and laciness if what they do helps them explore for real their life purposes, as part of using their willingness and immanent curiosity to learn to be able to fulfil that. And that can be fun, difficult, exiting, challenging as well as focused in hard work individually and collectively. This other understanding is addressing the educational system and its grown up agents to take responsibility and to “become able to respond” with conscious creativity rather than unconscious reactivity. It suggests that they can too transform them selves, the school culture and environment together with the students as co-workers, so that the school culture work with and not against young peoples, as well as grown ups own natural inclination to be creative, curious, eager to learn and pursuit.

I think we all recognise this frustration and bewildering confusion if we for example try to solve the above “behavioural problems” by making “what we think is distracting student” go away - like taking away the mobile phones, or discipline their moving and attentive energies into submitted concentration. The problem seem “gone”, but the empty tensed space that lack the presence of what we really wanted to create – a passionate, enduring and willing engagement to learn – is quickly filled with graver or more problematic co-dependent patterns behaviours and sabotages.

Using “learning by doing” in “learning by creating”

Fritz (1989) also points out that the old, or the problem has to be transformed by and incorporated into creating the new ways of doing things, not pushed away or rejected, but recognised and organised as a resource for learning. For example the ability “to be talkative” about “what interest you” the most, can be “a problem” or it can be made into a resource on a learning arena of training a new language.

For example you can use the ability to be talkative and frame it wisely into a role play in drama, where you tell you partner about your interests but in a foreign language. Or you can use the specific interest organised as a resource for learning channelled to be explored in a dramatized setting involving a learning aim or theme. The dramatic situation can incorporate and include the focus of interest and talkativeness that before was “stealing the attention from the real learning situation”. The problem of being talkative and interested is then being used instead of being fought by disciplining regulation where the pupil end up quite, shamed and in resistance, and the teacher is being transformed into many forms of a disciplining gatekeeper. No one will learn to talk a language by being quite or learn about anything without genuine interest. And no one will long term teach efficiently by being caught in scolding and distant controlling. To create focus by disciplining silence would be to solve a problem and get rid of “talkativeness”, but not automatically creating what you want, the ability to talk and use the language and interest in meaningful ways. When the problem of talkativeness and interest is being incorporated into the new action as a resource for learning, it becomes part of the resolution that leads to a creative and participative solution. Or as Albert Einstein puts it: No problem can be solved from the same level of consciousness that created it. You have to come from the conscious connection to the unknown new to be able to incorporate the old in a transformative way.

Let what we love be what we do

And finally Fritz (1989) says something that is maybe the most difficult for a rationally based educational system to digest, and that is indicated by paraphrasing the medieval poet Rumi (Barks & Green, 1997, p 31) in the above headline. He proposes, that the only reason for us to genuinely create something, that artist are well aware of, is because we love it enough to make it come alive. In the same spirit that Ken Robinson (2010) present his insights about how finding passion can lead us to develop and unfold from being within our element. None of these notions take away the fact that for any knowledgeable talent, skill, or competence to flourish it is combined with lot of self- and collective organisation, patient and often hard work that confronts you with all the challenges there is. But the important insight is that it does not happen out of duty, manipulation, obedience, necessity or obligation. The logical conclusion from that would be that when we are educationally creative and enterprising in a genuine and original way, we operate from love, and the love of doing what we do.

Focusing questions

These are for us a series of coherent questions. We have used, developed and refined them during our own process of understanding and writing up the examples. They are

therefore just as much an outcome as a starting point. They are happening throughout the aspects and perspectives of how these examples of practices and educational design’s have occurred. Also in how they continue to expand in their shapes, and what constitutes the conditions for creativity and enterprise to emerge within them. We share them to give you one pair of deepening and “open end” glasses through which you can read.

How is the culture of learning created? What challenges it? What shifts of focus or paradigm in traditions, values, norms, habits and attitudes and approaches - are critical? How are these abstract cultural components, from the macro to the micro levels working together as nested into each other? How are they being conformed or reconfigured in outer organisational structures? How are they being experimented with, learned about and becoming embodied into praxis?

How are the resources for teaching, learning and education being organised into an innovative learning environment?

What qualities of learning, competences and educational cultures does it promote? What is restricting, enhancing and challenging it to maintain a long term sustainable and dynamically evolving nature?

How the text is constructed and edited

We have chosen to present the examples in a form of summery description and visiting dialogue based on the specificity of each place and its core activities. It is the personal, the official and above all “the many” voices as well as the overall view of things that we have tried to catch.

The text is a mix of approaches. It is not a rigorous case study in a scientific sense, but a light footed and sincere attempt to make what is called a “thick description” of each of the examples, from the information we have been able to access. One part is lifting facts or summarizing, and this is often a compilation of official and informal documents or documentations made public. Sometimes it is written by someone involved or is part of texts that present the activities in some form on the Internet or in a printed form. Sometimes the overall story as well as detailed information comes from interviews with key persons in the context, or texts they have helped to write. It is made clear in the text when the story is told through the voice of one of these key persons. Even though I as the interviewer have “edited” our conversation often made at a visit on the sight. In the purpose of communicating a clear and more explaining understanding to the reader I have sometimes completed the construction of meanings I interpret was there, and I have rearranged the flow of the conversation. Those interviewed, have read through the edited version, and approved to the improved “words put in their mouths” as well as the ones that actually came out.

When there is an “I” in the text, it represents me Kerstin Bragby as the “key author”, in the sense that I am editing the information and have framed the analysing process. It was not a first choice to make this I involved in telling the story. But I found it more and more helpful in building a communicating quality in the text. So at one point I choose to develop, rather than hide “the I”. I take full editing responsibility for what this I is expressing. But behind the formulations of this I, there has

been an ongoing analysing dialogue, with my colleagues' Bengt Söderhäll and Pär Vilhelmsson, and on different occasions many of has been involved. Therefore the "I" sometimes become a "We" talking in the text. So the result is not a solitary work, but a collaboration of minds, made explicit by me. Sometimes I also chose to step into dialogue as a kind of reflective practitioner and teacher in the text, sharing my own experiences or some theoretical perspectives on the matter described.

But above all we have chosen to try to tell the particular stories about how the examples of practice happened, and grew into what they are today. How they used what they had in their hands to make it happen. This, so that you as a reader have a possibility to experience through recognition and to have insights about how particular shift of focus and paradigms has been actualized in practice, and how the specific attitudes, educational designs and structured support systems have grown out of that.

Our understanding is that you then need to translate and connect what you read to your own starting points. And we hope that the combination of more generalized concepts and the specificity of the examples in concrete context can complement each other in this. The intention is to give you an inspiring grip that make's creative and enterprising praxis tangible and can spur your own imagination and unique ways to create interactive human practises and emerging cultures possible to realize.

A Culture of Enterprising and Creative pedagogy

Entrepreneurship

The notion of being enterprising has a connection to entrepreneurship and being entrepreneurial. It is deeply rooted and maybe also has its most one-dimensional connotation in the economic discourse and practices. One of the first associations to entrepreneurship is for many people someone, preferable a "mail hero", creating new economically successful and/or inventive businesses. In the economical as well as the societal field there is and has been an ongoing historical and dialectic dialogue about entrepreneurship as a creative, pattern-breaking and innovating approach and its relationship to management as a more conforming form of governing business (Hjort & Johannisson, 1998).

A widening of the concept of entrepreneurship

A widening of the concept of entrepreneurship is taking place, and it is transferred to other arenas than the traditional economical, where entrepreneurial competencies is seen to operate within different professions, teachers for one, as well as in a variety of endeavours. The entrepreneurial competencies are being disengaged from the traditional roots and interpretations in the economical field. In the book *Arenas for entrepreneurship* (Berglund & Johansson, 2008) it includes everyday experiences to marginalized phenomena's. In this book one speaks of the thin and thick treads of the entrepreneurial fabric. Social entrepreneurship is a concept for entrepreneurship applied to societal change (Gawell et al, 2009). Intra-preneurship is used to the activity of renewing organisations and businesses from within.

Entrepreneurial learning

Today the concept of entrepreneurial learning is expanding both in depth and width as it is applied as entrepreneurial learning and pedagogic entrepreneurship in the context of education and schooling (Berglund & Johansson, 2008, Skogen & Sjøvoll, 2009, Skolverket, 2010). On the educational arena deeper roots of its meaning of applying a creative, autonomous and collaborative spirit is implied. A critical, expansive and creative understanding of its possible implications as a didactic and pedagogical shift in perspective and praxis is enfolding. It is a whole learning journey in itself, and is

taking place full scale, right now. We have not had the resources to systematically go through literature, research and praxis. But we want to share some of the insights, processes of discoveries and experimentation from different sources that we have found inspiring and helpful. This to start navigate and participate in the unfoldment of what entrepreneurial learning and pedagogy could become, and why it can be part of being equipped for a future kind of labour market or labour innovation. And above all how we can initiate ourselves to keep the initiative in constructing its meaning and purpose in education.

Notions of cultural, entrepreneurial and art-based connections of learning

The need for a stronger connection between the schools, working life and society has been a key issue for a long time on the European level. In preparing education for the demands of the 21:st century among others, entrepreneurial competencies, mind-set and culture has been identified as important for the educational arena to develop.

Attempts to provide a precise definition of education for entrepreneurship tend to stress that it relates to the development of one or more of a combination of attitudes, personal qualities, and formal knowledge and skills. Certainly, the strength of opinion in the literature is that education for entrepreneurship is concerned with the inculcation of a range of skills and attributes, including the ability to think creatively, to work in teams, to manage risk and handle uncertainty. Lewis (2002) couches her definition of “education for enterprise” in terms of an earlier OECD description of enterprise, by referring to it as relating to the development of “a group of qualities and competencies that enable individuals, organisations, communities to be flexible, creative and adaptable in the face of rapid social and economic change” (Lewis, 2002, p. 1). However, underpinning this broad categorisation is the contention that changing “mindsets” is fundamental. Thus, an overarching goal becomes that of fostering the development of a mindsets which is conducive to entrepreneurship and to entrepreneurial behaviour (OECD, 2009).

This definition taken from the European Commission context has been broadly used to initiate and implement entrepreneurial learning in the Nordic countries, and it is used as a starting point in the Swedish examples.

Entrepreneurship is a dynamic and social process where individuals, alone or in collaboration, identify opportunities for innovation and act upon these by transforming ideas into practical and targeted activities, whether in a social, cultural or economic context” (European Commission, 2006, p 20).

As we are interested in what learning can be at the crossroad of creativity and enterprise embedded in a culture we here give you some notions of what learning can be from a cultural perspective, and as entrepreneurial learning. When it comes to creativity we have given you some notions of importance for our context in the introductory chapter, on how creativity connected to creating can be viewed. The view of an organic and creative intelligence can be meaningful in relation to using inner motivation, as it will be defined as part of an enterprising approach in this chapter. In many of the examples different creative learning processes related to aesthetic learning and art are used, therefore we also give some suggested notions of what learning through art can imply in relation to educating for certain competencies and dispositions.

In a best practice study by UNESCO and ILO (2006, p 28) called *Towards an entrepreneurial culture towards the twenty-first century* these guiding pedagogical principles where find that stresses the long term and cultural relationship to learning.

- circuits of educational success can be created by identifying and tapping into talents and skills of young people at an early age;
- dynamic, flexible and inclusive curriculum underpins students’ life pathways, including employability, personal growth, social participation and the development of shared values;
- experiential learning, as one of the principle pedagogical pillars, enables participants to draw on their own life and cultural backgrounds and is more likely to make school based learning relevant, applicable, and meaningful;
- promoting real life applications allows students to reach for high levels of achievement, while creating their own solutions for addressing cross-cutting issues improving their environment and community infrastructures;
- education, coupled with guidance and counselling, will enhance the process of shaping a confident, responsible, independent, and complete young person;
- role models and mentoring extend students’ aspirations, increase motivation and lower the risk of drop-out;
- teachers and instructors should assume a role of facilitators with students exercising increased responsibility for their learning; and
- regular evaluation of the curriculum should be promoted to ensure its capacity to truly connect students to their schooling and their community and to engage them as active, self-directed learners.

According to Skolverket - Swedish school ministry (2010) notions (applied from OECD strategies) of what the pedagogic principles in entrepreneurial learning can be as part of a broader developmental strategy is:

- The student is offered education that adopt to its specific preconditions, experiences and ways of learning
- The student is offered and increases its own input of responsibility for learning. The role of the teacher consequently become more the mentor than the transmitter of pre-described knowledge
- Group oriented work is applied, in which the pupils learn productive collaboration with individuals with different competencies
- The teaching is characterized by “learning by doing” in combination with retrospective reflections
- The students work with authentic and complex problems that exceed the boundaries of the subject matters
- Co-operations between the school and the local community is happening frequently
- Work in the form of projects are done in a way that the result is profitable also outside school

- Working with tasks (challenges are also suggested as a rhetoric shift of perspective) that has continuity over a long period of time is performed. Those kind of tasks, (framed challenges) aims at teaching the pupils to plan, perform and evaluate the work, becoming more aware of the personal way of thinking and learning.
- The pupil are offered the opportunity to run a business within the frames of the education or in other ways achieve business knowledge and skills

According to Elliot Eisner (Lee Jacks Professor of Education, Stanford University) summoned in a best practice study by UNESCO and ILO (2006, p 25), there are 10 key lessons that arts teach. They are all relevant for how these examples use different art-based methods of learning:

1. The arts teach children to make good judgments about qualitative relationships. Unlike much of the curriculum in which correct answers and rules prevail, in the arts, it is judgment rather than rules that prevail.
2. The arts teach children that problems can have more than one solution and that questions can have more than one answer.
3. The arts celebrate multiple perspectives. One of their large lessons is that there are many ways to see and interpret the world.
4. The arts teach children that in complex forms of problem solving purposes are seldom fixed, but change with circumstance and opportunity. Learning in the arts requires the ability and a willingness to surrender to the unanticipated possibilities of the work as it unfolds.
5. The arts make vivid the fact that neither words in their literal form nor number exhaust what we can know. The limits of our language do not define the limits of our cognition.
6. The arts teach students that small differences can have large effects.
7. The arts traffic in subtleties. The arts teach students to think through and within a material. All art forms employ some means through which images become real.
8. The arts help children learn to say what cannot be said. When children are invited to disclose what a work of art helps them feel, they must reach into their poetic capacities to find the words that will do the job.
9. The arts enable us to have experience we can have from no other source and through such experience to discover the range and variety of what we are capable of feeling.
10. The arts' position in the school curriculum symbolizes to the young what adults believe is important.

Definitions of competencies in the educational context

The use of the word competences, are becoming part of both policy documents and every-day communication. It is of course filled with different connotations, for example from the field of professions, or charged with values about being competent or not. And we are all “on a quest for its definite definition” as usual.

This is an inspiring definition of competences for this context and it comes from the Government of Alberta in Canada. Alberta Education. *Framework for student learning: competencies for engaged thinkers and ethical citizens with an entrepreneurial spirit* (2011). Their research is connected to the OECD (ILE) network. The text, that is available on line, is a part of “a series of initiatives to provided Albertans with an opportunity to participate in dialogues about the kind of education that students will need in the 21st century”. It is a result of a review of educational literature and research and other provincial and international frameworks for learning,

“A **competency** is an interrelated set of attitudes, skills and knowledge that is drawn upon and applied to a particular context for successful learning and living. Competencies are developed over time and through a set of related learner outcomes. The following competency groupings contain descriptions of the attitudes, skills and knowledge that contribute to students becoming engaged thinkers and ethical citizens with an entrepreneurial spirit” (Alberta Education, 2011).

- Critical thinking, Problem solving and Decision making
- Creativity and Innovation
- Social, Cultural, global and Environmental Responsibilities
- Communication
- Digital and Technological fluency
- Lifelong learning, Personal management and Well-being

Their framework is made into a graphic of a circle with a core, and different layers that expands out into the periphery of the circle. The student is the core of the circle or sphere. The closest layers to the core are the literacy and numeracy intelligences. The competencies above are grouped in a circle around the student and its literacy, and numeracy intelligences that are said to emanate through and being embedded into all the competencies. Emanating from the layers of the competencies are in turn the subjects and discipline areas that provide different contexts of knowledge as well as an interdisciplinary arena for making the competencies come alive. The outer layer of the circle or the holistic outcome will be an “Engaged thinker, Ethical Citizens and Entrepreneurial spirit – that is the vision.

How to develop a school culture for entrepreneurial learning in the historical perspective of Swedish school development

The Nordic countries the last ten years have mobilised conscious strategies to introduce entrepreneurial learning into the educational system. In Norway:

The national Government has launched a nationwide effort to enhance entrepreneurship. [...] According to the Core Curriculum, education should qualify people for productive participation in the labour force, and supply the necessary basis for any later moves to other occupations. A more explicit focus on promoting entrepreneurship contributes to settlement, employment and economic development in local communities and regions, and encourages students to set up and manage their own enterprises (UNESCO & ILO 2006, p 97).

Sweden got a new governmental strategy 2009 saying that entrepreneurship and entrepreneurial learning should surge through all teaching and learning situations in the school. In 2011 it has been written into the new school core curriculum. At the University of Umeå in the north of Sweden a base for research on entrepreneurial learning has been developed. We want to share with you some of their perspectives on this matter.

The school culture is always developed from a historical context. In the book *Entrepreneurial pedagogy in school, driving forces for students learning* (Falk-Lundqvist et al, 2011) the “framing factors” (Broady & Lindblad, 1999) of societal development that has influences the development during the last siècle up to today is described from a Swedish perspective in short terms. Tradition in the school culture is described as being transmitted from generation to generation and the current culture is identified as holding a lot of unspoken and invisible matter of course. And some of those are older historical layers that are operating like mines, and needs to be de-armoured not to be counterproductive in the cultivation of new attitudes and approaches. Teacher witness about that the “the engine in pupils” are running out, and that they are bored. And as we suggested in the introduction, not a lot of research has shown the impact of the school culture on learning, rather the children’s behaviour is defined as the problem.

Studying the school culture, identifying the premises that constitutes it - both the inner logic of its actors and the outer logic of the structuring and framing factors as well as the tension between them (Lindblad et al, 1999) - enhance a deeper understanding of how embedding into a culture happens. Therefore to understand the cultural layers, where they come from and reclaiming the unconscious choices emerging from it, we suggest, can set free the energy to be directed into new conscious and creative choices.

This is a longer section (p 18-21, & p 65-66) from the book that we have been aloud to use for the context of this handbook. We are very grateful for that, as it shades light on the historical formation that is part of the complexity and situated challenges that are happening in the Swedish example, and we think it inspires and contextualize the challenges in the other examples as well.

What qualities where expected from an industry worker in the end of 1800? (p 18-21)

Working in the industry was often dirty and labour’s, which required and meant that strength and endurance was important. As environment and working conditions where troublesome it was crucial that the working force where obedient, took orders, followed instruction and did not obstruct. Being on time, being dutiful and adaptable where all competences matching with the working life of that time.

The inheritance from the church in the elementary school suited the elementary schools education and fosterage of children. The schoolteacher became the instructor telling the pupils what to do and what to learn. The school became organised like the sawmill industry, and the classroom kept the structure of the church. Parish catechetical meeting, as a method worked well to control the knowledge of the pupils, the shame continued to be used as a tool to direct and rule the children’s behaviour and abilities. Standing in the corner, shame, adverse remark, the pointer, marks in behaviour and order where important tools in the exercise of the profession of the teacher.

The absolute view of knowledge, connected to the right and wrong of dualism functioned well in the schools handling of reproduction of knowledge. The parts where considered more important than the context. What was assessed was the quantity of knowledge, and the pupils were sorted out in accordance to that, which prepared for an effective way of dividing them in accordance to the outer need of the society. The purpose was therefore not to educate the population, but to foster and control, at the same time as one was providing the society with a working force. The seminars for elementary schools where initiated and the teachers education where prescribing so that they where learning what the children where then to learn from them. Was that a strategy for having teachers not knowing too much? Scrutinizing the issue one can see that the elementary school simply took over the strategies, communication and methods from the church.

The industrial society changing into a “a mind-based business life”

The school of the industrial society works a long way in to the 19:th century. Sweden is developed as a strong industry nation and the school supplies the industry with a loyal and good performing, working force. After the Second World War, there is an enormous growth in our country, as a consequence of other countries being troubled by the war and in need for goods and services. The industry sector grows which gives economical room for a bigger and bigger public sector. The Swedish welfare State is developed. All ready the school commission from 1946, introduce the new democratic assignment for the school, in the light of the consequences of the authoritarian upbringing in Europe during the war. To follow order and instruction without an autonomous thinking, reflection and responsibility had led to a tremendous suffering in the world. The democratic commission points towards a democratic leadership within the role of the teacher and more self-responsibility in the role of the student. With that comes the demand for a greater proportion of knowledge and autonomous thinking.

During the time after the war one can also see in the curriculums and policy documents that the notions of knowledge is expanding, the prescribed content reduced, and the teachers task to educate and develop the learner is enlarged. The role of the pedagogue is discussed, the formal power is lessen, the possibilities to punish the students are taken away, new methods and ways of working are introduced. Reformations of the school interchange with each other, and new ideas in pedagogy are formulated by Skinner, Piaget, Dewey, Vygotsky et al.

The cause of the changes

The big political changes during the years around 1990, rewrites the world map and the economical conditions for businesses. Eastern Europe is collapsing, the globalisation enters and this collaborates with an explosive development within the information- and communication technology. The global competition carries with it that the industry production is moved from Europe and Sweden to new economies in Eastern Europe, Asia and South America, at the same time as new opportunities for work are emerging within previously unknown sectors. A lot of these new jobs are based on knowledge and innovative thinking. In the rhetoric from Swedish business and Swedish politicians are mediated the image of a service - and knowledge producing

country from the entry of the 2000 century, where the new businesses are also placing their production and innovative thinking in India and China. Europe suddenly seems to get behind economically, and a political dislocation towards new fast growing economies, has started to be noticed. Thinking, creativity innovative thinking, and enterprising becomes carrying capacities in carrying on living in a society of wealth.

The new role of the school

When information technology and robots makes more effective the business life, more unqualified jobs disappears, at the same time as the demands on education in all sectors increase. Concepts like lifelong learning and learning organisations is built into a common rhetoric. New working opportunities are created within previously unknown enterprises that are connected to service production, entertainment- and information technology. The business life goes through a rapid change and the global competition makes the export businesses dependent for their survival, on innovative thinking and creative abilities as competence in their employees. Now a new paradigm is introduced in the Swedish school system. A school for education, and the curriculums in 1994 correspond to these changes in the surrounding world. One could say that the policy documents from 1994 break with prior ways of thinking school and education. A school ruled by goals and results points more towards the possibilities in the future for the students development, rather than control. The aspiration goals also imply that the activity should be dynamic and include continuous development for the student to unfold in an optional way. The marks and grading are no longer done in relation to others, but in relation to goals, which makes the pupils important for each other in learning. No pupil should be graded on the behalf of any one else, but all students can get the highest grades with the help of other pupil's interaction. Competition is obviously replaced by a system of collaboration and this creates an opportunity to cultivate a totally new school culture. Summative tests and assessments of pupils acquired knowledge can be replaced by an assessment of the pupil's own evaluations of their own and others learning. The system can become transparent for the students as they have access to the criteria's, and suddenly formative assessment can be applied. This paradigm shift, increase the pupils role as the actor and rearrange responsibility and power between pupil and teacher. Dialogue and communication around learning and development changes the rhetoric and creates conditions for an entirely new school culture.

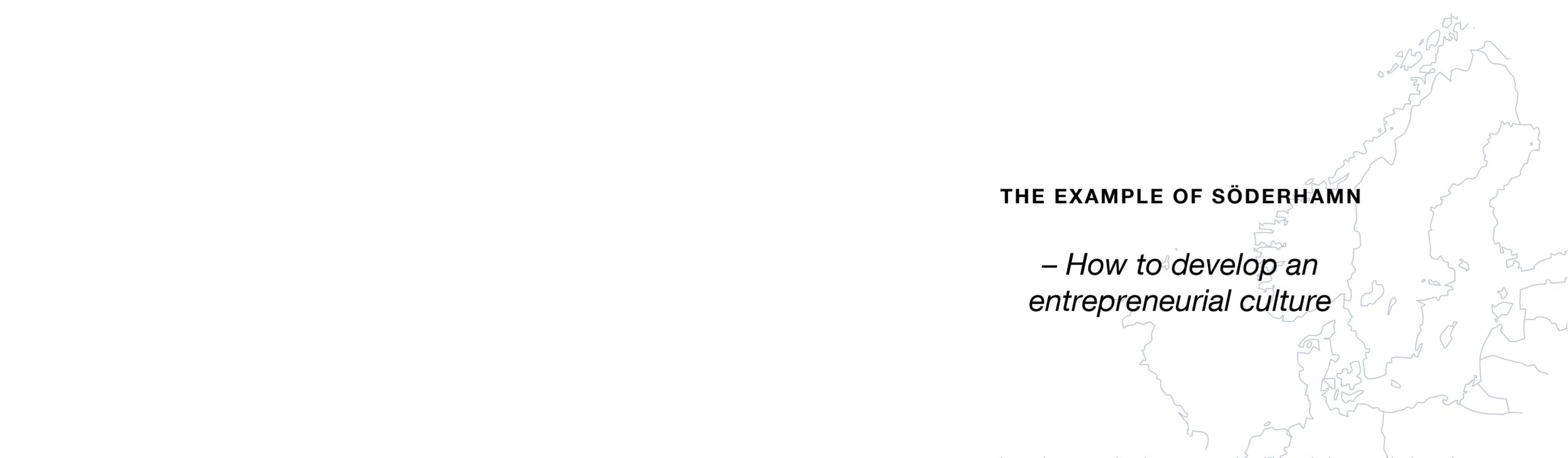
The new paradigm is based on a goal-oriented school with a relative notion of knowledge and a changed view of the pupils. The leadership becomes more entrepreneurial, both when it comes to leading learning processes inside and outside the classroom and when it comes to the development of the rhetoric, methods, ways of working, and assessment. In connection to this shift of paradigm one is discussing whether the teacher in the future should be called teacher, pedagogue or mentor/guide. Methods like, inquiring in the school, storyline, problem based teaching, projects and others appear to answer up to the demands of the new times. It is in this context that the new concepts and notions of enterprising or entrepreneurial learning start to turn up, and that answers well to the intentions of the curriculum and new policies.

The new challenges for the teachers:

To change a habit, can mean to make a change in culture. That, which promotes the student's personal development and learning, is what we shall take care of and cultivate in the culture. That which prevent or counteract the students personal development and learning we call a mine field, and these mines can be made harmless and be replace by factors that stimulates and motivates the pupils development and learning, and that is where the entrepreneurial is found. We need to shift the focus from the pupil and the content, to the culture and the pupil's strategies to be able to see what we do not see, and by that create possibilities for change.

The essence of motivation (p 65-66)

“The established research of motivation speaks about two types of motivation, the outer and the inner. The outer motivation is ruled by outer rewards as school marks, parental expectations, approved results and other powers that are part of the surroundings and environment and in others assessment of student performance and achievements. The inner motivation comes through as an urge, and joy to learn, and the motive for the individual is to satisfy the curiosity, the need for knowledge and need for meaningfulness and understanding. The different factors of motivation gives different types of learning processes, and the learning processes that are driven by inner motivations seems to give the most constant and lasting knowledge” (Falk-Lundqvist et al 2011, with reference to Giota 1999). A shift from the outer motivation to that, for learning and understanding, inner more meaningful, requires that the pedagogue has the competence to awaken interest, so that feeling and intellect are connected to work together in a way that makes the knowledge alive and understandable. When the task' that the pupils are faced with has an emotional charge they take on personal value and becomes meaningful for the pupil. This means that the pupil get involved and experience the task as meaningful in a personal sense. The design of the teaching and learning process, its tasks and activities, therefore becomes important for what kind of motivation that is activated in relation to the work at school. Furthermore it is of utter importance how the tasks are introduced, as it is at the introduction of a theme, subject or work project, that the energy and engagement of the students are to be captured and the curiosity becoming the driving force to think further. “The principle of goal activation means that if the pupil shall perceive the task as meaningful and be motivated to complete it, requires that the pupil can put it in relation to personal goals of their own” (in Ford, 1992). For entrepreneurial learning to have carrying capacity in the classroom, it is demanded from the grown ups to be able to identify with the world of the pupils, and see it from their perspective, where the pupil besides being a school pupil, is a human being with goals and expectations of their own.



THE EXAMPLE OF SÖDERHAMN

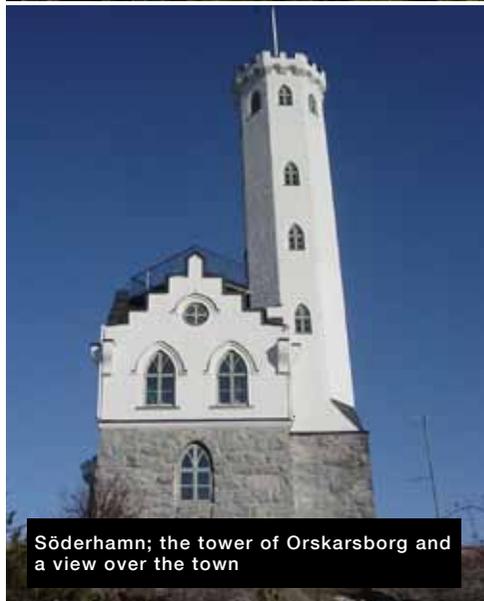
– How to develop an entrepreneurial culture

Margareta Högberg, the current local government head in Söderhamn, tells the main body of this story. She has played an important part in different official roles during the years, together with other officials and above all the project leader and “spider in the web”, Bibbi Lodmark. In collaboration with a political fusion, they have all helped to build a platform for the cultivation of an entrepreneurial culture. Within the organisational structures in the community they have create conscious conditions for a new vision to happen. The schools in particular have played an initiating role, together with an involved business life, different local associations and active citizens. They have all have created a joint driving force that have acted within and developed these frames, shaped the new conditions as well as actualized the new attitude and approach in action. In dialogue with her framing story the transformations will come alive through a diversity of voices from the schools, different projects and research. We will give you a story from Pär, Bengt and Kerstin, teachers from the University of Gävle involved in developing courses for the teachers, and we will spice it with some theoretical reflection on perspectives that arises in particular ways in the process in Söderhamn.

Söderhamn, a city in the middle of Sweden

Söderhamn is a small city with about 25.000 people on the east coast of Sweden, about two hours north of Stockholm. Söderhamn is situated by the Baltic Sea, the archipelago outside Söderhamn’s coastline consists of about 500 islands. The infrastructure is well developed with two deep harbours, high speed trains and one of Sweden’s main freeways, E4. The city was founded in 1620 and in those days the trade and industry were mainly focused on manufacturing rifles, paper mills, power systems etc.

Söderhamn has changed completely in the last 35 years and gone from a situation where most of Söderhamn’s inhabitants worked for a few big companies, to a



Söderhamn; the tower of Orskarsborg and a view over the town

situation with a high rate of unemployment, due to big company closures. Söderhamn has also got an increasing number of elderly, a diminishing population and an increasing immigration as part of its current challenges and problems.

Today there is a political unity on strategically important issues and a well-known vision for the future. Many exciting future focused projects are creating positive changes in the municipality and we have a strong growth within the service sector:

Söderhamn's Vision 2012 has got seven strategies for how to attain the desired future goals:

- Stimulate entrepreneurship and trade and industry development
- Further develop Söderhamn as a centre for learning
- Develop attractive living environments
- Cooperation and teamwork
- Focus on people interacting and meeting eye to eye
- Converge upon our strengths for a stronger cultural life and thriving climate for non-profit organisations.
- Highlight our progress

The municipality of Söderhamn, through the work of Vision 2012, takes a holistic approach in the process of entrepreneurship and learning in several sectors. The municipality has a comprehensive strategy based on entrepreneurial development. Innovation and entrepreneurial thinking will permeate all levels, both in school and in different administrations. Entrepreneurial individuals are a necessity for a society to survive in a changing world. Enterprising people need, therefore, exist in all sectors – whether they are new or existing businesses, public sector or voluntary – for society to evolve and grow!

Here are some interesting statistics that mirrors some general changes in attitudes of the population. They are taken from *A Comparison questionnaire study 2003* (published in Svensson, (2006) and one from 2009 published in Vallström (2011) *To recapture the future. The small town, the young people and the possibilities of democracy.*

- The proportion that plan to “stay on for the time being” have increased from 2 to 26 %
- The proportion that plan to “to move and not coming back” have been reduced from 31 to 21 %
- The proportion in different ages that find Söderhamn to be a good place has increased in all alternatives: 5 years old – from 63-90 %, 15 years old – from 37-59 %, 25 years old – from 11-25 %, 35 years old from 33-60 %.
- To study in Söderhamn is now a positive alternative for 60 % of the young people, 2003 it was 31 %
- To have a job in Söderhamn, any job, is now positive for 54 % in comparison to 39 % in 2003

Today a group of young people that grew up in Söderhamn, some not even living there any longer, have decided to influence their town, and maybe create the conditions for returning home. This is the story:

A young boy from Söderhamn, living in Stockholm where he had found a job at a petrol station created a group on facebook called; “Lets rule the town by free hand”. He wanted to be able to move back to his hometown. The facebook group grew very fast and had 160 participants when Bibbi the project leader invited them to come and talk about what they wanted, and what possibilities they were dreaming of. “When they started to talk they had many visions of how to create their living in a future Söderhamn, but the only thing we adults were aloud to give them as initial resources where a place to meet, and some coffee. They did not look on the town as I do”, says Bibbi. “They did not see the shut down industries, because they were never there for them. They do not want things served up for them, because they feel there is strength in creating their reality together with others... they have a totally other worldview than I, and that is such a miracle and relief!!” Nine months later the facebook-group has 2 200 participants and has been a place were people are creating a positive local identity and activities in real life are encouraged and coordinated.

Luck, chance or a synergetic effect?

So, how did this come to happen, and how is it possible that this kind of intentions meet? That the opportunity occur and also is acted upon, both by young people outside the institutions of power as well as by grown ups within them, in their official roles and functions? In another “universes” young people have visions or dreams that they do not feel empowered to share because it seems too impossible or they “believe no one will listen”. Or they share them but no one in power or with societal resources and mandate notices. Often “grown ups” are too busy planning for, and implementing what they think is the right thing, that they would never be receptive to the right thing, happening at the right time by itself. That “thing” being exactly the expression and seed for what they, isolated among themselves, are trying to make happen. And very few people know how to join their forces in mobilising for something neither of them actually know in advance, how to make happen.

Is there only a coincident that young peoples initiatives and adults receptivity start co-operating like this after 7 years of working with this vision of Söderhamn

to come alive? Or is it actually a concrete manifestation that is the result of taking a lot of steps, nurturing and acting upon a vision that sooner or later creates new habits of mind and creative abilities to mobilise individually and collectively? Many people here have worked with a personal change in their attitude, and experimenting in praxis with an entrepreneurial and creative spirit on all levels of organisation and different professional roles, including teachers.

During the inauguration of the last conference 2012 in Söderhamn the Mayor of the town expressed that one of the first parts of the vision had been that in the future it would be as easy to create a job as to find a job in Söderhamn. And this statement where followed by two of the young people from the facebook group saying, “let just do it”!

Parallel to a project Driving force (see below) that has held together the vision of implementing the entrepreneurial spirit in the schools, there has also been a big investment in young peoples lives outside school. There was an enterprise (decided in 2007) called Lifting the young. It was aiming to; counteract segregation, racism and scepticism towards strangers, drugs and violence; encourage equality and manifoldness; change destructive attitudes; give young people a chance to influence their life situation, create belief in the future for our young people and through that for the whole of Söderhamn.

A lot of the thoughts behind Drivkraft were similar to the ones that led to our major Ungdomslyftet (Lifting young people) initiative. It's all about persuading people to feel that they're adequate, letting them know that people realise they're there and allowing them to venture to take responsibility for their own lives. This is how people grow and allow their self-confidence to develop (Magasin Drivkraft).

Serendipity – an entrepreneurial competence

Serendipity is a beautiful English word with an interesting original story as well as interesting interpretations. “... serendipities is the interactive outcome of unique and contingent ‘mixes’ of insight coupled with chance... [...] how planned insights coupled with unplanned events can potentially yield meaningful and interesting discoveries. [...] Serendipitous events are opportunities for staging interaction ...” (Fine & Deegan, 1996).

The word serendipity comes from an old Sri Lanka story in which three princes get accused of stealing a camel, because they could so accurately describe it. They had never been close to the camel, but decided, when asked if they had seen the camel, to play a game. With the help of existing signs or matter of facts that they had notices along the road, they added their imagination and made a qualitative guess. They claimed to have seen a camel and reported correctly that it was blind on one eye, missing a tooth and lame. Once in prison they told their story, as the camel was retrieved and their innocence proved. When the princes were asked about how they “could make real to themselves”, or “make a matter of fact” of this camel they had never met in existence they responded that; the grass was eaten on one side of the road suggested that the camel had one eye, the clumps of grass on the ground indicated a tooth gap, and the traces of a dragged hoof revealed the camel's lameness (ibid, p 434).

This story indicates that to create or make real something that does not yet exist is a matter of making imagination and reality meet in a creative way. If we start to use our ability to pay attention to what is happening and be receptive to the different details, we can help pattern, coordinate and make manifest a new reality as a part of a greater picture or vision. We need to train and use our “serendipity muscles”, for that. We will be able to know how to invite those clues (people, suggestions, happenings, competencies) that come our way, as part of the solution to what we are seeking or intending. We will act intuitively - “trust what we know without knowing how we know”. This kind of use of our attention and the ability to nurture and act together with the flow of things is a disposition that we can learn and train. It involves engaging with the unknown and is part of creating. It is important to realize that we never can plan, force or anticipate how the results can be realized spontaneously in a way that involves people coming from their own initiatives, needs or dreams and desires. It is possible to harness, but it is one of these paradoxical challenges, that entrepreneurial competences consists of handling.

This open and attentive assertiveness can be used in relation to how you make manifest and create a vision of something, which you cannot plan to happen. You can help it manifest by systematically create the clear intentions and circumstances for it, and take the first step towards it, and then get attentively involved in designing and choreographing the energy and happenings in motion.

Mobilising collectively and self-organised

The more people that, like in Söderhamn, focus and involve their energy; this starts to build a focus of attraction that in turn makes irrational things gather. It indirectly builds a field of opportunities or coincidental circumstances that creates cohesion of synergetic interplays. To start interacting with the opportunities that then occurs is no longer done just by chance, nor is it fully calculated. It is a cultivated quality of receptive and active attention. The attentiveness is patterning together different events or connections in an intuitive and assertive way, and thereby harnessing change into the intended direction of the vision. It cannot be sought for in a solely controlled, disciplined, pre-planned, rational and direct way. But it can be outspoken clearly and intentionally and indirectly aspired for and acted upon.

In these stories this process seem to be a critical part of the art of actualizing a vision and creating what you want, long-term. It involves this ability to learn to be attentive to what you have envisioned or are intending, giving it focus, energy and attention, even though you do not now how to make it happen. You start doing the changes and the actions you can influence in your self and the situation. But that readiness or involved openness is what makes you recognise the substantial forms of the vision when it is showing up in reality as an opportunity to act upon. And therefore you are able to grasp the chance “make happen by accident” what you could never make happen by trying to plan it or enforce it. This is the same organic quality of creativity that direct a creative orientation described in the introduction. When that is done over longer period of time as in this case, in small and big scale, involving more and more people, the vision emerge, appear and start to build up as a reality.

Serendipity as a teacher competence

In the example we will see “the serendipity” muscles being cultivated as part of a receptive creative and enterprising teaching and learning competence. Teachers have clear intentions of where they are heading, but do not necessarily know how, or try to control how it will happen. They are letting the pupils’ interest be the driving force, organising a process of creating something that is concrete and thematically related to their interest. This builds a focus of attraction in the learning process. Then they are attentive within that process to the opportunities that arise in which the curriculum can happen, and the subject matters can be natural food for a contextual learning hunger in the students. In this way they solve and include the dilemma of giving up inhibiting control without losing directional responsibility.

Using the class room environment as a didactically structuring partner

It is a chilly autumn day in October 2011. A team from the different countries in ECCE is visiting the school Stentäckten, (pupils are 6-12 years of age). We move through the different classrooms, where clusters of benches and chairs, big sofas and different materials on walls and cupboard are organised into flexible studios for a variety of teaching designs, situations and processes, and they are all linked in open ways together as a kind of pulsating landscape. I think we are all moved by the relaxed and at the same time focused atmosphere. A lot of live candles and soft music are signalling that an open, vulnerable and yet allowing climate is tolerated. Or is the staging of the physical environment part of creating it? At the same time there is a dynamic climate of both collaborative and individual learning situations happening. They are all part of extended thematic learning journey’s, also structured by individual journals where each student make their individual planning and follow up.

The collective and creative climate as a tolerant container

In one room a playful teacher and student interplay is collectively inquiring into “What word the magical pen can write today starting with the letter M”. Everybody is huddled up in a big sofa and contributing with different words. We join them, and I think we all notice, both their ease in participating, as well as a bit of shyness in relation to us as visitors. We all see the boy in one of the corners of the sofa, playing with his own toy animals, absorbed in his own game speaking loud to him self, apparently not part of the collective game with words. When suddenly out of the blue, he gives his suggestion into the group context. The teacher later tell us about his learning difficulties, but how he today can blend in with his own agenda, without breaking the group focus. She says that she often use this playful “role” where she and the children has to set themselves together on a quest for something. “Learning is magic”.

In another room, everybody is working individually and on their own around the table groupings, but they also circle the room, going from their own project and dialoguing with each other or the teacher. It all seems to be self-organised, done with ease and inner, rather than outer disciplining or motivation, where help is close if needed, as part of a self-reliance and relaxed focus on the task. As we ask questions about how it is organised we get the impression that the assignments are structured in a way that create meaning and purpose to what is done, as part of a bigger theme and scheme. This is coupled with transparent working routines, owned by the pupils themselves, created together with the teachers.



Learning by teaching

In another class of gymnastics, two pupils are starting the class by leading them through their own version of warming up by music, play and movement. They sometime turns to the teacher for support, and sometimes seems to enjoy their new role and understanding of how to take responsibility for taking the lead, as the group follow their instruction and they experience the chill of leadership, expanding who they are and what they can do together.

Sitting in the staff room for coffee, we as a group where touched, impressed and inspired into a deep dialogue. We asked ourselves what shift of focus, paradigms and praxis was involved here, and how was it part of an historical development of the culture of the country, the school system in general, and the particular initiatives here in Söderhamn? And where were the parallels and differences between our countries?

Influence the culture by focusing on education – Söderhamn story told by Margareta continues

The new situation led us to a point when we realized that change was necessary. We realized that we had to influence the future by changing the culture through promoting an entrepreneurial culture in education from pre-primary to higher education. Before we started we realized that we needed a definition of what we meant by the word entrepreneurship and we chose the definition from the Swedish Agency for Economic and Regional Growth:

“Entrepreneurship is a dynamic and social process in which individuals, alone or in partnership, identify opportunities and make something with them to transform ideas into practical and targeted activities in the social, cultural or economic context.”

The next step was to identify the three different components of entrepreneurship,

The first component in entrepreneurial learning is the base for developing an entrepreneurial culture. It is a matter of how students can be supported to develop ideas and believe in themselves. The second component is how to develop cooperation between schools and companies by work experience training/learning. The third component is entrepreneurial training.

Entrepreneurial learning

After that we had to decide the skills that should be practiced in entrepreneurial learning and we identified the following skills:

- ability to see possibilities
- unrestrained thinking
- entrepreneurial spirit
- wealth of ideas
- ability to act
- stamina
- creativity
- courage
- ability to co-operate
- ability to express oneself
- self-esteem
- curiosity
- feeling of responsibility

By practicing these skills we expect that children and young people of Söderhamn be allowed to develop initiatives and ideas, cultivate dreams and imaginations. We also expect that they will be able to make their own choices and take responsibility for those choices, to increase their involvement and influence. That they will practice collaboration and interplay. They will also be given time to reflect (learn to learn) and to develop their ability to analyze, to train “helicopter view” and most important of all, to be co-creating their own learning and become entrepreneurs within their own lives.

*Entrepreneurial learning is about how students can be supported to develop ideas and believe in themselves. The preschools and schools have to offer learning environments that encourage everyone to become entrepreneurial individuals. Entrepreneurial skills is part of the curriculum, the basic view of man, learning and knowledge. Entrepreneurial competences are encouraged by entrepreneurial learning and develops **the abilities and attitudes** that generate a dynamic thinking and actions of what is already outlined in the curriculum goals.*

This shall be implemented by an entrepreneurial approach that is characterizing of all operations. The future is NOW!

Activities

In 2005 the project named Drivkraft Söderhamn, started. The purpose was to develop an entrepreneurial culture by doing entrepreneurial activities from preschool to adult education. First of all it was important that the teachers and the principals themselves had an entrepreneurial attitude and knowledge of how to develop those competences every day in school. Therefore it was necessary to educate those two groups.

Entrepreneurial learning in school is a strategy, a structure, an educational form of working with the curriculum goals to strive for. The aim is to create an educational environment that stimulates students’ entrepreneurial skills, enduring skills that will lead to increased self-confidence, motivation, responsibility and optimism.

The project has carried out mandatory activities for all educational staff in Söderhamn. There has also been specific activities for principals and for the teachers. The project “Drivkraft” coordinated courses for teachers in order to help them “daring do” entrepreneurial school. In order to create legitimacy for the project objectives, it was important that through information, dialogue and education, translate the objectives, entrepreneurial attitudes and skills to the school governing documents, thereby creating a common ground - a teaching language for the desired development.

How it all started.

The didactics of entrepreneurship – experimental coruces in collaboration with the University of Gävle

We will tell a story about how, why and with what we have been working together during the last seven years. We are Pär Vilhelmson and Bengt Söderhäll teachers at the University of Gävle, Pär in Business Administration and Bengt in Educational Sciences. We both have backgrounds as teachers in compulsory schools.

The history goes: One day Pär is approaching Bengt, saying: – Can I please profit on you? We did not know each other at this moment, but Pär knew that Bengt was enrolled in the teaching of teacher students and had been given a task to put together a course for teacher students in Business Administration. As Pär thought he did not have enough knowledge about the actual school development and the steering of the school and coming from a group of researchers in entrepreneurship, he enjoyed this challenge. The result of this first meeting became the starting point of a range of activities. First, the course for the student teachers was developed.

Secondly, Pär and Bengt wrote a paper with a long title inspired by a principle at an independent school. *The Independent School of Sventon: A Part of the Public Sphere Rethought and Remade by Entrepreneurs. A New Framework for the Organization and Operation of Schools and a Strategic Use of School Actants and Professional Knowledge.*

It was presented at the RENT XVIII Conference in Copenhagen in November 2004 with focus on “Managing Complexity and Change in Small and Medium Enterprises”.

Thirdly, we arranged days of inspiration with lectures and hands on, under the title “How to make a workshop of the curriculum?” This was at the University of Gävle and we had 200 participants. During a break, one of the participants, Bibbi

Lodmark from Söderhamn, asked us if the University could help the municipality of Söderhamn to develop school activities on an entrepreneurial line. This she motivated by expressing the change and complexity as Söderhamn is moving from an industrial town into something else.

After this we developed two academic courses in Entrepreneurial Learning (7,5+7,5 ECTS) and in 2006 we began working with these courses in Söderhamn, 80 kilometres north of our work place. A course usually operates over a period of five weeks, but here we decided together with the other participants to work with the course from half to a whole school year, depending on the local situation. Over the years, we have been giving this course for around five hundred teachers in Söderhamn – from pre-school teachers to upper secondary school teachers and also headmasters.

The courses in retrospect

What we could not see when all this started, was just that we had something in our hands that could generate a new perspective, at least for us, on the activities in schools. And now we are here, in this ECECC project, coordinated from Söderhamn, together with participants from England, Italy and Czech Republic. As this project grew, a need for complementary competence arrived and we asked Kerstin Bragby at the University of Gävle, working with drama, leadership and regional development and also a Ph D student in this field, to join the project.

To be prepared but not preplanned and risk it together

Before we had our first seminar of the first course, we had collected some quotes from fiction literature, film and music that were in some way pointing in a direction sympathetic to what we thought we were going to do together with the other participants, the teachers of Söderhamn. The way we had planned this first seminar, can be described like this: *we did not want to know what to say, but we needed to know what to talk about.* One starting point was the definition mentioned earlier in the text:

Entrepreneurship is a dynamic and social process in which individuals, alone or in partnership, identify opportunities and make something with them to transform ideas into practical and targeted activities in the social, cultural or economic context.

But how to create opportunities for a dynamic and social process to occur, in which we all, including ourselves could discover what it meant to be entrepreneurial in our professional roles, what it meant to transform the ideas of being creative innovators of a new school culture to a practical activity and reality?

We had the idea to take out the course, to *plot* the course, together with the other participants to create a didactic room where we all are learners and teachers. We also had the assumption that the teachers that were taking the course had a lot of knowledge and skills that were not explicit and that during this course, part of these skills and knowledge could be articulated and communicated. Probably we also intuitively knew that we had to put our selves at some kind of risk, to unsecure the situation in an inspiring way, if we were not to fall into the traps of the autopilots in our selves and the participants.

To use “the crack” for the “light to get in”

(paraphrasing Leonard Cohen)

For the first seminar, and we had decided not to be lecturing, we had discussed how to open the scene. After some time, Pär came up with the idea that we should sing a song as a starter and not rehearse it too well. So, Pär brought his accordion, which he claims he cannot play, and Bengt his ukulele and we sang the song of Freuline Saga. The text is about a vision of a society in which the human relation is celebrated and dared in the face of war, and socially alienating conventions. The song was personal to us, and talked to our hearts about trusting something deeper, and how empty and painful it is to live in a culture or situation that have no room for what truly makes us meaningful for each other.

In retrospect we can see that to allow this personal engagement and vulnerability to flower in us as adult, has been a key opener and theme in different texts and poems that we have used to catalyse the process together. To become touched as grown ups helps us becoming alert to what makes us creative and available for each other and the children in a new way within our professional roles. And we have come to understand that this is an underestimated and vital component, in the task to experiment with how to create a new school culture, based on inner motivation, deeper context and meaningfulness. We have to do, and make happen in ourselves what we want to teach.

In October this year, we had a project meeting in Söderhamn and one afternoon we visited Skärså, on the Baltic. A man was repairing a house and when we passed him, he waved, shouted at us, put down his electric drill and walked over the ditch to us. It was Nils-Olov, one of the teachers that had been in the first of the courses and immediately he began to talk about our not so well repeated performance of “Fräulein Saga”:

– That was what made us go on. We had a feeling that this was for real. We copied the idea and started our project with a song!

In retrospect we may suggest that the song had a dimension of authenticity and vulnerability and this lead to open the minds of skillful professionals. It confirmed our hypothesis that we all are more skillful and capable than we show in our every day work, but also that we need to break the routine performance, to allow more of our creatively performed understanding to come alive.

We also have heard from other participants, that they were frustrated with this differently structured opening of the course and from the fact that we continued to work without using too much frontal education. These frustrated participants also said that they were not familiar with a course where they themselves should be so active. Later, though, this grew into becoming a part of what they experienced as a benefit of the course; not taking the quick fix through the already known grounds, but to dare the chaos, and to wait for a new direction in how to coordinate it and let new ways of acting emerge.

Warming up the Serendipity muscles and a manuscript of Red islands

I (Kerstin Bragby) have joined Pär and Bengt for the last two years of courses that we have developed for the Ministry of Schools in entrepreneurial learning, based on their previous experience. Today, many courses later we have continued to develop our own culture of “thick preparation”. It consist of a “heating up of the focus and

subject” through our own conversation about the small and big things going on for ourselves in relation to what we are going to teach. And sometimes we talk about what is in our hearts without knowing how we will use it. But we trust that it makes us “present”, or create a charge in us that makes us ready to ignite the theme and connection to the group. It makes us warm up our attention and serendipity muscles.

This means we are prepared with aliveness in connection to a lot of different aspects and perspectives of our theme. The actual preparation and action of the course, becomes very easy. It often consists of awakening and coordination all ready existing elements, creating a living structure through which a mutual and adventures dialogue and conversation of discovery can take place together with the group. We have created a manuscript of “Red islands”. That means we know which components we want to include and make happen, but we can let ourselves be taken there by the improvisational interplay between the participants input, course of direction and our own orientation in the moment. We still often find a story, a poem or a song that helps as hit the cord in the room, or use improvisational opportunities with the group that we can act upon. And as Pär so elegantly suddenly said in one seminar to the group; “plan A is that you all take over the course, and our planning is a plan B”.

To make it happen in praxis

Pär and Bengt continues. We had from the start, suggested that groups of teachers, competent teams, should attend the course. Between our seminars these teams worked with projects at their schools, projects they had chosen together with their pupils. Because of this, that the unique situation of the different schools and teams were focused, the need for activity from every participant was crucial. Most of the time at the seminars were used for the groups to form, talk about and later evaluate their projects. “Pär and Bengt” were more of critical friends and go-between the groups then lecturing academics. We also had a role of moderators, or “co-writers of the course” and this we can describe by quoting Tomas Tranströmer, Nobel Laureate of Literature 2011:

*But the writer is halfway into his image, there
he travels, at the same time eagle and mole*

In the forming of the projects, we where directed by a question; in English something like “What is happening when it says Wow?” When we continued to involve our selves and the participants in this question, it made us wonder what made the difference; the positive difference in a learning situation. Without knowing, we realized we had been looking for turning points. Turning points in a creational story of an entrepreneurial educational event, maybe without the storyteller even knowing that it could be defined as such.

Stories are packages of knowledge to be unraveled

I talk more with Pär and Bengt about the uses of stories being such big forum in our seminars, stories in literature and from the participants as well as our own real and professional life. We realized that we are organising this “storytelling room” as a resource for learning. We are unlocking “packages of knowledge” hidden in each persons experience, as well as in written stories. The problem, the turning points, and

the different situated solutions function as our “live textbook”. We search an active participation in understanding and recreating, “reconfiguring out” our new ways of teaching and learning in entrepreneurial and creative ways. That is why creating a safe room to express one self and to be authentically listen is so effective. We have learned to organize for a deep space of respect and attention to the words and their meaning. And when the experiences shared is not yet conscious knowledge, we have learned to mirror the “storyteller” in a supportive way. They become aware of and hear what they are telling themselves and us, and we can all start to transform that into living insights.

This is how we are catalyzing a culture of sharing and creating knowledge. When appropriate we connect theories, concepts and general understanding out of the “paper text books” to the “live text book” hovering in the room. That gives an expanded understanding and theoretical connection to what has been emerging between us. And for the teachers, the space for reflection and dialogue in collaboration with one and another has become an important part of building competences in the new roles as teachers. “We are joining the good in each other”, our favorite Swedish actresses Lena Nyman made us realize.

No Way Back

Two participants of the courses had a project where pupils of fourteen years taught pupils of eleven years. When they reported their project, they said that they now have “the control” elsewhere and that there is no way back to the more formal way of teaching they had used earlier, as they experienced that the pupils learned more and in a more creative way aligned with the curriculum and at the same time developed their own professional skills. We also have experienced this. The courses, has changed our ways of teaching. We guess we have come to grips with a broader teaching repertoire.

Back to Söderhamns story by Margareta

Several mandatory activities for school leaders has been carried through in order to provide training, opportunity for dialogue about the projects objectives etc, and information on the project's processes and activities. They have also been informed about process support and been given expertise in order to run an improvement project.

In addition to principals' educational work with their employees, have the project enhanced teachers' learning through different courses and activities. Teachers have been offered the opportunity of further education, dialogue about the project objectives, and been continually informed about the project's processes and available process support. Furthermore, good examples, exciting activities, improvements etc has been shown in two exhibitions. Scholarships have helped to focus on the task and ensured entrepreneurial development within the school environment.

In addition to the above, there have been activities in the project such as lectures and inspirational days for principals and teachers, who gave evidence to reflect on the objectives and to find a balance between the two approaches regarding performance improvements that exist in schools, focusing on the shortcomings and weaknesses through training and control (external motivation) and focus on interests, ideas and strengths through emancipation (internal motivation). The main mission of

the “Drivkraft” project is to provide support to the entrepreneurial skills of managers and teachers. Principals and teachers’ task is to “take the process” to develop innovative and creative solutions, create environments within schools that encourage entrepreneurial skills, and to have an outlook in their teaching to do the same. That will allow students to learn for life and not just for school.

Voices and concrete examples of a new learning culture and environment

All of these quotes comes from the paper Magasin Drivkraft (2010) that summons a lot of the activities within the project.

Reflection

Everyday life is also changing for teachers – more for some, perhaps less for others. Even though it might not be immediately apparent, entrepreneurial teaching has been taking place in many schoolrooms for a long time now – since before the concept of entrepreneurial teaching even existed as such. “However, in general it can be said that the interviews I have held with teachers throughout the entire school system are demonstrating a new attitude, a more professional role, and the importance of reflection as a tool for developing teaching. With reflection and documentation, you can ‘float’ through life and take a good look at what you are actually doing. One of the things you learn is that not everything you do has to be perfect...” (Bibbi, Drivkraft p 3).

A pedagogical turning point

Three years ago, things started to happen with their teaching methods:

“A number of us working with children got to read a book entitled, *The Education of Listening*, thanks to an EU project. What we read there was revolutionary for all of us who had previously applied completely traditional working methods, with groups of children and a lady standing at the front of the class, planning things and deciding for them,” explains Maud now. “But after we read the book, everything changed. The message in the book was ‘listen to the children, work on the basis of what they think and what they are interested in’” (Maud Nordström, Drivkraft, p 6).

Starting a process together

Starting the process together with the students also makes the days more interesting and a lot more fun. The process makes different demands of the teachers’ leadership abilities, and teams of teachers can work together on something they all have in common with their students. “Training on personal responsibility is one of the main tasks of any modern educationalist. But if a group of students is left to take on too much responsibility on their own, without sufficient support, there is a risk that the group will avoid taking a difficult route that might perhaps allow them to develop more.

“In traditional schools, students are asked questions and give answers. With entrepreneurial learning, you get the students themselves thinking and put yourself in their shoes. Students say this gives them a better idea of situations, and they start to see the point in learning things. Certainly, schools are guided by the targets for



Creative and enterprising pupils in Söderhamn

knowledge governed by the syllabus, but the content, working methods and forms of reporting are decided upon in consultation with the students themselves.” (Bibbi, Drivkraft, p 3)

Professional pride and collaboration

“We teachers also reflect differently today compared with how we used to do things. The whole educational approach within the scope of entrepreneurial learning gives us a real boost. “We teach one another, but we’re also discovering what we can actually do and achieve. And perhaps our professional pride is also given a bit of a lift when we get the chance to show off what we can do and give it our support.”

“In our teaching team, we all think things through. So we don’t just come up with readymade solutions off the top of our heads. Nowadays we talk more in the staff-room about how the children think.”

“Students learn more effectively when they’re allowed to control the task in hand. They feel that what they think is important, and I don’t tell them whether they’re right or wrong; I get them to try things and then check the results for themselves.”

When children feel they can influence things

“Children with influence show more of an interest and absorb all the things that are happening around them. But agreeing to everything is simply not possible. The job of the educationalist involves finding that fine line between authoritarian concerns and complete freedom. We have learnt to treat children as a resource, not as empty vessels to be filled with content...” (Drivkraft, p 6).

Golden rules for golden children at Stentäktens school

The excitement and anticipation meant you could have cut the atmosphere with a knife the morning the children all got together over their golden rules. Over the term, they’ve talked to each other, discussed various situations and thought about what they should do and say and how they should act with one another and with other people. They’ve created collective values for themselves. So on this winter morning, it’s time to gather together to look at the golden rules that go to make up their values and to agree that this is the way things are going to be in future. They all sign – in gold ink, of course.

Then all that remains is for the children to put their hands on a piece of volcanic rock and make a wish. And then they all turn into golden children. Magic!

These are the Golden rules:

- We are kind and listen to one another.
- We are all as important as each other
- If anyone says Stop, we stop
- We say nice things and give each other encouragement
- We stick to rules and we are good losers
- We do not tell lies
- Our school is calm and nice

- We look after our things and do not take anything without permission
- We clear up after ourselves
- We comfort one another, and we go and get a teacher if we need one
- Everybody joins in at playtime
- We are polite and say thank you when somebody gives us something

“Well, we’ve certainly noticed that this initiative has been taking place. The children have done a lot of talking about it at home, and we understand that this is all very serious,” explains Lotta Lemberg, parent of one of the golden children. “The children are also really good at reminding one another of the rules,” says Dan Bergh, another parent. “It’s important for the children themselves to help draw up the rules. Now that it’s all down on paper, they can all see what’s written and agree to abide by it,” he says.

Lotta adds that the fact that everything is written in the children’s own words is important.

“They feel people are taking them seriously,” she says.

Context and interconnection

“We believe that this method will lead to a greater understanding of how everything links in together,” she explains. “Our work is documented thanks to our organisation for learning and our entrepreneurial approach, and we work on the basis of relevant issues at work meetings. We have fairly large working teams and mixed staff groups. As a result, our different skills are utilised more effectively; and this is reflected in the development of the children. “The children’s learning has been underpinned by the fact that they now have more to say, more opportunities to influence their surroundings and take part in the work that we do. We’re also building up a portfolio and CD of the children’s work to document their individual development. This makes them aware of what they’ve learned and gives them a sense of pride.”

Autonomy in thinking and doing

“We go to school to learn, to learn how to think. Not to be handed ready-made solutions.” “When we haven’t been able to agree, we’ve been allowed to discuss things for a while and everything’s all worked out in the end.” These are the views of Kajsa Dahlström and Natalie Jansson, both students in Camilla Nyström-Westberg’s class 5 B at Östra Skolan in Söderhamn.

“We feel we’re allowed to take responsibility, that we can play our part and decide what we should do.”

“The basic attitude doesn’t just involve entrepreneurship the whole time. But people think it is, so everyday life can be very varied. In fact, on reflection, people end up being entrepreneurial without even thinking about it...”

The children are asked to perform various tasks in workgroups. These tasks are given in the form of “study figures”, where they’re asked to use mathematical methods to resolve problems such as how to measure out one litre of water using one three-litre and one five-litre measuring jug, or how many small boxes are hidden in a larger box with four boxes inside, each of which has four boxes, with another four boxes in each one... you get the idea. “It’s better when we get to work like this.

Loads better than having to sit and count rows and rows of numbers,” explain her students. During our chat, they also demonstrate that entrepreneurial spirit means they can apply several different methods to resolving a problem and still come up with the same result in the end. The trade fairs in which teachers have participated have been very important.

By allowing children to give free rein to their creativity in an accommodating climate, they also get to see that trying new things isn't dangerous. “They venture to do things, and that helps them to grow. They have more self-confidence, and it gives them the courage to move forward. Sure, I do push them at times, but without taking over the lesson.”

“It is all a matter of external and internal motivation; from doing what the teachers say to doing things on your own terms.”

Aesthetic learning processes

“Together we can attain our targets through aesthetic learning processes where we use our imaginations and our creativity to create,” says Anneli Dahlberg, “I think entrepreneurial learning, where schoolchildren take command of their own lives, fits in beautifully with learning processes where there's scope for imagination and creativity,” she says.

“I feel that teachers have taken on board my input, and students I've interviewed have demonstrated that one in every three students have improved their grades. Students and teaching staff have worked together to set up targets and discuss content. The possible things on the students' 'wish list' have all been implemented, such as drama lessons, visits from authors and even a circus of their own.” “It's important for students to discover a tolerant atmosphere, to find out that they can use their imaginations,” says Anneli.

“We want our future adults to be the kind of people who aren't afraid to stand up for themselves, who are able to use all their abilities and speak for themselves. This is a good argument in favour of drama in schools. Even parents who are a bit dubious tend to agree with that.”

Open exhibitions

The children at Kungsgården preschool presented a bright, versatile opening to their exhibition at Kvarnen in Söderhamn, where they showed off examples of their creative talents using lots of different techniques and methods. Copious amounts of imagination and creativity had been invested in the exhibition – a fact confirmed by the parents, brothers and sisters and other relatives invited to the grand opening.

When the Unusual becomes the norm and dreams become reality

Here, entrepreneurs get the space they need. At the *Dream workshop* in Söderhamn, young people in the municipality find meaningful things to do, and even the most taciturn and withdrawn students are encouraged to blossom. “Young people who come here demonstrate incredible inventiveness and creativity. Here, they feel a sense of security with likeminded individuals. Some of them may have felt a bit 'different' before, but here it's normal – or even something of a status symbol – to be different,” say Hans and Johanna.

Social Development studies

“We wanted to encourage entrepreneurial spirit among the children. But from having started off believing that it was all about starting your own company, I now know – five years later – how I want to work to create individuals who can think independently; young people who can take responsibility, who dare to dream, who understand that if anything has to be changed, they have to sort it themselves.”

School lifts entire municipality

We're seeing a new attitude in schools now, but also within the municipality as a whole. A new 'Söderhamn spirit', which involves all administrations and politicians, where everyone is discovering that cooperation, can move mountains. “Society is changing, and schools are the cornerstone. As a result, when schools and trade and industry can work together, the results can be nothing but positive,” says Sören Valdhav, a member of the executive at the Business organisation in Söderhamn.

Story of Söderhamn continues – Cooperation between schools and companies by work experience training/learning

Entrepreneurship in education refers to activities where students are trained in working life, or may try to run a temporary business. This provides experience and knowledge of both working, and self-employment conditions. Within the project Drivkraft many ways of cooperating between schools and working life have been developed.

Söderhamns model for students to interact with companies and organisations is named “The future is NOW” and reinforces interaction between school and work, from preschool until the students are 15 of age, in the compulsory school. The model has been developed by the “Drivkraft” project with representatives from schools and businesses during 2006-2007. The model was initiated in schools in 2008. Implementation took place in 2009. In preschool and grade 1-6 in the compulsory school the activities for example can be role plays, industry boxes, company visits and work experience in the neighborhood. The students in grade 8 have to write a CV and then they can search for a job in the special jobmagazine. When they have got a job they do half a day per week at the workplace and half a day at school to do their workplace report and to prepare the final trade fair in which they make a presentation of their companies and their job.

Entrepreneurial training

UF -The Young Entrepreneurship programme is an educational concept for high school students between the ages of 16-20 years. UF gives the students the opportunity to experience the life cycle of an enterprise, from the start up to the closure. The UF organisation is a non-profitable organisation and was started 1980. All regions in Sweden have a UF region office that educates interested teachers to become tutors and give students information about the concept. One of the main targets for the municipality of Söderhamn is to increase the number of students that participates in the UF-concept. In the municipality of Söderhamn all students can choose, during their last year in upper secondary school, to have an UF-enterprise as their final project work.

The number of students in Söderhamn that choose to be UF-entrepreneurs has increased, from 55 students in 2007 to 103 students in 2010. Traditionally the target groups for UF were students in economics and administration. Today students of art, construction, media, natural science, technical, health care, business and administration as well as business studies are working with the concept.

As a UF tutor a teacher must attend a qualification course and after that they can act as a coach for the students. The students work with their UF enterprises two hours per week during their whole last year. The students must decide who is in charge over which department in the enterprise and who will be the president.

Compulsory elements in the UF-concept is to register with UF-online, writing a business plan, arrange at least two selling opportunities, write an annual report and to establish a contact with an advisor from the business world.

In addition to the above, there are a few optional elements such as creating a website, creating a logotype and creating an environmental plan for the enterprise. As a final event the UF-organisation in our region arrange the Young enterprise fair. Almost every UF enterprise in the region is exhibiting the company and products at the fair. They can participate in different competitions i.e. best sales, best marketing or best website etc.

In Söderhamn we also have a concept called Summer entrepreneurs. The purpose is to give young people, between the age of 15-19, the opportunity to realise a business idea of their own, by putting it into action during their summer vacation. They start their very own business during the vacation. The main objective is to encourage an interest for the future, to start or run a company and to develop their entrepreneurial qualities. It is not necessarily about learning all the regulations about how to run a business. The concept starts with an inspiration and education week, a kick off. Everyone is given 2000 SEK to use for investments at the start of the business. Then they are working with their businesses a couple of weeks. They have a coach during the time. The concept is ended by a joint final activity and everyone gets a diploma. Business ideas have for example been self-designed stickers, café, freelance musician, IT-support, designing knives etc.

Business Start is a practical training program for adults with an idea for a potential company. As a researcher, innovator or entrepreneur you will be offered a foundation in preparation for founding a company. The program consists of ten workshops comprising critical areas in business such as business models, sales strategies, admission barriers, internationalisation, finance alternatives, leadership etc. Theory is alternated with practical work and experienced entrepreneurs and experts inspire and motivate. Between meetings there are some assignments and individual coaching is offered.

Business Lab is designed for people with a product idea or research results, that they want to develop and test – but at a very early stage. A highly experienced business coach will help half day/ week, analyzing the technical and commercial preconditions for building a company. Fully equipped office space is offered to a reduced cost and it is possible to utilize other support functions from the business park Faxepark, for example financial support. The enterpriser is helped in forming exactly the right network filled with competent people and organizations. Acceptance to Business Lab is a quality stamp among our customers, contractors, and financiers.

Business Accelerator; BA offers a possibility to get support for companies with potential of becoming a future export company. To ensure a powerful realization of the business idea there is access to a business coach half a day per week. To get access to BA the company should be done with the initial phase, come a way with product development and be ready for marketing activities.

Research the project

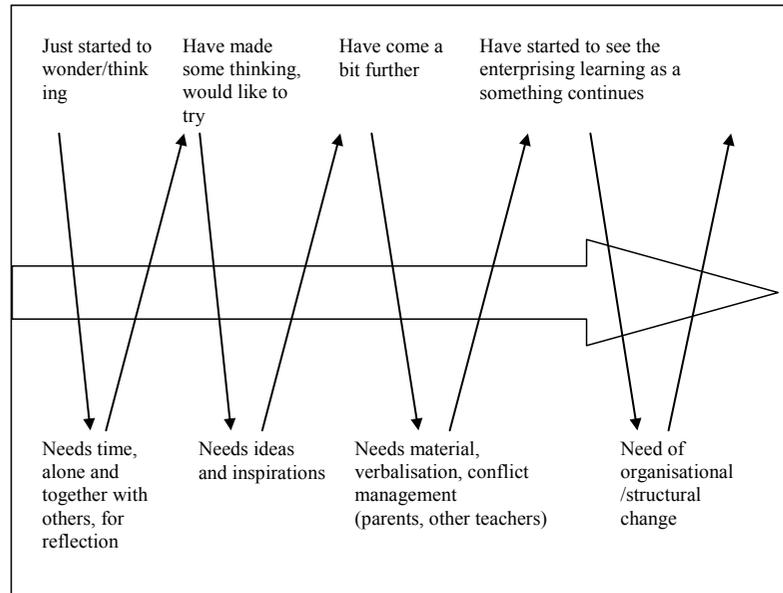
A researcher, PH. Dr Lotta Svensson, has studied the early stages of the project "Drivkraft Söderhamn". She has studied the effects of all activities that have been done within the Drivkraft project. The objective of the evaluation consisted of two parts, a study of teachers' learning and effects the project has got on students. The researcher was intended both to be evaluative and to give the process support.

It seems that the risk of a narrow concept of entrepreneurship has been avoided in the Drivkraft project by showing the personnel the connection between the projects objectives and the main national objectives of Swedish schools. The activities in the project, that which is perceived as an entrepreneurial approach, have already been written into the current curricula and objectives. The project has shown that a broad definition of entrepreneurship is very much consistent with the school's goals and guidelines.

Just because something is written in the school objectives and guidelines does not mean that it is practiced in daily operations. Drivkraft employed a project manager with a background as a teacher and had the project team initially working on the question of how entrepreneurship and the school's values and objectives are related, and how to anchor this in the school's own curriculum with focus on how to work with "the conditions for entrepreneurial learning".

To develop an entrepreneurial culture requires new ways of thinking and practicing within the organisation. Developing teachers, leaders, teams and the organisation is essential. From the beginning, it is about ones own courage, reflection, inspiration and support from colleagues – but eventually it creates the need for organizational support and co-ordination.

Process for entrepreneurial approach and enterprising learning target group: principals and teachers



Learning environments in the school system that encourages the development of enterprising individuals, in that the activities are distinguished by an enterprising attitude.

Entrepreneurship in school is not just to educate future entrepreneurs, nor is it a matter of giving the future citizens a greater chance of creating a good working life. Children are training during school time to build internal entrepreneurship to make external entrepreneurship. Entrepreneurship in school is as much about changing the practice of schools, and not least in view of what knowledge is and how learning is practiced. The mission is to be allowed an innovative and creative development in schools.

Our approach is fully in line with the opportunities that are described in the Swedish National curriculum. Teachers and students can jointly decide on learning contents, learning methods and work/project presentations. A Finnish researcher Bettina Backström – Widjeskog has revealed the entrepreneurship in education systems in the following three divisions:

1. Immanent
is an educational approach in the classroom. It is about maintaining and developing children and young innate curiosity, initiative and self-reliance, to educate so that they can create and courage in every aspect of life!
2. Technical
are learning concepts such as Young Enterprise and Summer Camps Contractors. Overall objective is then to develop the skills to become self-employed.
3. Cooperatives
is collusion school – work/community where the aim is to develop work skills/vocational knowledge

In the implementation phase Drivkraft started many training courses for teachers at all school levels. Common to all courses is that the school's operation and school's development must go hand in hand and it is important that the teachers have influence in which areas they wish to develop in entrepreneurial attitude and learning.

Drivkraft started with the initiation process in 2006 for principals and teachers to understand *why, what and how* about the project goal and had a dialogue how we can support the learning process for principals and teachers. It had had a lot of activities like kick-off party, inspiration, information, environment reconnaissance, lectures, training and arenas in order to highlight good examples. The interactive research in 2007 shows that the initiation of the entrepreneurial approach and entrepreneurial learning were happening on many different levels.

The learning concept builds on the belief that entrepreneurship is something we need to train constantly and therefore should be part of lifelong learning. Teachers, children and students work differently and they are actively improving these skills during their own lifelong learning while working with the national curriculum. It is about changing the schools practice – what knowledge is and how the process of learning is practiced.

Drivkraft is working with developing in all three sectors, but the immanent development in the school system due to the entrepreneurial approach is the basis for development in entrepreneurial learning as well as in technical and cooperatives areas. Schools often focus on gaps and weaknesses in training and control (external motivation). This project is highlighting focus on interests, ideas and forces through liberation (internal motivation). The project aim is to get a better balance of those two approaches to learning.

The goal of the project process involves changes in teaching assignments and teachers and students learning process. The entrepreneurial attitude and entrepreneurial learning teachers role focus less on teaching and more on “seize the knowledge of learning” and coaching student in learning process. Competence will not be gained simply by experiencing; you have to work with your experience as well.

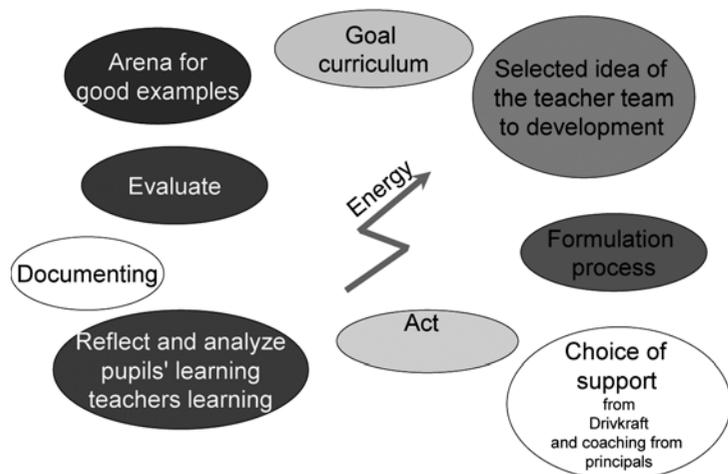
A professional student:

- knows all about learning processes in general and about their own learning processes
- knows where to find sources and how to use them
- knows how to learn together with others
- is able to control their own working time and effort
- knows about the targets for their learning and the criteria for their results
- has the ability to relate what they know to reality
- knows how to produce and describe the results of their learning work
- is motivated to work and has the determination to do that work
- has self-confidence and a sense of personal security so that they can take responsibility for their own learning
- has the ability to use their own creativity

*Aha! Entrepreneurial learning
by Johannison, Madsén and Wallentin*

Continuous development in schools demands a continuous process for entrepreneurial approach and enterprising learning and idea development that is, a learning organization for principals as well as teachers.

Entrepreneurial learning process for principals and teachers – Learning to learn and have power over their own learning



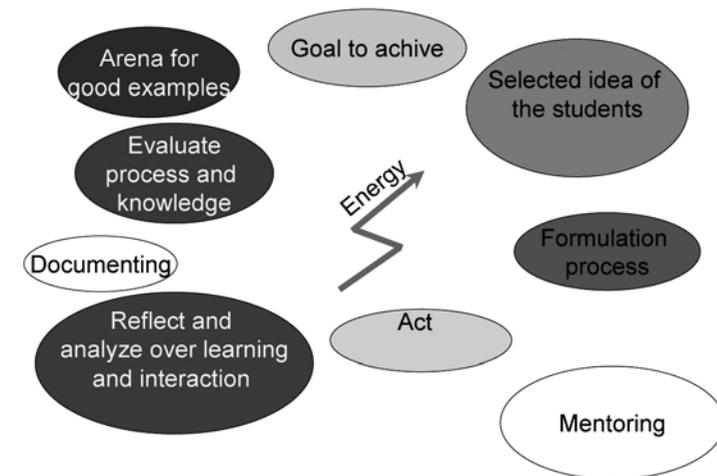
Through reflection old patterns of thought can be broken and new solutions and points of view can develop. The teacher role is more reflective and is working to

develop students to become professional in their own learning in the direction of lifelong learning.

Process for entrepreneurial approach and entrepreneurial learning target group: children and students

Entrepreneurial learning is to stimulate students' basic motivation and increase the degree of personal leadership that is knowledge of oneself. Students encouraged to take responsibility to reflect, develop ideas and drive. This is made possible by the teacher / team approach, the student/team approach and by the content of learning and way of working process. Learning process based on the student/group's strengths, characteristics, interests and ideas.

Entrepreneurial learning process for children and students:
Learning to learn and have power over their own learning.



Teacher's role is:

- Encourage suggestions, ideas and own INITIATIVE = supporting pupils to make choices and take responsibility for their learning (affect one's future)
- Extend/provide knowledge
- Mentor/coach
Get the student to function socially (= personal development individually and in groups)
- Provide ongoing encouragement and constructive criticism (analysis and evaluation)

There are no failures – just learning!

Finally...

To change the culture is not a quick fix. It takes a long time. Söderhamn decided to focus on children and students from preschool to adult learning and to work with the three entrepreneurial components.

It is a question of taking every chance to lift good examples of entrepreneurship and entrepreneurial attitudes on the web, in newspapers and in different fairs. At the same time it is a question of working very hard to offer good conditions for existing companies in the municipality and to have an organisation for developing good relations between the municipality organisation and companies.

Working with entrepreneurial learning and entrepreneurship from preschool to adult learning, why? The short answer is that this is the way to develop an entrepreneurial culture and the big challenge is to be sustained.

For more information;

www.soderhammn.se/utbildningochbarnomsorg/entreprenorielltllarande

ST: GEORGE SCHOOL

– A dragon coming alive...

Imagine a school for children and young adults with severe, complex and profound and multiple learning disabilities setting up their own business in their own school grounds.

What would happen if this business enterprise, based around creative learning, invited other schools to use a facility that the students a special school had not only designed and built themselves but actually ran themselves? Well we're about to find out!.....As far as we know St George's School in Newport is the first school in the UK to offer a pay to use service to other schools. Students at St George's will have an opportunity to work at every level of the business, from management to maintenance from IT to PR and development, they will be able to gain real experience of real business and of life in the work place at every level. The far reaching effects of this project will be fantastic for all involved, for St George's, Island schools, benefactors, investors, funders, partners and sponsors alike. (www.eccleston-george.co.uk/creativeeducation.htm)



St: George on the ground



Working with sensory dome



Willow dome growing



Dome building climber



Touching the Art



Willow dome inside



Uncovering the dinosaur



Dinosaurs with Nigel



Drawing the dinosaurs

Life experiencing new grounds for learning

So how did this come to be? What are some of the important features in this story of creation? Over the years a collaboration and interaction has been built up between an institution of schooling for severe and complex special educational needs students and a group of freelance creative, artisan people - an art collective. The concrete aim for the school is to prepare the students coming from their potentially restricted starting points for adult life, not educating them in having knowledge in the traditional sense", tells Rachel, one of the Deputy Headteachers. The art collective say that "experience-led" learning is what drives them. How does these ends meet?

We will see in these stories, limitations as a departure for a deeper involvement, leaps of learning and liberation. Tremendous capacities to co-create an environment and culture of learning that is full to the bursting point with creativity and enterprise. These individuals and their collective learning journeys involves everyone from their own unique point of departure. It challenges the conventional notions of how to build learning capacity, skills and knowledge, as well as what it should look like, and for what purpose. Is there something to be learned about learning itself, from this relationship and interplay between life focus and the receptive, patient, concrete, interweaving and warm hearted collaboration and creating together? How is this an example of mobilizing the human potential to expand its own conditioning, and to co-create new circumstances for operating educationally and professionally?

The Eccleston George group has both an artistic, handcraft based and entrepreneurial approach. They describe themselves having gone through a process of learning, changing and creatively forming their own inner context, purposes and ways of working in relation to the school and the project? The framework of Creative partnership¹ has been an important resource to enable the projects through which

¹ Creative Partnerships was established as the Government's flagship creativity programme for schools and young people in 2002. Managed initially by Arts Council England (ACE), since 2008 it has been managed by Creativity Culture and Education (CCE). The main sponsoring and funding department is Department for Culture, Media and Sport (DCMS).

It aims were to develop:

- The creativity of young people, raising their aspirations and achievements;
- The skills of teachers and their ability to work with creative practitioners;
- Schools' approaches to culture, creativity and partnership working; and
- The skills, capacity and sustainability of the creative industries.

Creative Partnerships was initially designed and funded as a pilot programme (phase 1) from April 2002 to 31 March 2004. This phase was given a budget of £40 million. Sixteen pilot areas were selected by ministers from a list of the most economically and socially challenged areas in England. In the July 2002 Comprehensive Spending Round, Arts Council England was awarded funding for Creative Partnerships to continue beyond the original pilot programme. DCMS committed £70 million to the programme. This was targeted to continue to support the existing 16 Creative Partnerships, and to develop 20 new Partnerships between 2004-2006.

Creative Partnerships Southampton and Isle of Wight was established as one of these new partnership areas (phase 2).

During the 2007/8 academic year Creative Partnerships introduced three major new schools' programmes: Schools of Creativity, Change Schools and Enquiry Schools. A new body, Creativity Culture and Education, took over responsibility for the management of Creative Partnerships nationally and in April 2008 it formally entered a new phase, delivering a broader national programme. This was designed to reach 70% of English state schools with high quality cultural and creative learning programmes by 2014. Most former regional Creative Partnerships offices changed in status, merging with or establishing independent entities, known as *Area Delivery Organisations* (ADOs). CPSPH is an ADO that is hosted by the University of Portsmouth. It covers an expanded area including Hampshire, Southampton and Portsmouth. CPSPH currently work in partnership with 23 change schools and 26 enquiry schools. They do not engage with any schools of creativity (Bradley & Fitzsimons, in press).

the collaboration has been enacted. But many other active participants in the role of teachers, pupils, different staff positions, stakeholders and local partners as well as a range of materials and environment have been part of the network of resources that step by step have manifested the result as a whole.

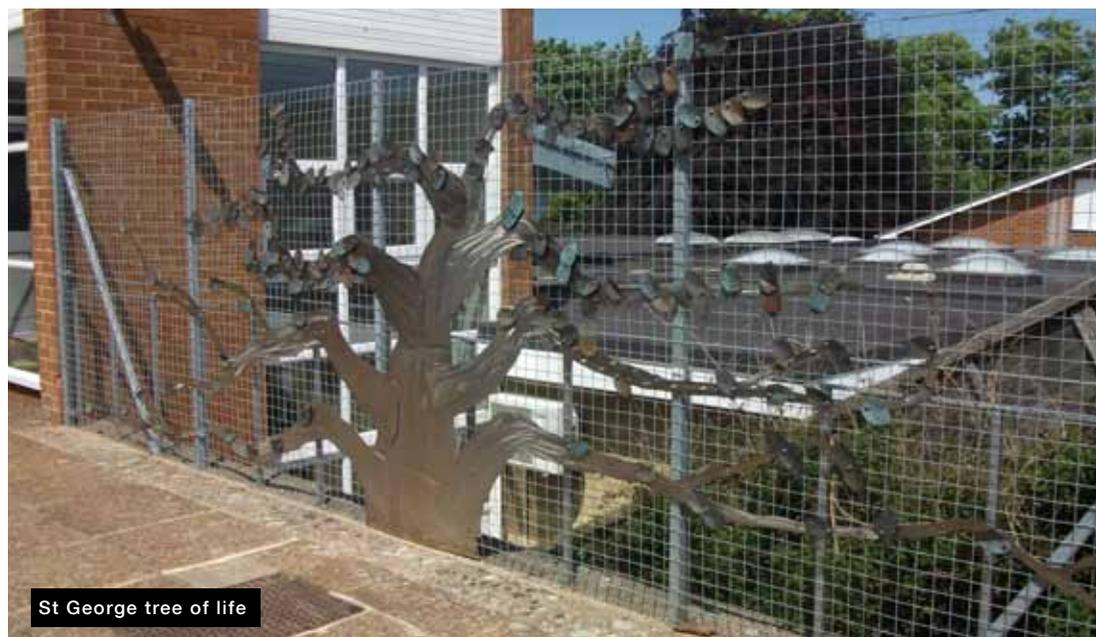
What kind of differences or meeting points between the school and the artistic craft community have been involved and cultivated? What learning cultures, didactic designs and processes? Have they been confronted with each other and merged, influenced each other or stayed parallel? How are the resources for learning being structured according to this? How are the roles operating as learner, teacher, senior school leaders, and creative partner in this new and uniquely assembled landscape of education, creativity and enterprise? Are the roles and functions amalgamated?’

All these questions will not be answered fully, but some leading threads are embedded in the stories. This story will be told with the help of different voices, from participants in different roles and functions from within its context. Some texts are transcriptions of interviews; some are interview material turned into a story by additional editing and co-writing, even though it is told in first person. Some are texts put together from information on website’s, or internal processes.

Every situation is a learning situation and we lead by doing what we talk about

Rachel the Deputy Headteacher tell us:

Our concrete goal is to prepare them for their adult life, not educating them in having knowledge in the traditional sense. Their different inabilities range greatly. So for some, the more traditional curriculum, subjects and knowledge also becomes a part of what they need to be provided with. But that makes a difference in focus. In general,



St George tree of life

everything here is regarded as and becomes a learning situation and / or opportunity. Just walking down a corridor, or having a conversation, opening a door...

It is important that what we do makes a difference to their lives and life chances. We are privileged in that we have the resources to have an individual plan and adapted learning paths for each individual. We try to make it meaningful for each child, from its own point of departure. They are organised in smaller units of 8-12 students. Each class has its own room. The classes are made up of students with similar needs, abilities and premises for engaging, as well as age level.

As we walk around to see the facilities and how the collectively organised context is performed, we pass an outdoor yard with a fence. On it is a beautifully designed metal tree with long branches. On them are leaves each inscribed with a student’s name that remain on the tree until they leave school. When leaving the school, they will take their leave with them and leave a space for the presence of a new student. A discussion about the engraving of the names is overheard. A local artist engraved all of the names and the copper will become verdigrised and enhance the impression. I understand from the children as we ask about the tree that it fills them with a sense of belonging. Some leaves are especially important and will add an existential dimension to the tree, namely the leaf of some children that recently have past away. Those leaves will be “transformed” into a butterfly shape, a dragonfly and ladybird and they will stay on the tree forever. I will come to realize that almost every part of the in- or outdoor environment are filled with these living dimensions of connections, it is part of the substantial story of the school, its “inhabitants”, their learning and, life-stories expressed in a communion way. We go back inside, and Rachel continues her guided tour.

Then there are special subjects such as art, music, science, physical education, cooking etc, in rooms that are specially equipped. And then there are rooms for training of special needs. Like the phoenix room, where someone who is in need of devising the behavioural aspects can come to have relief from the bigger environmental context. There is also a sensory room, with musical and sensual stimulation. We use something we call total communication, which means that we have strategies for communicating with every student in the most meaningful way for them; this includes speech, signing, using symbols, pictures, photos, objects of reference, physical and gestural.

A silent voice in me asks; have these communicative limiting starting points contributed to cultivate and alerted this trait of awareness and presence and helped cultivate a deeper level of speechless communication and meaning making through the environment? And has this created an attraction for and a playful meeting point with the arts and crafts projects?

The outdoor grounds created with Creative Partnership funding are used by everyone. Jock is one Learning Support Assistant specially assigned to be responsible for the activities and the grounds. But the use, maintenance and development of the grounds are today organised by many. The Dragon Partnership Committee consisting of students, senior staff, financial staff, teachers, support staff and local creative agents. New within this organisational structure is also a committee of only students that will be more active in carry on questions about the activities.

Like I said, contextually and with the everyday life complexities that these children and the educational organisation is confronted with, we can be flexible with curriculum content, deviating from the National Curriculum if that serves the needs of the students best. That gives us the freedom to organise ourselves differently. Learning journeys are the important thing, not memorising some end points. The end product is to produce confidence in the children to take the next step in their life; life beyond the school.

As a deputy and a teacher, the only way I have seen to become part of creating a creative space within the ways of working for each teacher, is to catalyse it through doing what I talk about in my own way. I lead by example. I love to teach, without that I do not think that I would be performing in the deputy's role in the way I am doing. In that role another aspect is of course to be supportive to all teachers' efforts to improve or change their ways of doing things, their approach and relating, for the better. Another important aspect is that we have a transparent culture. We can learn together, because everything is an open learning situation for both students and staff alike.

This understanding of the superior organisational role as a receptive, staging, catalyzing and supportive role as well as the importance of making the learning culture transparent is recognisable in all the examples.

The outdoor room as a third pedagogue and an eco-social arena of co-empowering participation and interaction

Jock and Darren's story is here retold in first person's, as I (Kerstin) perceived and sometimes interpreted it.

J – The story started with a thought and then something happened by accident, weaving a new direction of action leading to a new plan, running into another happening by accident, growing a new path within an emerging, like you say, land- and mindscape, that today is... the Dragon.

J – I was designed to make something of the outdoor area, so I walked around in all the classes, asking the children what they would like to create outdoor. They came up with different ideas, and among them where a green house, an outdoor classroom, and a fruit garden, so that they could eat their own fruit. I thought that was fare enough, so I drew a plan and hang it up for all the staffs and the kids to comment and reflect back upon. No one objected to it, so I went along. I had something like 700 euro to start with. I did not want the green house to dominate the ground so I put it kind of tucked down behind the hill. What really got me started was the idea of an outdoor classroom. But I started with the greenhouse. Working on that project, we had kids that had problems with behavioural outbreaks in the indoor social and physical environment, and they where sent out to me. What I did was that I had them join me in the work. I handed them a tool, and we would work together, and they almost always calmed down and got absorbed in what we where doing. So that was a starting point. Now it has become a conscious way of using the outdoor environment. We create a "learning journey" out of all the faces of the process of creating and maintaining



it as a space for nature, cultural, and socially experienced based learning in itself. And finally we have started to invite others to travel with us into their own learning journeys, based on, sparked by and mediated by the different impulses in the natural and shaped environment as well as the stories embedded within it.

Expanding the learning environment

J – The dome as the form for the out door classroom, I stumbled upon it when I was buying plants. I saw the structure on a photo, and later hired the man who built it, and he started us of. He was very expensive, but in two days I got the hang of it. That dome over there, we have covered with clay and on it we are letting everyone "make his or her mark"....

As we walk through the second dome - that now creates a beautiful and tranquilly focused space, yet open and transparent to the sensation of being outdoor - I see that some of the structure is falling a part, but it is mixed with branches that seems to be alive. J, show me the young trees that are put into the ground following the line of the base of the dome. Today the willow is grown alive into the first now dead structure. For me it becomes a striking metaphor for how the whole project of the dragon, growing and renewing itself, from within its own created matrix. J, later show me the full-scale meadow of willow that has been cultivated from cuttings. It has become a pool of organically renewable material that is well used for many different things today, and is supplied in a sustainable way. He continues his story.

J – It was when I did not know how to make the floor, that I got hold of Nigel’s name (Nigel is one of the founders of the Eccleston George team). He came in and he clicked in as an artist, and understood as a craftsman what we needed. In due time he and his team have built in a deep driving force for the entrepreneurial in the project and keep it going. In the beginning he was shy with the kids, and another person on his team, taught him how to learn from them and become comfortable.

**“Each human being is a door half open,
that leads to a room for everyone ...”³**

I now remember, standing with Nigel on a bus in Milan, during one of the conferences in the ECECC project, where he told me this story himself. One of the younger members on his team had a brother that was disabled, and therefore had a more experienced way of interacting with the kids. He guided Nigel into understanding more about how he could relate, and interact with them as well. He said that one outcome of this was, that it had created an opportunity for them within the team, to have an exchange of experience in a way that bridged the gap of age, and difference of experience in the working skill arena. It had deepened their relationship, connection and equality based on the value of differences. These are Nigel’s own reflections from the conference in Milan:

N – It’s true I can’t speak Italian! However I bet if I’d spent a couple of weeks or so in Milan I’d now be able to have some kind of conversation with the people who live there in their own language, as they say, the best way to learn a language is to spend some time in a foreign country and learn by mixing with the locals. The funny thing is that this is precisely the way we at Eccleston George deliver our education projects.....we call it ‘experience led learning’.

N – What’s interesting for me is that before the conference I assumed that creativity and enterprise went hand in hand with each other, now though I’m not so sure. I’m still as certain as ever that an enterprising person must first be a creative individual capable of thinking up novel ideas with value, but I suspect that to become an enterprising entrepreneur, a creative individual must have an overwhelming desire to pursue the potential of their idea.....this, I think, is what sets the enterprising entrepreneur apart from someone who is just naturally creative. Also I’ve found myself reassessing my understanding of the words enterprise & entrepreneur. Like me you might associate them with someone who is successful in business and is therefore good at making money. This I now realise is a very narrow view of what is most important and effective with enterprising or entrepreneurial thinking. I’m sure many a rich person who calls himself an entrepreneur is no more entrepreneurial than the next man. And many a creative person who struggles to pay the bills is entrepreneurial both in thought and deed.

N – I think the pursuit of ‘potential’ is key to all this, to properly pursue or explore the potential of an idea one must be vigilant, always aware of, and looking for, possible connections that might enhance or further your original idea. One must understand that possibilities may come from anywhere and anyone and that they’re often found in unlikely places.....rarely, at first anyway, does a potential connection present itself

right in front of you. Clearly the driver for this process doesn’t have to be about money or profit, just passion for your original idea will do I think.

N – In school, children are generally taught that answers to problems are usually right or wrong or black or white. I think in many cases and in all sorts of ways this can be far from the truth, I would argue that it’s just as important to teach children about the wondrous shades of grey that make up the beautifully nuanced world we inhabit. I’m pretty sure that if we fail to do this then our young people will inevitably miss out on a lot of knowledge and opportunities that would otherwise help them to reach their own potential. I’m not suggesting that one plus one doesn’t always equal two but rather there might be more than one correct way to work it out!

These thoughts expressed, resonate strongly with a deeper understanding of what constitutes a creating orientation, rather than a responsive-reactive one. It is driven by the love and passion to make something come alive, and use an organic intelligence and creativity to make it happen. The serendipity muscles are at work.

Jock continues his story:

J – The children are making their own mark, and putting in their own work in the place. It makes them own it, not destroying it. But we learned the hard way. The first mini-dome we made ourselves as grown up, and it was torn to pieces. They teach us how to create a proper learning situation for them, if we listen. So we learn from the kids as much.

The neighbourhood as a pathway to new worlds

The boat came to us from a lady that lives three houses away. She phoned me and asked if we wanted a boat. I realised that we could not use it to go onto the sea, so I asked if it mattered what we did with it, and she said no. I did not really know what to do with it, but to be able to use it on grounds we had to move it. A group of young people involved in fire-art, came and moved it one night. Today it is a story-telling boat.

A lot of people help us out in different ways, which leads to new connections. In one place where I was buying flowers, this lady started to give us stuff she could not sell for free. We got to know her, and she loves her own garden and has in her back yard a beach. Children go there today to explore. A lot of the project or learning journeys today “happens” or grow organically out of incidences that connects to a theme or awakens an impulse in the children that we follow through.

We had a tree falling down, which made some damage. When we had it cut down I saved the material. The kids wanted to use the material to build their own dome. It started with a simple structure of two ropes. They made the rest up, I just handed it over to them. When they asked me if they could put a branch like this or that, I just said, “You can put it wherever you want”. You see this long tunnel at the end. It is there because they asked what would happen if someone smokes, and it starts a fire. So they created a fire escape structure – a mini tunnel.

Today they love to help out. We had some other construction work happening on the land, and they left a house. I asked if I could have it. Digging it down, we were making the ditch, and one kid was digging so intensively that he buried himself; we had to dig him up.

³ Tomas Tranströmer



Storytelling boat



St George



Sensory Dome

One story that involves the boat is about St: George. This ramp for the wheel shares with them to see the scenery, but it also became a fishing pond for the little process drama or story of participation that is woven together with the story in the boat.

We have worked a lot to make it possible for wheel chairs to move along everywhere. We have been changing the floor for the wheel chairs to be able to move smoothly tree times. The last solution, the man coming in to do the works charged half the price. Cam, a boy that used to sit in wheel chair has helped out with the design of these roads. He did not speak when he joined in with the first project together with

Nigel's group. That project was focused around dinosaurs, which actually existed on the island, and is part of the myths and stories here. We did the dinosaur skeleton, in natural scale buried in the grounds, and made a story of how he actually could have died. Cam was very gifted in helping out with the drawings. Today he is an apprentice within Nigel's team.

I asked Nigel if he could tell us some more, and with Cam's permission he gives us this story;

When I first met Cam he was aged about 14 years old. He was, as was explained to me by school staff, an 'elective mute', in other words for some reason or other he chose not to talk at all, also I was told that shortly before I met him he didn't walk either; he was to all intents and purposes a wheelchair bound silent boy. I now know that Cam suffers from some mental health difficulties and is very dyslexic. Today he can neither read nor write, this combined with his depression are the things some people will tell you is wrong with him. Having spent 6 years working alongside Cam, the first four with him as a student and the last two years as a work colleague, I know now that Cam's dyslexia and depression doesn't define who he is, I think what makes him is his sense of humour and his creativity.

Shortly before he left school Cam started to try to talk and it was during one of the first faltering conversations I had with him that he asked if he could join Eccleston George as an apprentice, back then he spoke with the worst stammer I had ever heard and conversations with him were difficult and very longwinded as a result. The Eccleston George team agreed to take Cam on as an apprentice and so began his short journey from the institutionalised bubble of a special educational needs school to the 'real world'.

Cam's very first project with us was one working with primary school children, the project took the form of a three-week creative arts residency and he was part of our six-man team. If he found being in a mainstream school difficult it didn't show and day-by-day we watched his confidence grow and his stammer wither away. By the time we started our second project at a mainstream secondary school just a few weeks later Cam's stammer had all but vanished and the rest of us in the EG team looked in amazement as we watched him 'teach' students just a few years younger than himself. As the weeks turned to months Cam's so called 'disabilities' continued to melt away and during the planning of a third educational residency he felt confident enough to put forward project delivery ideas to our team, we ran with his ideas and the project was a huge success as a result.

After two years Cam's apprenticeship has now come to an end and he is, I'm glad to say, a permanent member of the Eccleston George team as well as a freelance creative practitioner in his own right. Of course there is a lot more to Cam than explained here, many more things have happened in the time that he's been with us and his influence has impacted on us all at Eccleston George. Of course Cam's own story in his own words would be very much more interesting than anything I can tell you about him, lately he and I have discussed the idea of documenting his story from his perspective, I think we both now realise the huge potential for him to inspire others with his story. We will start on this soon!



Sculpture for Daffodils

Just before Cam left St George's School as a graduate the school entered a national competition to design and make an interesting daffodil exhibit in their school grounds. The competition went out to schools across the UK and the first prize was to be £1000.00 of gardening merchandise for the school. Cam took on this particular project with real enthusiasm and designed a beautiful abstract sculpture that could be planted with daffodil bulbs. The Eccleston George team worked with him to make his design a reality and the school won the competition!

Different rules of engagement

No one can know what really is impacting this long learning journey. But in a reflective talk with Nigel I suggest that when it comes to different professional learning cultures, something called Legitimate Peripheral Participation LLP (Lave & Wenger, 1991) is identified as an important agent. It means that in a practical, and or aesthetic learning culture that happens in transparent ways, the tacit knowledge in action is openly displayed and accessible for any newcomer. That makes each learning situation contextual and relational to concrete experience and goals. And the learning is exactly “led by and built up through the experience” rather than implementation of theoretical concepts and knowledge components. Mastered ways of using knowledge and performing skills and competences adapted to different situations are role modeled in live action and authentic situations. The relationship between the experienced

ones and the beginners are so, that as a beginner it is legitimate to “just to be around from a peripheral perspective”, and perform from your own level of experience. And then gradually you move into the centre of the professional scene and tasks, when you grow in handling your performance as a part of the whole. A built up relationship and trust between “the apprentice and the master” is also part of the social design.

Nigel tells me, that in many project they have notices that different kids naturally gravitate towards different individuals in the group and that the personal rapport is an import factor of the learning process. This form of deep and yet gradual participation is maybe a part of the professional culture that are married in a resonating way with the needs for these kids to learn from their own limited but just as potent starting points, and to unfold in their own pace, in a supportive and hand-on environment, that is both stimulating and create a calming focus. And on top of that this learning environment and culture use the imaginative dimension in relation to concretely creating this environment into an open-ended arena for real life purposes with meaning to the participants.

Later in the afternoon I have a cup of tea with Nigel, and visit his “gang of guys”. We continue to speak of the difficulty of really being able to articulate what they are doing to make things happen the way they do in their project. What are the ingredients in this creative and enterprising soup, and how is it stirred? He gives me examples from some other educational project. We also discuss the meeting points or possible tensions between the school culture and the working methods, the attitudes, approaches, stances, dispositions and habits of minds applied by their practical and aesthetically formed professional and entrepreneurial culture.

Sometimes I experience we have a different concept of creating and creativity in the crew of creative partnership as suppose to the teachers on the school. We have to learn from each other. Jock is a bridge. But many of the teachers I experience do not use, or maybe “do not understand”, how to use this world of interaction that we have created. They have not yet fully discovered the learning journey, the didactic spaces, made possible by ways of creating practically and aesthetically, and how to make the physical landscape mediate it.

For the enterprising part, I perceive it as if for them that often come back to founding's, rather than using what we have created as an enterprise. It takes resources of course, time and energy, and that is difficult. But it is neither really considered nor chosen to be explored all the way. We will se what happens, if we keep on travelling.

But I have also been thinking a lot about what we actually are doing. We did a job for a school recently. It was for a shorter period, a thematic week for the whole school. And without it being put to our attention, we where assigned to take care of “the troublemakers” of the school. They started to work with us on building murals from this material basically made of paper and mud, that is “nothing”. Over the days our group of young kids grew, others choose to come to this group, and we ended up with an artwork that astounded the whole school and made them very proud of them selves. You could see that they could feel their own value. When I in retrospect understood the background of the situation, I could see that one important thing was that we actually had treated them as equals and with no preconceived ideas of their dispositions for” bad performance”. And I think they felt that. I also realized that we always do that, we invite the ones we work with as a natural part of our team. We

just give them the tools, and trust that they can handle them. I could see that we to them must have been a team of men with different role models that break the patterns of how to engage, we have other rules of engagement. In the journey of creating we organise another context for interaction where they can be themselves as equals to us. We guide them but involve them directly with confidence in their ability. They are taken seriously and being trusted. That makes it possible for them to use another behaviour in themselves, which is not conditioned by negative response.

Again one can see the traces of a different working culture with affinities to PPL at play.

Another dimension that comes to my mind was the fact of the contrast between us being able to create something so valued and filled with quality out of practically “nothing”. It can have had a symbolic impact that created a shift of focus from outer to inner value. That is, the material like paper and mud coupled with imagination and physical work, does not have the exchange value that they as young men in their subculture, where usually using for trading for identity and confirmation (in the first days I could see them showing of between each other with watches and different branded goods.) So how and what they created had to come from another source, from within them selves and us, as we where as team.

Eccleston George about educational working methods

We believe that the way we educate our children is due for one or two changes. Some time ago we decided that we wanted to be part of making these changes and so, to get the ball rolling, over the last five years we’ve been developing some ways to help to show the positive impact that comes with making these changes a reality.

Collaborative learning, divergent thinking and creative problem solving are all parts of a kind of delivery programme that we think is really important. We’ve had some success implementing these ideas too, one of our projects has just been included in a European Commission Comenius best practice study and many more of our school projects have been being hailed as successes by the schools in which they’ve been delivered. We’ve also been mentioned favourably in a few Ofsted reports and helped at least one school to achieve an outstanding grade.

Through our work we want to inspire young people to believe that they can aspire to do whatever they want with their lives. We want them to realise that learning can be engaging and even fun, and that working creatively will help them to think clearly and stay focused. By delivering projects this way, we’ve found that students of all levels, ages and abilities begin to discover for themselves that by working hard they can start to unlock their own, often hidden, potential. With a wide-ranging array of creative techniques and skills the Eccleston George team is ready to work with your students and teachers on a new kind of education delivery.

Deep ecological “co-creativeship”

We also have other kind of partnerships here in the garden, Jock tells me. Do you know what this is? It is an entrance for a badger. I used to mend a whole that he dug in every night, and finally I decided to offer him a permanent solution. Today we have a “creative partnership” also with the rabbits, the insects, the birds, and the different

spices of the plant world. In our Mediterranean garden there is a special mix that create their own community.

I get the thought that in this learning environment the kids are treated as rare and unique species, like one of their kind, creating an ecological network of their own with each other. That this world here is both strong and fragile, and that it needs to be met with a heart- and mindfulness, as well as concrete interaction to grow. Or am I idealising? I ask Darren to tell me about his attitude and approach to the children, especially about how to meet these children’s challenging conditions and I assume sometimes behaviour.

Well, it never works to punish them, or try do discipline them in a traditional sense, that only turns them against themselves. If someone ends up in a difficult behaviour, I stay close and just try to be present and make my support be felt. I can redirect their attention with suggestions, so that they can be supported to break their own pattern. But this place is also very supporting in it’s own way, and it is very easy to have things ease out, and interest to awaken and build in a constructive way by itself.

I cannot help but feel that that is exactly the way I also desire to be met when I make it hard for myself or get caught in conflict, efforts to perform, emotional stress or confusion. When I get stuck in my learning process, my human relational stories, and my professional endeavour. To be listened to, and be taken sincerely and gently by the hand helps me “come to my senses” and find a space in my self where I become self-generative and interactive with ease. I stop sabotaging for myself. On the other hand I need the help of an intelligent structure, and my rational reflection that helps me discern, to make me continue, make sense of, and come to an end result of some kind.

And it makes me reflect, there in the middle of this very special “space” where I am standing. This space is like a room for relating, exploring, creating, experiencing, learning, becoming. And more and more specific forms and contents are being differentiated here, as well as interconnected. It is not just a garden, not just art, not just construction, not just an outdoor class room, not just a didactic playground, not just imaginations taken form. It is a multidimensional story going on, substantially alive and vibrant with something that truly matters. And I ask myself, what role does “what truly matters”; play in creating creative and enterprising education for the 21:th century? How important is this deeper cores of meaning that we can hardly talk about, less learn to spell out right, or measure for assessment. I hear one more story ringing in my heart. It is about Jock and it touches my heart, as well as it strikes the urgent sense of this existential umbilical cord.

On the conference in Milan, Jock told us that this was the first time in his life that he told a story, in front of so many people. Yet I think we where all both calmed and touched by his confident radiation as he talked. One could immediately understand why the kids could change, grow and learn in his presence. One could also understand that that was not just specifically related to his profession as a teacher assistant, but more to him as a person. Even though one could understand how that informed and supported his role as a teacher assistant. He was also open with another personal part of his own journey that had brought him to St George into this position. At one point in his life, he had overcome a life threatening disease. He had promised himself to

change his career, and give the rest of his life to something that truly mattered for him in his heart. And for him, to give it to the well being of these children was one answer to that. I think it really matters in the creational story of this school.

A bit about St George's School

Head Teacher Sue Holman reflects on the successes of the Making Sense project that lead to the setting up of DRAGON. This adds to the green aspect

The Creative Partnership work at St. George's School has really gathered momentum since the start in 2004, resulting in an ethos that will continue on into the future. The whole school has been involved directly throughout the project and in a way, the tangent skills have been as important as the finished sculptures and builds. The result is that our grounds and buildings are more exciting and interactive. Students are constantly reminded of their successes, and have had the opportunity to work alongside different year groups and abilities, developing a greater empathy for their peers; and the staff team are keen to involve creativity in the curriculum.

The project has fostered a real sense of community, not just in the visiting artists and people from outside of the school, but more so from within. Every young person has contributed, be it at the planning stage, or through the practical application and sensory activities. The project has given students a sense of context for their skills, enabling them to enjoy the fruits of their labour and develop a sense of empathy in relating to the needs of others.



The students and staff have particularly enjoyed working with Eccleston George who really has become part of the school family. They have contributed on so many levels to the pupils, supporting and guiding them to make art, and encouraging them to believe that anything is possible if they problem solve and work hard. They also worked with students to record and release the Making Sense Song, to raise money for materials to continue the projects. Their respect and support has provided fantastic role models for the students that we now see emulated in the daily behaviour of the school.

One of the first projects manifested on the land is today a cornerstone in the pedagogical learning stories and happenings that are created for visitors. This Dragon like skeleton of a real dinosaur was the result of several months work, exploring everything from the historical reminiscences of dinosaurs on the island, to making animated films on the theme and actually learning to practically replicate the skeleton. Today other children can come and “uncover” a covered skeleton and reinvent their own learning journey of a “Dragon come alive”. And their live cicerones are the students of St George.

The loss of Creative Partnerships will hit our cause very hard indeed. Those of us who are passionate about the subject will try hard to carry on our work in the education system, but the truth is we know we are up against it. We at EG will help schools however we can to embed creativity in their own curriculum, we have some ideas about how to do this and are currently making connections with like minded individuals and organisations who wish to do the same but it ain't gonna be easy!

For your interest here are some of the Creative Partnerships facts and figures that seem to have been overlooked by the people that matter where education policy is concerned⁴. Even if you are a total cynic were a creative curriculum is concerned, how can you argue with that?

For more information about;

St George; www.stgeorgesdragon.com

Eccleston George group; www.ecclestongeorge.co.uk

Creative Partnership; www.creativitycultureeducation.org, www.capeuk.org,
www.themightycreatives.com, www.curiousminds.org.uk

⁴ The Creative Partnerships programme is expected to generate nearly £4 billion net positive benefit for the UK economy, the equivalent of £15.30 of economic benefits for every £1 of investment in the programme – Price Waterhouse Cooper.

Creative Partnerships has worked with over 1 million young people and engaged over 90,000 teachers in local projects. Research highlights include: Young people who have attended Creative Partnerships activities made, on average the equivalent of 2.5 grades better progress in GCSE (NFER).

Creative Partnerships was shown to be associated with an educationally significant reduction in total absence rates in primary schools (NFER).

Around 70% of the programme's funding goes directly to the practitioners and over half of those working with Creative Partnerships have developed other work and employed other professionals as a result. Thus having a positive impact on the economy (Burns Owen Partnership).

THE SCHOOL OF ST MARKS'

"It takes a village to raise a child"



A vision

"It takes a village to raise a child". This is one of Anne Steele Arnett's first statements as she tells me about her own motivation and vision for St. Mark's as a school, and for herself as its head teacher. I get a very deep sensation of trust, excitement and wonder in my heart. The quote holds a wise, collective strength and promise for an individual child as well as for a collective of grown ups responsible for raising and educating children together, in a bewildering and arbitrary world. To grow up and be an educator and learner in a context inspired by such a metaphor could be a very pragmatic key to orient oneself culturally and educationally. But it touches me even more because I instantly realize that she really means it. These are not just some appropriate fancy words she uses but a living vision being expressed. And I learn from her that her vision is set in stone in order to maximise optimum levels of achievement for each child and for each child to be part of a family to be supported with the school and neighbourhood community. A resolute determination is clear about the ambition for each child to succeed.

And even though I know that it is just as unfair and not a sober thing to put someone up on a pedestal and idealize them as it is to put them down with pejorative or critical first judgements, I can only take the risk and sincerely acknowledge that what I hear her say is "I have a dream". And I can feel the potential of that dream, when she talks. I can also sense the connection to the reality of the dream actualizing itself in the forms and contents of how the school activity is organised and carried through. Having visited I can understand the challenges and difficulties of seeing the vision through due to changing school contexts over a period of time. However, it becomes clear to me during my visit at St. Mark's, and the more I talk to the teachers, the pupils, the staff and ponder and share all that is written up about the process over the years, that being part of "a village" could be one way of accessing your creativity and enterprise through being part of a living context.

Learning as growth, learning as a Tree

It is a living context that is made explicit as a diverse environment, activities and processes of learning, with many relations, dimensions and a conscious depth. The school strap line of "Together we make a difference" supports an increasing network of professionals, artists and other adults who wish to be engaged in developing creativity. One aspect was developing reading as a central core through the "Power of Reading". As the projects have developed over a four years period the key strands have come together as a metaphor represented by a tree. The strength of that, Ann tells me is; "A visual message and skeleton which all staff and partners engage with alongside our children to explore the deep roots of our learning values, the strong trunk of the learning process and the creative development of the curriculum content represented by the branches. The fruits of the tree represent clearly the children's continued ability, through their creative projects, to demonstrate their development of skills such as resilience and responsibility". I interpret that it is through an inter- and intra- personal depth of participation that those capacities grow into an articulated understanding, and here it is part of a conscious strategy to "build learning power" that is transportable and applicable into the rest of life's different arenas.

Being in you element as a spirit of fire - sharing power

In the Swedish literature on entrepreneurial learning, one of the most used and practically inspiring books on how to introduce and work with this attitude and approach in schools is titled: *How spirits of fire are ignited - an introduction to entrepreneurial learning* (Peterson & Westlund, 2007). 'Spirits or souls of fire' is an expression in the Swedish language for people who are central for mobilising others socially, practically, politically or otherwise, by catalysing through their own engagement, acts and attitudes. They do what they think is right to make things happen, rather than just talk about it. It implies 'energising' and thinking afresh and or thinking 'outside of the box' to make things happen. The first time I heard Anne speak, and the more I get to know her and how the story about how St. Marks "has been evolving", she seems to play the role of a "soul of fire", as a person and in her function. I find out that she also has a very clear strategy for deregulating or co-empowering others to carry the mantle of the function of her own role. She wants to make sure, that if she left, everyone would be able to step in and to keep the 'fire going' - in leading, inspiring and guiding functions to be put in place to work for the benefit of their children. She seems to be in her "element" to use the association with Ken Robinson's (2010) book *The Element - How finding your passion changes everything*. She seems to initiate, together with her colleagues, a school culture where pupils and teachers can also find out how to be in their element, as part of finding their own passion, growing in the lifelong journey of learning, and how an educational schooling culture can be experimented with to serve this purpose. It is a dynamic journey for all.

Holding tensions, and handling complexity

St Marks Church of England is a Primary school in the city of Southampton on the coast of the south of England. It has changed from being a Junior (7-11) to a Primary School (4-11) over the last year and a half with a result that numbers have expanded from 300 to 450 with several key challenges to address. Communicating effectively

with 46 languages and as many cultural backgrounds to deliver key messages about their learning values is a clear priority. Additionally, strong visual imagery is required to represent quickly what they are trying to achieve, how they organise learning and how well they achieve their aims due to higher than average turbulence (children moving in and out including from situations where they may not have attended school) throughout the school year. The metaphor of the Faraway Tree is symbolic of what they represent with their tools for learning.

The environment and the social climate

On one of the walls entering the school I see the motto written in big letters: 'IT TAKES A VILLAGE TO RAISE A CHILD'. One of the first places Anne takes me early in the morning is to the breakfast club. There we have a chat over cereal and milk with some of the young "members of the village" that have risen early. There is an informal atmosphere, and I can see that the head teacher visiting does not surprise the pupils. Rather, they seem to catch up on different subjects they have personally talked about with her beforehand. The school also has a range of after school clubs including sport and leisure, maths and technology, music, outdoor learning, arts and crafts amongst many. I think of the differences compared to Sweden where, not all, but many of these after school activities are still organised for free, as here you have to pay for them. Ann tells me that; "the school believes that the creative entitlement should run from 8am until 6pm with opportunities for families to sign up for a range of activities which are free, subsidised or full-fee and for them to be available throughout each term and progressively through 'holiday and inset' times as well."

Coming into the main school building in the morning there is an open and welcoming atmosphere; there is music on in the big hall, teachers with coffee cups in their hands and cleaning staff moving around. The main Victorian building sits amongst an eclectic set of buildings ranging from the 1940s to 1970s. The Victorian classrooms with their high ceilings and classic square shape enable the teachers to be flexible with their learning environments and approaches: the classroom can be formal or can be turned into a Victorian coal mine with some imagination and rearrangement of furniture. Open areas are utilised with a studio-style approach to become anything from museums, pirate islands or a flexible group working space. The walls are covered with artistic pieces of multimedia work, often chosen by the children, on different themes that have been worked upon - it is a living exhibition of knowledge, creativity, engagement and learning opportunity.

After an initial tour around the school I meet with Peter in the "village's head quarter" – the head teachers office! The electrician pops in and fixes something in the Headteacher's room. During my stay I will be observing vivid scenes with a wide range of contents, challenges and 'actors' taking place in this room. Peter is one of the many teachers discussing ideas and proposals for development with the Headteacher and today also holds the role of actively focusing on the task of mentoring Teaching and Learning in the school. This post is looking at the operational as well as the strategic development of the class teacher in securing maximum potential for learning of their pupils. I talk with him about how their journey began:



Gradually creating a contextualized learning environment

It started with us going out to other schools to get ideas about of how they were delivering curricula's in creative or alternative ways. We wanted to look at the skills sets required for learning. We wanted to understand more about the building blocks for learning. Having looked at the National Curriculum key skills for learning, we visited several schools to see how they were supporting children's learning, particularly with thinking skills and the organisation of the teaching programmes from age 4 to 11 years of age.

We realized from the beginning that we did not want to start from scratch or throw good working knowledge and praxis out for the sake of it, but to start to elaborate from our own starting point, as a school and as different individuals and teams. Our main starting point was evaluation from the children themselves who said that they wanted to spend time working on things that interested them, they wanted to work intergenerationally and most importantly, they wanted to succeed and be ambitious and take risks. They wanted to try new things which we thought was brilliant as a

concept. Staff also new that the children in many cases were not being thought of as individuals and we wanted to change this to secure learning journeys for children that were relevant to them and which were compliant with the National Curriculum and standards of attainment.

We started to look at different viewpoints and ways that different subjects could be linked together; the Early Years and Foundation Stage approaches appeared to be able to offer us a concept to develop with subjects clustering holistically in six umbrella areas. We played with different ways of mixing things up, without disrupting the whole scheme of things. One important purpose was to create a more contextual learning ground, in order to create a deeper rather than superficial learning process. We wanted learning to be more profound, and looked at the work of David Hargreaves to further develop the notion of Deep Learning, Deep Experience, Deep Support and Deep Leadership to structure our development strands both operationally and strategically.

Deepening and make conscious the learning process

One initial inspirational structure used was: “The Power of Reading”. Starting with a book which was accessible from High Street book stores and which was relevant both to topic work and age appropriate appetites, we developed a journey of learning that involved different subjects and a repertoire of skill sets which were known as us ‘building learning power’.

The principle of “Building Learning Powers” Guy Claxton (2007, 2010) which involves conscious ways of using questions, reflection, feed-back, collaboration, creativity and many other entrances to learning in a strategic and organised way, have become an important tool and dimension. That is something that we have added and built in as a way to make the pupils aware of “how to learn how to learn”. It is a kind of meta-cognitive focus so that they can become more of an owner of their own learning process. We are making that more explicit to the children, as well as making sure that they know how important pupil voice is, and equally how important it is to know how to learn and develop these skills as well as developing the skills to assess their own learning and appreciate the skills and knowledge required for their next steps, emotionally and academically. We hope that we are enabling more responsibility and ownership of their own process of learning.

Our faraway Tree was symbolic in growing strong roots, the trunk became the vehicle to deliver learning power and the leaves and branches, the skills and knowledge in the topic work that enable the fruits to be evident through a variety of activities. We knew these as our five ‘R’s – in other words, the children’s increasing ability to show us how they could use and apply how responsible, resilient, resourceful, reflective they were and increasingly, how they could show how they utilised their reciprocity in situations that were familiar and new to them.

The concept of “building learning power”

Reading through the different sources about the concept of “building learning power” (Claxton 2010, 2007), as well as all the policy documents of the school where it is applied, I realize that I will not be able account for it with full justice. But I will try to capture some of its essence and contours, so that its influences might be easier to

recognise in the practice described. It is such an important part of the strategic and explicit tools that are being used by pupils, teachers and staff, in cultivating qualities that deepens the learning process and help it encompass the whole, in a structured, organised and well communicated way.

The concept, the strategies, and the heart of the method or approach is emanating around and five elements; Resilience, Resourcefulness, Reflectiveness, Reciprocity and Responsibility. They are all put into motion through the attitudes and approaches in the roles of teachers, pupils and staff, and are applied in all dimensions of learning opportunity. It is aiming at developing and supporting a “Supple Learning Mind”, and a creative and enterprising learning culture, that make’s learning a conscious and pragmatically tangible endeavour that is strategically intended. The approach is also used to create transparent tools for self- and co-creative ways of monitoring the learning process, to perform self-evaluation and develop assessment criteria.

Resilience

The concept of resilience might be a “strange bird” to some, if one is not acquainted with the word or has not used it in a learning context. It is a concept that has been used for many years in research and understanding about sustainable development. Firstly in ecological systems and strategies played out in nature, but also transferred to understandings about the sustainable long term cycles of renewal in socio-cultural, socio-ecological and socio-economical relationships and cultures. Some dimensions of it were introduced in the Introduction in relation to the adopted theory of Panarchy and sustainable development (Holling, 2000, 2001).

One entrance to understanding the concept is that it is an ability “in a system/ culture or an entity with many interrelated connections to handle disturbance while maintaining developmental capacity” (Walker et al, 2004). It is an emotional engagement, which is connected to strategies that create and maintain opportunities. That can match and pitch those by a kind of living openness, a stand by of manifoldness and variation, and therefore have an inclination to and can act on these opportunities with attentive and creative variation. Much like the “Serendipity muscle” (see example of Söderhamn). This creates a both flexible and strong foundation and balancing capacity, yet open for change. Transferred to learning, and a resilient learning culture this will apply to both thinking and action in relation to inner and outer context. This “many headed, supple learning mind” in a person, a group, “a village”, a school, a city, a society, will than be constantly prepared to use and assimilate change and uncertainty as an agent and opportunity for shaping growth, expanded understanding, and make manifest its visions. It uses changes, challenges and difficulties, rather than perceiving them as an obstacle. Easy to say, but...

One of the ways that this is made concrete to the pupils are in how they can learn to maintain focus in the face of different inner and outer patterns of disturbance, in other words “managing distraction”. This is for example turned into one of the self-evaluating criteria’s that the pupils’ use and ask them selves about on a daily basis. Another aspect is how they build their perseverance staying with the process of “tolerating uncertainty and disappointment”. One interesting “turn around point” consciously used is how “stuckness” is defined as “a site of interest”, and is being used as a starting point of discovery rather than turned against “the learner” or the

learning process. It is also about the pupil's awareness of noticing and being able to stick to the point and not be distracted. Risk taking is too, about the pupils' increasing ability to try something new and not tested in their learning journey.

How to be receptive and attentive is another focus of interest, learning to notice in ways that let "underlying patterns of connection emerge". It accumulates the capacities to absorb and stay focused for long-term goals and to be inclined to use opportunities in a creative way (again an affinity with the serendipity competence). The heart of resilience is here also connected to "emotional engagement - ready, willing and able to lock on to learning"- in other words, to be able to be confident and secure to take 'risks'.



Resourcefulness

The concept of resourcefulness is a cognitive one that cultivates the "range to be ready, willing and able to learn in different ways". The focus is on open-ended questions and processes, where it is ok "not to know", not accepting things uncritically and getting beneath the surface of things. It is learning how to link things together into over-all understanding, through an interplay of imagining and reasoning,

analysing and running scenarios. An important factor is "capitalising", meaning to look out for and using materials, resources and support to assist learning. This is made very concrete in strategies linking to resilience in how to "orchestrate what to do", when you get stuck. You can ask a friend, read the question again, use a reference book, share your problem, use different sources etc, etc.

Reflectiveness

Reflectiveness is summoned as a "strategic responsibility to be ready willing and able to be strategic about learning" by Claxton (2007). It encompasses being able to plan by taking a strategic overview of learning, knowing parameters and assessing resour-

ces. It takes into account how to estimate time and make a route map and anticipating hurdles. It fosters a formative process where one is monitoring how things are going by reviewing progress and making changes along the way. This has gradually been something that the students are coming to own and integrate into their own processes, as well as by getting feedback from the teachers. Teachers seems to use this capacity to improve and structure the over-all structures of lessons and learning journeys to actualize and deliver the curricula with the help of different scenarios. This includes creating situational, improvised and planned "stretches" or "proximal zones". But the students also learn how to expand, generalize and transfer their learning and keep it growing by applying it elsewhere. A strong focus is on how to develop a common language for articulating when and how learning happens and works. It aims at developing an "accurate sense of self as a learner". Learning is to become transparent and self-monitored in co-creative and collaborative ways with one self, the environment and others.

Reciprocity

This element refers to "interpersonal involvement" - to be ready, willing and able to learn alone and with others. Interdependence is trained by balancing interactive and solitary learning where one can maintain independent judgement. In collaboration with others one is investigating how to work as a part of a team, sharing information and using communication skills. Listening with empathy in order to understand and be able to fully shift perspective and step into the shoes of another person is a corner stone. The ability to become creative in your own original way is built up by the capacity to be inspired and imitate others and other things as role models. It supports the child's capacity to absorb and imitate using all senses to incorporate habits of minds and inclination. A free interpretation is that tacit knowledge as well as explicit mental strategies is absorbed through interplay between experienced based and theoretically focused activities, where the reciprocity of reflection in situation and action are also used. This relates to the fruitful relationship between the intuitive and the rational (see references to Einstein in the introduction). Peter continues.

Fine tuning and coordinating a dynamic and relational whole

We learned how to fine tune learning aims within each of the Power of Reading themes each half term and of course, to aim to cover all that we wanted over the year. We were able to look at the themes, the skills for learning and plot these over the key stages to ensure that children experienced them in different situations and that their learning became 'concrete' and usable. The process enabled opportunities for pupils to find areas of interest within each topic and for them to be able to discuss issues that arose out of the books, through their characters, situations and contexts within which each book was written. Our children come from all over the world and many, use their first hand experience to share with the children in their class.

That, I would say is the real driving force in the process; the diversity of the children, the skilful selection of books on the current market. Which, when combined with

the requirements of the National Curriculum 2000, enable staff to combine the many elements creatively in practical and entrepreneurial experiences that the children engage with fully and which also engage their parents and carers in some way too. The activities and experiences are within the context of the book with the children getting to 'know' characters extremely well – the situations that the characters find themselves in are the topics for discussion and resultant action too. The children see the curriculum as being 'alive' and engaging and with outcomes that often have missions for 'change' in their world. An example of this was a book called *The Lost Riders* by Elizabeth Baird about camel jockeys – the children having read the book discussed on many levels what they thought and talked about what difference they could make in their own way.

So these themes can nowadays be sparked in many different ways, not just from books but also from films and DVDs to compare and contrast viewpoints from all medias with discussions about the strength of media 'persuasion'. Usually a theme runs for 6 weeks or half a term.

Individual and collective learning journeys for pupils and teacher over time

By suggesting that year teams and teachers are all at different stages and points in their own understanding and development of practice. This is asking for tolerance, and a realistic arena to experiment, take risks and explore those 5 areas that we are asking of the children. For some teachers, this is a most uncomfortable arena. It is also important to create an open culture, an arena for interchanging practice as well as the opportunity to be inspired and surprised by each other as they also find out about each other and the 'hidden skills' that have as yet, not been revealed. In many ways, the exploration is similar to the experience of the children.

As we work in teams, the team is a supporting platform for discussion and professional support; however, there is the autonomy to discuss a way forward, agree this with your team and try something new. This is important and is reviewed critically as new learning evolves.

There are different organisational levels affecting the team and the co-operational context of the staff as a whole. A complex series of meetings of all staff takes place to ensure that key messages /professional development takes place as well as informal gatherings that harness new found skills and interests that evolve around new projects and ideas. Everyone accesses the Power of Reading projects and can suggest activities that promote one of the 6 areas of learning. Core and foundation co-ordinators particularly must ensure curriculum coverage although the creativity for delivering this may remain with each team within their topic area.

We actively sourced funding and possibilities to develop creativity. We were fortunate to have a three-year programme with Creative partnerships, which we will continue with although the funding has ceased. The philosophy is at the heart of what we do and will keep doing as long as it benefits the engagement and maximum learning opportunities for our children through doing, reviewing and making. Staff have learnt a lot about multi media approaches as well as fitting into teams that is not always how one is used to work as a 'teachers'. The creative opportunities have enabled staff skills to widen, parent participation to increase and children to have autonomy about

routes within their learning journeys. They are active and curious in their learning. Everyone has more scope to make informed choices and have fun whilst leaving legacies in their school.

There are always going to be barriers for learning – both for children and for staff – it is the unblocking of these which remain the focus for all of us and one of the key challenges to progress creativity and enterprise approaches. Sometimes, someone may want to have control of a project or an idea or concept or a way of doing things because 'it feels safe' or 'that's how we have done it before'. And even when one is willing to let go of it, one does not really know how to sometimes, without stepping back from responsibility or 'power'. So it is a gradual process to turn things around, reappraise our thinking and accept new ways of doing things to benefit the most important resource, that of our children.

Being a Literacy Manager, Year 6 teacher and teacher governor at St Marks' Primary School, for the last six years has involved challenge but most of all it has involved taking risks which have created a lot of enjoyment for the staff and the children. Things are just getting better and better. [...] Our school community is diverse and unique. We work as a close team and together we all make the huge difference to improve standards. At the heart of our school is our vision, the provision of a quality curriculum, care for self, care for others and care of the environment we work in.

Rajani Arora in the St Marks Daily Echo, p 2.

Impressions from visiting the teaching activities

There is no way that I or anyone can form an accurate understanding of a learning situation by visiting some classes for one day. I have no idea of the relations cultivated, or the history behind the pedagogical considerations made in the moment I observe, the consistency or moderation of the character style of teaching that is played out in that particular moment. But as I sit in some hours with three different teachers and classes, and follow a session in the Big Hall with all of the students I find those statements above to be very accurate. I see traces of controlling or strict teaching strategies but with heart, as well as creatively organised, structured and relaxed reciprocal interplays between student and teachers.

Working with different themes

Ann tells more about how the different themes are being elaborated:

St marks' evidences creativity across the curriculum. From the wide story bases that hang in the school hall to the corridors depicting the Easter Story, pictures tell amazing stories visually. Inclusion is key but has been informed by diversity and the strap line of 'together, we make a difference'. Leap in Faith weeks, three times per year; share a key question, whether it is a question to do with Christmas, Easter or Pentecost. The whole school is asked the same question but with many different interpretations and responses which are respected and listed to carefully. The children have an active role in responding to the questions through role-play, art work or multi media responses that are shared to the school in celebrations at the end of each week. Another project sprang from an idea from a teacher in year six. "Why don't we focus

on the ships from Southampton –the Titanic for example? Our Curriculum is based upon the city and with so many families coming from much further afield; it seemed a good idea to build a platform for our children to explore their city and begin to share this with their own families. This gave our children the opportunity to lead their own family in finding out about the city and also to provide a fun family learning opportunity at a low cost.

It became a theme that we have developed further. From a mathematical problem solving project about how much profit could be made from various sizes of freight vessels, developed a project that became a museum piece and a role-play area to find out more about the Titanic and who sailed on. Several children found out about relatives that had been on the Titanic or who had known about people who had served on her or who had lived in the streets adjacent to our school. The children made scaled models and researched more about the ship as it had left Belfast on her way to Southampton and onto her final destination. They looked at fashion, food, provisions needed, the crew, the actual journey and specifically looked at areas that interested them so that they could design a museum around their interest and show these off to the rest of the school. They became part of the crew themselves as they invited guests for lunch in their role-play areas that they had created.

Each project is evaluated and reviewed as an ongoing learning journey for the children and indeed, for the staff. Sometimes the Power of Reading Book will change but the classic books stay and the interpretations change as new teachers come and go in and out of the year groups to provide fresh ideas and stimulus. The reviews are fresh as each teacher visits the spectacles that the children have produced – photos, videos and anecdotes from evaluations remain to be considered as the projects evolve further.

Deep Learning Day's are another approach when we let the whole school problem solve for a day at the end of each month. Problem solving in maths is the key focus. This year, the theme has been on Sustainability with each year group designing and making items for an Eco Fair in July. As in real businesses, we teach the children the skills to become enterprising, where we investigate how to run a business, how to sell things, set it up and run it with quality controls and feasibility studies to try products out. One task could be to theoretically design and run a hotel in the Caribbean, to incorporate weather, how attractive it might be to go at certain times of the year, to stay within a budget, and how to attract visitors to a particular resort or island in that area.

Learning for real with imagination

Important characteristics that I identify is “experiential learning” and “learning for real quality”, that can be actualized in many and varied ways. Having a real audience for the exhibition makes it a real event with real people to work with, handle and take their views from. To create real experiences and role-play opportunities, Ann agrees, enable the children to become part of the learning experience; this results in two outcomes. *Firstly to function as an agent for connecting their own interest, driving force and self-organisation, as well as creating meaning, substance and context for what different skills and knowledge are required. This is deepening the learning process, and has created qualities within their learning power that have become more memorable, permanent and that can be built upon further.*

The Power of Reading Books enables teachers to plan and devise a curriculum that challenges the views of our children too. The children will read about characters in different countries that live in different settings with very different living conditions to themselves. As a result, the children may feel concerned about the treatment of characters in the book in particular situations and decide on what action they might take to protect them or ensure that these situations do not happen again. These opportunities link with the Rights of the Child, which are also a basis of the educative process of all children.

Our staff recognise that whilst we are secure with what we understand to be the components of learning power, there is still much more to learn and investigate with the skills for learning across the primary age group. We are all researchers and continually find out more about ourselves, our own practice as well as the complexity of developing the skills of our children.

It is a great credit to the staff that they are creative and will spend a great amount of time developing ideas to lead learning. It would be easy to take projects from a book or a bought resource. The ideas are fresh and relevant to the teams putting the thoughts together, based upon the requirements of the National Curriculum and the outcomes from attainment level expectations together. There are national expectations about content and levels to be achieved but the creativity is there for the exploitation and interest and engagement of the children and staff.

Creativity is not about “not having structure”

Peter confirms my understandings and interpretation when I share my thoughts about the effects of the learning journey getting structured by the process of creating something for real as well as through creative or artistic processes and approaches.

One could then say that artistic and artisanal processes are used as inspiration and an indirect means to structure the learning process, as well as processes in their own right. These processes can open in themselves rooms to other indirect learning aims as well as foster original patterns of learning, habits of minds and dispositions (Hetland, 2007). One important aspect that I see is the regulation, and reciprocity in the social interaction and exchange, as a resource both for learning and growing as a human being. The process of creating holds the blue print and premises for the dramaturgy of a learning process, even if it takes different new forms and themes. That journey builds a holistic and contextual space to travel through and in. The contextually and thematically contained journey coordinates different learning situations into a coherent and integrating learning process that accumulate over time.

Peter affirmed that is what the learning journeys do. *It takes the National Curriculum, the different aspects of subjects and rearranges them in a contained theme, making them contextual. Now they are arenas of learning, interconnecting subjects, rather than separate subjects. And still the content is controlled in a responsible and focussed way.*

This is different, I keep reflecting, from the traditionally structured learning sessions, with no connection between the different subjects, which previously created different fragmented spaces of learning situations. Learning in those circumstances becomes abstract and non-contextual which in turn can make it difficult to create meaningful

bodies of substantial and related knowledge understanding that stay and can be transferrable. Maybe your way allows for both reproduction of standardised knowledge, as well as the creation of knowledge in an inter-dynamic and generating structure. It builds competences, not just assimilation of information and objectified bits of knowledge. It interconnects learning situations that build on each other and seems to create depth in the learning process. It accumulates knowledge and experience that get assimilated, integrated as well as differentiated and transformed over time. I perceive that it also build meta-cognitive embodied knowing of not just “how to learn” but also of “how to create”, as well as different skills used in that particular process.

I also hear that the learning journey as it is concluded into a real and concrete result, is given a completion, which creates a feeling of having achieved something real and purposeful, The staff and children feel that it is being received in a meaningful way. All this I imagine builds a quality of contextual meaning and participation, that is both individually and collectively created, shared and harvested. It can also mean that it lessens the pressure towards disciplining the social regulation by outer discipline and rather letting it self-organise through playful rules of engagement riding on the waves of inner motivation and the natural aptitude for exploring and completing a concrete goal.

The outdoor environment as an extended classroom

I am taken on a tour by the children of the grounds of the Victorian school and the eclectic buildings that have emerged over the years. A ‘Making Waves Crew’ demonstrates its desire to harmonise the landscape with islands which will link together with imaginative problem solving projects. A boat nestles in a corner by a makeshift quay. The scene is set for children to re-enact a story and for them to travel across the play area in role and convinced that they are part of their own story and make-believe.

The Green team help to take care of the grounds, cultivating the schoolyard. We pass by the corners and spaces where the different Green projects are happening; the cultivation of a wide variety of plants is taking place in common pots, in the ground and in “imaginative containers that seem to embody some kind of “ socio-cultural, art- eco-scientific experiment”. The cultivating activities are flowering, and they give those parts of the schoolyard the flavour of “an original and creative cultivated fun back yard”.

Forest school approaches also support the use of sustainable resources and particularly, the use of land around the school for the common good. Children are taught to use simple tools to cut and drill wood, to search for appropriate wood to make fires and use equipment to cook with. Children are taught simple rope work and knot techniques but most importantly, to respect their outside environments and to use them creatively and with imagination.

Working with Creative Partnership

A big beautiful Lion created from stone, lies like a “Big Aslan” with his inner secrets I suggest. “Yes with one eye that is open and the other closed supporting the view that he is always watching over our children, like a God”. Peter tells me it was made in a creative partnership project with two year groups working together, one helping to support the ideas and workmanship of the other. “A symbolic lion with wings –

marking something special and spiritual for our church school community – a legacy from our children to others.”

Our projects have taken three years to accomplish with many professionals working with our staff and our children. Parents and children have participated with many adults coming back to the school for the first time in years and enjoying the opportunity to ‘play’. Children in Reception, aged 4 years old, worked with older pupils in Year 3, aged 7 years, to build a tree with little animals that they had designed on the front of their class areas. In with this, the words of the school song were inscribed



Making the new school building come alive



The Guardian Lion

along with their little handprints, which became the leaves of the tree. Once again, the children were leaving a legacy for the future whilst securing their roots on a new building as the school expanded.

***It takes a school community to raise a city!
– St Marks is making its mark as a driving force
for a creative and enterprising future***

“This is what we at St Mark’s believe to be true about our neighbourhood. At a time of economic recession and gloomy news, we are focusing our efforts on ensuring that our young people (some aged just four years of age) begin to see what creativity and enterprise is all about.”

This is a statement made by Anne Steele Arnett, printed on the first side of the special edition of a local newspaper called the Daily Echo in Southampton. This edition of the “St Marks Daily Echo” has been created by editing teams of teachers and pupils guided and supported from within the professional and technical frame of the real newspaper. It expresses the vision of the people within the school community about what is happening now in the school and what can lie ahead. It is being edited in conjunction with a biannual event known as The Foyes Corner Community Festival, where the school coordinates the cultivation of enterprising relationships with business partners and enterprise initiatives by the pupils and the community alike. The Festival takes place on a piece of nearby land - an empty field - envisioning the use of the field as an arena for the community.. In the article *Branching out at St Mark’s* Anne continues:

We want the children to be proud of their city and to feel at home as soon as possible. They are the catalyst for showing their parents around - whether it be the art gallery, the Aviation Museum, the docks or the Quays. Through our Power of Reading stimuli, all of our children go off on journeys which were not just possible years ago... and it is FUN!

They are at school to work and to get the best out of the opportunities provided and yes, they do work extremely hard - both staff and children and their supportive families! Southampton is at the heart of our curriculum! With many of the children arriving from outside the city, ways of enabling the children to find out about the rich cultural heritage or our city are essential for them to feel at home as quickly as possible and begin to put down ‘roots’.

We are a very ‘hands on school’, and believe absolutely in pupil voice with over half the children having responsibilities as School councillors. Green Team members, Eco Warriors, Healthy Life-style champions, Reading Partners, Play Workers or Helping Hands. Our children are able to ‘branch’ out into many different roles and we hope these challenges enable them to develop into confident and assured young people who can ‘make difference’ - with their learning and to contribute to their community/communities.

Our staff are advocates of ‘building learning power’ with our children and with each other - we believe that our children should be developed as independent, enquirers, mature and creative thinkers, become reflective thinkers, grow as team players, be able to manage and most importantly, be effective participants to ‘make that difference’ in whatever they are doing.

We are fortunate enough to be a Creative Partnership School and have been able to work with artists and creative professionals form the last three years. As a result, we all have grown. We are achieving Forest School status this summer and successfully run courses for children using the tools and crafts used by our country folk and ancestors. ‘Simple is good’ in today’s world of techno gadgets - from harvesting produce for a meal to creating shelters from a pile of logs or using mud to model and create mythical masks. In our inner city school, the children’s world just comes alive!

**Structures and forums for children to participate
and having a call in decision making**

Peter tells me about the different forums for practicing “real life roles” that Anne is describing. The forums, arenas and tasks are organised to give the children experiences of having real impact on their daily activities. These activities are linked both to give form and content to their own learning environment, but also to actualize the schools engagement as a “real life classroom”. You can be on the School Council or be a House Captain. Equally, you can be a Sports Captain that gives suggestions for sports day content, be a teacher / role model for the younger ones, or lead training for real when it comes to being a mentor. In the school office elected Eco Warriors focus on how to make the school eco-friendly.

**Reaching out to other professionals and using
inquiry critically and creatively**

I remember Anne telling me in one of our first meetings, that one way she noticed that the children were growing in confidence and ability was their ability to take the initiative and “ask questions “to each other and to the staff. Ann develops this: *Whilst the adults frequently did give answers, the children were encouraged to follow up with even better questioning skills and pursue their lines of enquiry in answer to their own improved enquiries that gave them an opening to more information that they would have to interpret. More work but much better responses that deepened learning. If we do not provide an answer and respond with another question, they realize that they are often in for something very interesting and worthwhile.* Reading through the St Marks Daily Echo I can see the traces of this approach in operation. The children were appreciating that there was often more in things than what they initially could see or read into them. Hence:

Their stories about business locally to the school

Some children visited the police station and wrote about that in the paper. The report from the visit contains the impression of the different rooms and the raw environment and situation that one gets to experience as a criminal. They report their understandings about the difficulties in the aspects of keeping the “city safe”, that is part of the professional task of the police role. Visiting the Florist family gave them an insight into how to develop a profession/business based on art and nature, and how a family can use this as a basis or platform for a business. Looking at 10-15 different food places and rating their food gave a very “subjective fare” score for Mc Donald’s. Abeni, a hair dressing business was a “headstrong” business being discovered. It became apparent that you can make your living by selling products for people with

dreadlocks and people with natural curly hair. The Charity shop Scoop, and Oxfam (selling everything and sending the Money to poor countries like Pakistan) is noticed for the possibility to create business from different driving forces.

One group is visiting the airport with two engineers and having the time of their lives “simulating piloting and crashing in airplanes.” Another group went out to find out “what exactly made the thriving shopping area a hit with locals”. As well as noticing that the shopping area delivered the “goods” with quality and/or fare price, they saw that “Shirley High Street, much like our school, was a fantastic mix of different cultures and languages (Suraj P)”. “We as a school, welcome people from all over the world with open arms and embrace their nationality as they do ours (Sam, Ben and Kuba)”.

What was also high lighted in an “inquiry battle” was that there were “very few shops for boys”, especially fashion and clothes. This gave rise to “two big inquiries“. 88 % of the boys wanted more shops for boys. Other strong statements came out from the “GIRL TALK” columns about this. “No way!!!, and this is because we want to shop until we drop. We understand the reason why there are fewer boys shops, because boys or men rarely go shopping”. In their inquiry boys would rather spend the Saturday mornings sleeping or looking at TV.

There is also another interesting “inside investigation on clothing” made about the reasons behind the design of the school uniform. It is clear that the head teacher’s preferences have been guiding the outlook, as well as the interpretation of “inappropriate clothing” by bringing the uniform back in place after a period without it!

Another report about the St James Park being restored and developed, gives an insight into how a group of citizens have been mobilising opinions and money and negotiated with the policy makers to make their “dream come through” regarding the development of an area of green land at the side of an area of intense housing.

Networking, connecting and relating

The school use both their themes that frame the learning journeys; as well as the premises for operating the school to relate, connect and network with the real world. Their aims of making the school “go green” in many ways, and the vision to make it an “inclusive learning community” in many aspect, are two areas in which they have cultivate partnerships with different people, organisations and institutions, as well as reaching out for the civil community at large.

“When I visited St Marks School a little while ago, I discussed with Mrs Steele Arnett, the head teacher, her plans for making every aspect of the school greener and more energy efficient. Putting everything the school does, how it recycles its waste, whether it uses its energy efficiently, under the spotlight constantly and involving all the children in how everything happens seemed to me a first rate way of learning by doing. Since then I know they have made great progress in all these areas - using their recycling and energy-saving efforts to add to lessons, establishing the “green team” in school to do all sorts of environmental activities. That is why, among other things, the securing of all or most of former civil service sports ground next to the school as ‘green space’, will be such good new for the school.”

(Alan Whitehead MP, in St Mark’s daily Echo)

In the last article, all of the schools children are crying out to the public, to stop polluting the school’s own sports field with cigarettes, broken glass and other waste,

including dog poop. A “new thinking field is opening up” for green ideas that could reside on this now polluted field beside the school.

An interesting external partner is the University of Southampton. It has one of the leading research groups in energy efficiency of buildings in UK. A master student will conduct a full assessment of the old beautiful but energy consuming building of the school, as part of a report on how one can become more energy saving, both by changing behaviours as well as by investing in resources to reduce waste.

Generational crossings

The school are intentionally creating bridges both for the young kids entering the school, as well as for the young people moving on to the next school level, by connecting and creating projects where younger and elder children across the different institutions can meet.

This is the first year that we have had Reception children at St Mark’s. [...] All of our children love to help out at lunch time, and are fully involved in our reading projects acting at all times as great ambassadors and role models.

(Julie Russell, St Marks Daily Echo)

One of the nearby independent schools, King Edward VI School, is also a partner. “KES has a strong link with nearby primary schools such as St Mark’s, Highfield and Springhill. Current partnerships with St Marks’ cover literacy, art, science, outward bound enterprise projects as well as Latin and French opportunities.

The Corner stones, the Challenges and Difficulties

Finally I ask Anne Steele Arnett to summon the building blocks of the work, and challenges she herself, the staff and the school faces. The response is to do with being a reflective practitioner and having the experiences of working in all sectors of the 3 – 19 age range.

Learning is a right to everyone and the more creative and meaningful we can make it, the better for our children, particularly when we can frame the learning into meaningful sequences that link to the city, to good books and to situations that make children think!

Listening to children talk about their learning has been key; listening to what they want to learn about has been essential. Knowing what interests them and engages them is essential.

Additionally. From a staffing point of view, having a team with whom you can build capacity with is a big challenge and doesn’t happen overnight. We have taken 6 years to engage staff, partners and parents and have a philosophy that is now embedded in our school, so that if I left, the legacy would remain.

One aspect is to build in thinking time as part of being in a creative process as well as building the learning power. Our overall goals are to make them confident and capable young people, and “it takes a village to raise a child”. I see that we use three different parts as the main building blocks to cultivate the learning situations and culture; the curriculum goals, building learning power and creative learning journeys. The curriculum goals and the strategies and insight into how to “build lear-

ning powers”, they are all played out through the creative learning journeys. They are covering the content of the 6 areas of learning. A learning area is separate subject building blocks built into a cohesive area that make different subject skills contextual to a greater degree.

The dynamic strategies, the ways of structuring different learning journeys that cover the learning areas are becoming embodied tools. Today those tools give the clarity and flexibility to actually know what you are doing in whatever context – it is a journey... This opens up the dynamic between organising a context in a structured way, combining spontaneous input, and stimulus coming from the pupil, the environment, the outside world, etc.

The Power of Reading strategy has begun to engage children and adults alike. I also see a real need for people to ‘play’. Role-play is important, but it needs still to be improved to develop quality talk and improved vocabulary between children. More structure is required from adults to help scaffold conversations with children – scaffolds that challenge the children into using more advanced language and conventions. Adults do not play and rarely are creative in the outside learning environment. Therefore, creating a creative curriculum, learning through what is important, and building on children’s natural resources for learning, like playing, role playing, imagining, learning by doing are the core elements to enhance children and parents working together, building relationships together and most importantly, having fun together whilst learning.

We would like to think we measure what we value, and not value what we measure [Louise Stoll] – the children’s increasing ability to be effective participants in activities, to play a decisive role in team working, to be able to reflect on what they are doing and communicate this effectively, to be creative and to be independent are the most valuable tools we can develop in or children to become resilient and adaptable lifelong learners of the future.

Learn and grow as a Tree – the beginning and the never ending story

In summary, to build our village around the child is a complex issue. Developing a learning journey for the children is based on the premise or metaphor of a tree, with strong roots, a sturdy trunk to develop learning power, a rich context of leaf and branch which encapsulates the skills and knowledge of their curriculum and the resultant fruit, is the children’s increasing capacity to demonstrate their continuing abilities to be resilient, resourceful, responsible, reflective and reciprocal in situations that are known to them as well as situations that come out of the blue and which need a solution.

Our Faraway Tree embodies life long learning, when the roots are deep into the ground and embody the security of trust, listening, caring, safety and spirituality whilst the strong trunk ensures a structure that will be resilient to support the growth of knowledge and skills. The fruits as have been explained previously, demonstrate the continuation of using the application of skills and our young people’s capacity to branch out and try something new.



The Faraway Tree



THE EXTRAORDINARY IN EVERYDAY LIFE

– *The whole world as an adventures classroom*

Do not teach: let's experiment.

Giuseppina Pizzigoni

Education is not what the teacher gives, but it is a process that occurs spontaneously in the human, it is acquired not only by the words, but also by experience gained in the environment. The task of the teacher is not to talk, but to prepare and provide a series of culturally motivated activities in a specially prepared environment.

Maria Montessori

Intrinsic connections between creativity and enterprise

Different small cases are presented in this example and they come from the whole region around Milan and Cremona in the north of Italy. There has been a long cultivation of the “art” of unfolding children’s learning as well as creating learning and teaching cultures with the help of artistic, creative, imaginative and explorative means in this region.

The small cases are different but share an understanding of the educational work in schools and nurseries that puts the child at the centre of the learning process as an active player, competent and capable. The projects and their pedagogy and methodology listen deeply to the language, aptitudes and expressions of the children. The curiosity of the scientific and artistic mind, are being connected in a pedagogical framework. Relating in intimate, playful and inquiring ways to the material world of nature as well as the worlds of our own inner nature.

The pedagogue is being responsible for doing everything to turn every learning situation into a meaningful session of insight, beyond absolute rights or wrongs, claims or mistakes. They use artful ways to co-create with the children’s organically unfolding learning journeys mediated through a manifold of leaning perspectives, themes, environments and activities. The focus is often close up and can help us to penetrate how the intrinsic connections between creativity and enterprise as they were presented in the second chapter of this book⁵ are being build together into “learning and teaching power”.

Nicoletta Ferri, pedagogy for Cremona Municipality and Monica Guerra from University Milano Bicocca have, together with the pedagogues in the region, gathered analysed and written the cases up, and we reflect on them with some “coming from outside” perspectives.

Educational Services for Children in the city of Cremona

The most important educational influences in the birth of the Cremonese style of education are to be found in the work of Ferrante Aporti, director of elementary schools of Cremona. In 1829, he designed and created the Nursery of Charity, which is considered a real laboratory on the world of teaching. Other important influence is undoubtedly the experience of the Agazzi sisters, Rosa and Carolina. Their method, based on the rejection of instilling knowledge, the use of poor material in education, the importance of contact with the natural environment, is still inspiring the teaching in the area. At last, the Montessori method, for the attention of child skills, the interest in development of autonomy, the reflection on the use of space and materials is a fundamental point of reference.

5 Learning in cultural ways

- tapping into talents and skills of young people at an early age
- dynamic, flexible and inclusive curriculum underpins students’ life pathways, including employability, personal growth, social participation and the development of shared values
- experiential learning, as one of the principle pedagogical pillars, enables participants to draw on their own life and cultural backgrounds and is more likely make school based learning relevant, applicable, and meaningful
- teachers and instructors should assume a role of facilitators with students exercising increased responsibility for their learning

Learning through art

- The arts teach children to make good judgments about qualitative relationships. Unlike much of the curriculum in which correct answers and rules prevail, in the arts, it is judgment rather than rules that prevail.
- The arts teach children that in complex forms of problem solving purposes are seldom fixed, but change with circumstance and opportunity. Learning in the arts requires the ability and a willingness to surrender to the unanticipated possibilities of the work as it unfolds.
- Artistic activity is a form of reasoning, in which perceiving and thinking are indivisibly intertwined. A person who paints, writes, composes, dances ... thinks with his sense...[but] genuine art work requires organization which involves many and perhaps all of the cognitive operations known from theoretical thinking.

Learning with entrepreneurial focus

- The student is offered education that adopt to its specific preconditions, experiences and ways of learning
- The student is offered and increases its own input of responsibility for learning.
The role of the teacher consequently become more the mentor than the transmitter of pre-described knowledge
- Group oriented work is applied, in which the pupils learn productive collaboration with individuals with different competencies
- The teaching is characterized by “learning by doing” in combination with retrospective reflections
- The students work with authentic and complex problems that exceed the boundaries of the subject matters
- Co-operations between the school and the local community is happening frequently
- Work in the form of projects are done in a way that the result is profitable also outside school
- Working with tasks (challenges are also suggested as a rhetoric shift of perspective) that has continuity over a long period of time is performed.

ScienzAzioni (ScienceActions)
– *Resurrecting pedagogy through scientific
and cultural enterprise*

“**ScienzAzioni**” is a project which was born in the “**children’s pockets**” and which is destined to kindergartens and primary schools.

It proposes experiences in the scientific sector and children’s activities especially focused on the collection of information from the environment. It is based on a network, which through research and actions promotes **personalization** of learning, **multi-tasking** and didactic continuity between kindergartens and primary schools.

In general it is based on the organization of a network of public and private schools where the subjects interact and cooperate for the teachers’ training and the joint organization of school activities.

The project considers the environment as a text, which can provide us with various keys to analyze it together with the world. ScienzAzioni is part of a bigger project in which the Educational Policies Department of Cremona Municipality and the Natural Sciences Museum cooperate.

The project’s goal is educating every child (with the cooperation of parents) to develop scientific knowledge and awareness for a sustainable environmental protection. ScienzAzioni is based on a pedagogic method which mixes day by day exploration and observation of natural, human, social and museum environments of the town which can be a points of reference for all the children’s experiences.

Projekts’ name: SCHOOLS OF THE NET

Involved schools: n° 9 municipality schools and 3 state schools of
1st Cremona district and 2 of the 5th Cremona district
Teachers trained: n° 78
Classes involved: n° 39 (900 children)
15 meetings and visits of the museum staff in the schools and
44 visits to the Natural Sciences Museum

The project and its reasons

Every child, especially if s/he is very young, naturally has a heuristic approach, s/he wants to know “what?”, “how?” and “why?” of all the world which surrounds him/her. These are the three basic questions of human knowledge. Also very young children analyze events or situations and process them in their minds. All the parts of the natural and social environment acquire new skills to be “understood” as a reality. A lot of activities that are normally carried out by children have important scientific aspects. We only have to highlight them through the analysis and the contribution of the teacher.

The progressive development of scientific methods and knowledge facilitates the harmonious and integrated improvement of the children’s skills and competences. It is necessary to underline that in his/her approach with the natural environment every child must develop his/her abilities. For this reason the educator must provide opportunities to make the children observe, perceive, generalize and produce.

Working method

We think we must use the exploration opportunities that every child can have, paying attention to the environment and to the materials, spurring the children to carry out activities and experiences concerning scientific procedures.

The experiences and the problems treated are related to the knowledge of the children, and can be easily understood. The project provides children with opportunities to express themselves and be listened to. A fundamental role is played by personalization of the intervention and by the group debate and dialogue. The context of relational dialogue created by the teacher reassures children to feel free to express their ideas. The goal of the didactic activity is not the acquisition of abstract knowledge but the cultivation of behaviors, which analyze the direct experiences with the materials that are observed and touched.

The dialogues represents an important element at a methodological level, as it allows the creation of questions, explain the answers, create more awareness of what you think, and in it you can look for efficient strategies to solve the problems and support the transfer of skills to other situations.

These passages are important because the child can learn through senses and emotions that establish contacts with the external world (which is the knowledge’s object). This in order to analyze what s/he learns according to the structural scheme s/he already knows (words, concepts, abstract links, cause-effect, before-after...).

Activities organized during the path:

- teachers’ training and project’s monitoring
- activities with the classes carried out by teachers with small groups, workshops, visits to the natural sciences museum, trips on the territory
- animation and dissemination activities in the town.

Materials and resources

We decided to observe the materials which characterize the territory and which facilitate the curiosity and motivation of every child. We wanted to observe outside of the school the elements studied in the classroom.

The same observed, touched and analyzed materials are used to make the children understand that they are part of the urban reality. For example, in the river environment and in our houses you can find clay, sand and gravel; trees and small animals live in the wood but also in the school garden. If children recognize their environment they can be rooted in the territory defining their identity and sense of belonging. During the activities, the spaces and the tools available in the museum facilitate the observation, analysis, synthesis and hypothesis production. Every school prepares a permanent “scientific corner” where the materials that the children can use are stored.

Projects name: The chestnuts

The project of the Kindergarten “Martiri della Libertà”
School years 2007/08, 2008/09, 2009/2010
Teachers: Luisa B., Isabella B.

When spring arrives and the temperature rises, the playground of our school fills up with children and the teachers monitor them while they are freely playing. Some of the children climb; some gets on and off the slides, some go on the swings or play in the small houses. But, if we pay more attention, somebody is “out-the-way” and s/he is doing something else. Among the voices of the children who are playing in the school’s garden, some children are playing with the earth and the soil, others are picking up flowers, leaves, stones or grass threads; they look and gaze at what they have collected. The sand-areas are full of children with bare foot who transplant plants, makes hole’s, riddle the sand, fill and empty shapes and buckets. They are so concentrated on their games that they do not even hear the teachers who are calling them to go back into the school because the lunch is on the table. It is evident that the structured games catch their attention only at the beginning because, immediately after, they are attracted by the environment and its objects or by some natural phenomena that can catalyze their natural attention for all the time they spend in the playground. This “attentive” time, moreover, can be repeated every time, as probably the child feels the necessity to make the same experience but in different ways. Then, when you go back in the class, the pockets of the children are full of things jealously collected and it’s wonderful to look at these objects and understand the way these children analyze the world.

In the “Guide for childhood educators”, by Rosa Agazzi, there is one interesting chapter which is dedicated to the “pockets of the children which sometimes were full of things which were ugly, dirty or dangerous... the pockets of my thirty children were full of nails, chestnuts, small stones, nutshell ... I understood that if I wanted to be trusted by my children I had to spur them to show me their objects, exactly as if I were a classmate. I would have admired when admiration could not be a lie; I would have made suggestions, I would have kept and stored some of these things and give the children back their objects at the end of the day. And I did it! The number of the things started to increase more and more”.

This incredible Cremona teacher, with her interesting analysis, suggests to us that our world is the complex “text” made up of various chapters which leads us to discover all its contents. With its biodiversity, the environment can represent for us the “con-text” in which real objects represent the plot.

The experience of the class

The experience of our class started with the discovery of the garden of the kindergarten *Martiri della Libertà* at the end of September, when suddenly the school playground gets full of strange brown pointed husks. The children realized that there is something new and start to look at them, to collect them and to ask questions. Some children ask; “What are these?” “Why are they on the ground?” or “Why do they fall down?” This is the right moment to share knowledge and experiences through conversations with the children who make hypothesis and tell stories. We, as teachers, started to

wonder how we could help the children to discover the environment and its elements.

How could we spur children to make things? While planning the didactic activity we thought about two things: what to do and what not to do.

What to do

- Take into consideration the knowledge of the children and their previous experiences and use them as the base to organize our activities, bearing in mind that every child interacts in a special way with the acquisition of new information.
- Create contexts, which can facilitate the debate so that the children can feel free to express their ideas and mix them with what they learn individually and together with the others.
- Remember that learning new concepts can represent a possibility to increase what children already know or can represent something completely different from the past. Some of the new concepts can also be applied to other subjects.

What not to do

- Do not convey abstract ideas but be mediators of the learning process, which must always start from experiences, deriving from the children’s life and environment, from experiences, which are important for them.
- Do not provide abstract explanations but spur the children to discover the environment, fostering them to touch the materials and to ask more questions.
- Do not propose activities that are completely different from the interests and the children’s knowledge.
- Do not oblige the children to follow the processes of phenomena they are not interested in, even if we think they are important for the development of scientific skills.

Our kindergartens are similar to “construction sites” where various group-activities take place. The space is “prepared and equipped” every time and the children consider it as the place where they can make things, try, discover and be the protagonist in their own drama or story of learning. The workshop area contains only the materials necessary for that specific activity, there aren’t pieces of furniture and the children can focus their attention on the objects. The area is equipped for that specific activity and in this way the experience is spontaneous and suitable for the creative behavior of every child. The tools used are adequate for the children’s age. At the end of every experience the tools and the objects are classified and placed in the “scientific corner”.

What we did

When we planned the scientific activities we decided to leave the children free to focus their attention on environments and materials in a structured and not structured way. We worked as facilitators and answered the children’s questions.

During the activities we analyzed the spontaneous relationships of the children with the environmental context: this interaction produced occasions to organize activities based on observation, classification on a logical basis, search for links, diffe-

rences and similarities, as well as transformations. During these three years of experimentation we understood that the first experiences are related to water, soil, plants, animals, schools' or houses' garden. Usually the grass of the school's garden and the objects collected during the holidays fill the classes and these objects must be analyzed and properly placed in the classroom. We must decide where to put them and how to store them. This activity fosters spontaneous classification of shapes, colors, dimensions, smells... But not only: with this activity you can discover the living world. How can we store this object? Do we have all the necessary tools to observe its transformations? For all these reasons it's fundamental to find shared criteria and think about what can spur the children to focus on logical operations like classifications, making groups, naming the materials etc....

In this way the children can spontaneously understand that it's necessary to create a specific space for the objects and can find new original criteria to store and classify them.

The children also start to feel the necessity to tidy up the class, and when everything is cleaned up, it is even easier for them to understand. For this reason in every school a "scientific corner" was born, a space to store and observe things but also an area full of personal and school memories.

Final remarks

At the beginning it was not easy: the idea to let the explorative and spontaneous experience lead the process was only embryonic, the method was unknown, the contents new. We were afraid that we could not answer the children in the right way from the scientific point of view. However, thanks to the children's enthusiasm, our first uncertainties disappeared. The previous experiences of the children were linked with the new ones and these created interesting debates in which everyone contributed to transform questions in a chain of answers and vice versa.

Our scientific adventure starts with the games in the school playground: the children use spontaneously the natural elements of the soil; they collect different natural elements and ask questions..."what are these? "... why are they on the ground? "... why do they fall down? "... there are lots of them"... (ex: the husks). In this way it is possible to foster children's curiosity for the elements they search or find. Then, day by day, they collected in every environment they went with their families (mountains, seaside, countryside...) every kind of elements.

The cooperation of some families, which spurred the interests of their children, contributed to this "project" creating a favorable context.

The idea of creating a "project" about the chestnuts derived from the children's interest for the chestnuts of the school's horse chestnut and from the comparison with the edible ones collected by a child in the mountains during his holidays with the family. The cooperation of Ms. Cinzia Galli (natural sciences expert) was fundamental to define the evolution of the didactic path.

I, the teacher, was more a mediator not only a knowledge conveyer, and in this way I could water down my anxiety.

The project went on respecting the children's interests and it was sometimes stopped when the children were not interested anymore. I tried to respect their needs and in this way the children could perceive these activities in a natural way and with per-

sonal motivations: they spontaneously went close to the scientific corner to observe the classified objects.

It was exciting participating and observing the wonder of a lot of eyes eager to see, understand, perceive sensations and get knowledge, make comparisons, compare elements, touch them, smell them, notice the differences and ask "why". The wonder and satisfaction of the children when they noticed new elements gave me the opportunity to understand that the scientific method can be used not only by scientists but also by all those people who have to study new topics.

Project's name: URBAN ADVENTURES

Place: MartTrento (Contemporary Art Museum), Palazzo delle Albere

Classes: first and second grade, primary school.

Project by: "La Coccinella" Cooperative and Barbara Zoccatelli.

Based on the observations: one at the museum, one trip in the neighbourhood and one at school)

+ 1 preliminary meeting with the teachers (4 h)

The project "Urban adventures" is based on the analysis of the territorial context, a game in which children can be protagonists and discover their neighbourhood as young explorers. And not only: the project's goal is to get to know and developing the orientation skills and the autonomy of young inhabitants, starting from their neighbourhood's map.

What is a "map" according to the children? Which are their theories and ideas on this theme? And especially: how can we draw a map? If you want to draw a map you must have a specific knowledge and so you must observe, sniff, listen, survey, walk, touch, ask, interview, look around and move your mind in every directions (also above). Careful observation during the trips and live drawing help the children overcome stereotypes to understand the variety and complex aspects of the real world. The analysis of the territory represents for the children not only an entertaining moment, but also an occasion to get to know their neighbourhood through their senses, sharing their life experiences, personal feelings and skills in the group.

These activities generate various operative possibilities adaptable to the peculiarities of every single class: creation of single elements characterizing the children's house and the school-house path (short *walks in the memory*); analysis of sensorial landscapes ("sound map", "olfactory map", "tactile map"); creation of a scale model; creation of a "neighbourhood's risks map" and of a "tourist map" realized by children. Images, thoughts, theories and emotions can offer new points of view on the town in order to improve the urban environment and make it more "children-friendly".

For more information:

Avventure Urbane. Perlustrazioni nello spazio abitato, La Coccinella in collaborazione con MART, Edizioni Artebambini. Or: www.lacoccinella.coop



Urban Adventure



Adventure



The Thread's Tale

Project's name: ADVENTURE

Place: Verona and its surroundings. Classes: Verona kindergartens.
Project by Rosanna Zerbato; teachers of Verona Municipality kindergartens

The project "Adventure" was born to give children the possibility to freely explore new environments out of their school; the project aims at promoting strong and genuine experiences, which can make children step into the role of the protagonist, and play the main character in their learning. With these activities children can promote new ideas, make hypothesis, debate and dialogue and make negotiations in a group.

The project is characterized by the fact that the experience proposed is particularly peculiar: children can live it in an active way as real protagonists. The school teachers start to organize, in the first part of the year, an adventurous trip in a particular place that is chosen according to the children's experiences, the games organized in the class, the themes treated, the fairy tales or the real stories told by the children. The activities which are proposed are planned together with some experts and linked to a series of games and researches: exploration of a cave together (with an expert), orienteering in the wood, climbing, free exploration of a natural space.

Every "adventure" is based on the combination of several experiences: exploration in a natural environment, psychomotor games, discussion and negotiation. The basic idea is offering all the children the opportunity to live an exciting experience in contact with nature, so that children can then propose new experiences and decide what they want to do; in the second part of the year, in fact, the school organizes other trips according to the children's proposals.

For more information:

Mortari, L., Zerbato, R., *Avventure in natura*, Edizioni Junior, 2007.

Project's name: THE THREAD'S TALE, Mixture of movements, materials and relationships

Place: Nursery school "Re Mesina", Correggio.
Classes: 2-3 years old class.
Meetings: daily and then decided by children.
Implementation period: school year 2008/2009
Project by: Laura Malavasi with the teachers of the nursery school and the pedagogue

Facing the world, children never separate feelings from thoughts: they adopt a holistic knowledge approach, which combines mind, heart and feelings. The project's threads, which are interweaved, represent the combination of various feelings and emotions, and from them are built different stories that created this tale.

The project "The thread's tale" was born from the interest of some children for threads, which because of their shape can be used as playing tools. Observing the children's interest and games, the teachers decided to use this kind of material as an opportunity to create, step by step, a project focused on some peculiar aspects of the children's games: relational aspects, motor and psycho-motor activities. In order to support relational exchanges it was created in the class a "weaving corner" where children can find a net where they can weave day by day the threads and ribbons stored in a piece of furniture.

At the beginning the "net game" represented an activity for small groups to be carried out in the morning. Then, when children became expert, they could freely play with it whenever they wanted. Through the net's holes the children could look at each other and check their friend's movements and expressions. They invented new ways to stay with the others, playing with their friends. The children had the possibility to change the way in which they know the reality surrounding them. The net represents a metaphor for sharing, discovery, emotions and experiences lived by the children (with their friends) day by day.

For more information:

www.coopargentovivo.it

Descending into culture

Flying into Milan, all these places, Cremona, Verona... can be spotted. If you look a bit south over to Bologna you see the municipalities as Cremona and Modena and towns like Parma and Reggio Emilia, a little bit east over to Venice passing Bergamo, lay

Verona and Padua, a little bit to the west comes Torino. Soaring and descending over the north of Italy, you can go in for landing through many different cultural, pedagogical, scientific and historical lenses, with a collective charge. Here are many cultural points of reference that hold contextualized meaning for many people. Depending on your inclinations, experiences, and what you happen to be informed about, your spirit can fly high on wings of Shakespeare, Commedia dell'Arte, Leonardo Da Vinci, Michelangelo, Scientific revolutions of Copernican proportions, Stradivarius, Reggio Emilia, Pizzigoni, Montessori pedagogy... You can get hungry for the Italian kitchen, wine, music, opera, sculpture, cathedrals, Roman history in stone, fashion in slender skin, silk and curving elegance...

And the pedagogical approaches somehow in a fare fetched but peculiar way, seem to resonate with these historical layers of the regional culture itself; culture as a map of orientation for the human endeavour, also of entrepreneurial, artistic, explorative, creative and innovative competences as they play the "protagonist" role in the drama of history, or the history of dramas.... You can click and zoom in on your "inner internet and GPS" (global position system). I click on Verona and I see the image of the protagonists Romeo and Julia, on the famous balcony.

We have started to get familiar with the pedagogical features in praxis, inspired by Pizzigoni and Montessori. I click on Reggio Emilia, and imagine the pedagogical scenes that created the experiences that lead to the insight and expression that "Children have a hundred languages". This is one more pedagogical root in the region that have experimented with the art of an artistic, scientific, dreaming, imaginative, practical and artisan pedagogy.

...
*The child has
 A hundred languages
 (and a hundred, hundred, hundred more)
 But they steal ninety-nine...*

*They tell the child:
 To discover the world already there.
 And of the hundred
 They steal ninety-nine.
 They tell the child:
 That work and play
 Reality and fantasy
 Science and imagination
 Sky and earth
 Reason and dream
 Are things
 That do not belong together
 And thus they tell the child
 That the hundred is not there
 The child says: NO WAY the hundred is there--*

Loris Malaguzzi Founder of the Reggio Approach

The scientific visionary

I click on Padua, and the life of Galileo as it was portrayed in the theatre play of Brecht, pops up in my mind. Galileo studied at the University of Padua. In a performance of the play called *All is moving*, staged in Gävle from where we come; the epiphany moment in Galileo's mind from the play come alive, as it resonates with the pedagogical scenes of the children in the cases just presented, discovering the inner secrets of our natural world. Galileo observes through his homemade telescope that "the stars has moved"... and a new world is discovered... It is a world not just flat, hierarchical and anthropocentrically confined by the paradigm of the medieval mind. Not just black or white and reducible into rational separation and one form o logic. But a world that is both flat and round, circling around the suns, the stars and our human interconnectedness with a non-linear and linear experience of the cosmic play.

Maybe this dynamic wholeness of interplay is what we aim at when describing our intelligence and creativity as organic, inter-dynamic and multidimensional? Maybe our mental cognition is just the tip of an iceberg of a multidimensional cognition, using all the senses, the body and the entirety of our consciousness. It might be that a world that is relational and inter-dynamic, rational and intuitive, subjective and objective, individual and collective etc is what we are dealing with. And our "nature of learning" springs from it, whether the organisation and standardisations of education, pedagogical methods and evaluating criteria mange to mirror it, supporting us in using it efficiently or not. But we are confronted by a world that turns in unpredictable ways, and we are being challenged to learn to move with it in pedagogical and professional ways into the 21: century. Daniel Hjort, a scholar in entrepreneurship working at the Department of Management, Politics and Philosophy in Copenhagen writes:

*To understand entrepreneurship,
 is about understanding imagination,
 creating, action, revolt and passion*

The entrepreneurial fool and magician

I click on Bergamo where from the historical Commedia dell'arte figure of Harlequin originate. With his half faced black mask and many coloured patched clothes, his crazy physical acrobatic agility and vulgar humour, he is the archetype of all fools and clowns. He is the king of the dead spirits, the narrator and master of all turning points. It is the part of us that can turn the world up side down and inside out. It is the social courage and challenging humour of the jesters that made the men of power and of the church laughing by jumping on their tables, splashing sauce and wine on them in the medieval carnival times. They are the social and artistic magicians described by Garzoni (1592) in his – "*Piazza universale di tutte le professioni del Mondo*" (The universal square, of all professions of the world). And maybe that is the same mysteriously creative ability that is still operating in all acts of social, political, artistic, pedagogical, scientific economical and practical entrepreneurship. Is that the spirit of the 21: century self-creating, autonomous professional competence that is looked for in all the policy documents, from EU directions in Brussels to the living school curriculums in our schools?

The historical setting of cultural entrepreneurship in Cremona

Cremona as well as Milan was a generous host for our visit as a group. Visiting Cremona in reality we took the train from Milan, and where picked up by cars at the station. We were invited into the house of municipality, an ancient building beside a town square. As we sat down around a huge table in big armchairs with red velvet seats, and behind us, an enormous open fireplace covering half of the long wall, we began to share.

We got the story of the spirit and the intentions of the Cremona municipality to support creativity and enterprise from the input of the roots of its cultural traditions. Inspiration we were told was coming from many sources and among them the food production, the violin builders to fabrications of leather products. A creative entrepreneurial story about the brand of Piquadro, making all sorts of portfolio's, travelling and handbags touched us. They were making success with a new design brought about with the help of a collaborating process with autistic children, creating original solutions to the modern challenge of giving form to smart pockets and spaces within the bags.

After that, the most sacred rooms for violins in the world were opened for us, by one of the "old caretakers and guardians" of the museum, and we got to stand beside the real violin families of Stradivarius, hanging like tender shells or pearls of woods in glass boxes. Each day, he told us, they were taken out and played upon by the professor, and we could hear in the voice of the old man a deep love and care for these living instruments. And our story of love and care of the children as living instruments continues....

Educational Services for Children in the city of Milan

Milan has built over the years an original educational model and quality, but unfortunately, this extensive experience of teaching / learning is minimally known in theory and practice outside the borders of the enlarged city.

The current network of Nursery Schools and Kindergartens is a clear example of how the Municipal Administration, over the years, has managed to create an educational system always projected to a future improvement, with a particular attention and sensitivity to changing social conditions that have followed over the centuries.

The history of the school in Milan is very old, the first public schools were built, around the first century A.C. but in the late nineteenth century in the years when the city of Milan was under Austrian rule and control of Marshal Radetzky began the school's attention to early childhood as we know it today.

During that period, Ferrante Aporti, then director of elementary schools of Cremona, in 1829 he designed and created the Nursery of Charity, which are considered as real laboratories on the world of teaching; in Milan his pedagogical style, was widely disseminated through the creation of a number of nurseries. During the years, the experimental approach to education of Rosa and Carolina Agazzi, the innovative experience of Giuseppina Pizzigoni and the Montessori method and the influence of Reggio Emilia approach in the 70s have contributed to build a methodology that is still widely used nowadays.

Pezzi School Methodology

The pedagogical organization of the school is based on a project-methodology, where nothing is pre-planned. The teacher gives only the first input, which is then developed by the children in an autonomous and original way. The curiosities presented by the children are developed with them and transformed into other inputs, which will be the starting points to create and analyse other topics.

According to this kind of methodology, every child is an active subject of his/her evolving and pedagogical process. The child is not considered a "passive" subject, but a special human being with a unique and different way of living, learning and answering. Every project fosters the personal contribution of children who can contribute with personal ideas and mutual interaction with their peers. In this way it is possible to foster in a constructive way the discussion and the negotiation. The planning activity is considered in a perspective of cooperation, co-management and co-implementation on behalf of the children and of the adults who work "together". For this reason, the most important verb of every educational action is only one: listening (to needs, necessities, thoughts) and not speaking, explaining, conveying.

Listening is the engine of the project as it educates the children to respect the others. A project must be considered as a hypothesis, not as an obligation: the hypotheses are fundamental to spur children's attention and support their strategies without blocking them.

In the framework of a project, the teachers support the children in their desire to know and to put at stake their skills, helping them to understand in a better way the meanings of the "reality" they live in. For this reason, the teachers set the educational context and foster the children's exploration respecting their rhythms in order to define the educational processes and transfer them. In this way, the kindergarten can be for the children an "organizational support" for the information s/he acquires from the external environment and that s/he owns.

The project generally ends with a feedback of the children's experiences. This can represent the end of the year's work and the starting input for a new project for the next year.

Objective organisation

The multimedia project about cinema "Experience...pictures...multimedia", was developed, in the years 2006-2009, with a group of children (more or less 36) of the same age who participated in the activities for three years. The project involved 1 educator per every 12 children. The children participated to daily meetings of more or less two hours, in October and May.

More specifically, the project used some educational intervention schemes freely adapted from the theory of the **Mental Models**, like:

- Frame and Brain-storming: techniques of conceptual survey
- Script: helps discern if the children can understand the sequences of an event.
- Tale: to spur, reinforce and evaluate the logic-temporal skills.

Some fundamental instruments were used to mediate the monitoring process. **Conversation** in small and/or big groups is used to allow the children to exchange emo-

tions and experiences. The conversation, moreover, is for the educators an instrument of cognitive-conceptual survey about the topic/experience treated.

The analysis of the **reports** (thoughts expressed by the children and written down by the educators) detects the deep interest of the group and, in general, the logical connections (which apparently are not present), which lead to the development of the concept proposed.

Analysis of the experiences with different expressive instruments:

- Graphic – painting
- Theatre
- Physical activities
- Manipulation

Through these activities the concepts learnt are focused and made transparent.

The **systematic observation** during the free-game moments is an instrument to evaluate the *internalization* of the concepts treated and to assess the children's capacity to use spontaneously what was learnt apart from the activities guided by the educators.

These mediated monitoring instruments allow the educators to evaluate and check the development and progress of the children, changing the project if it's necessary.

“Experience...Pictures...Multimedia” – a three year project

Municipality of Milan – kindergarten G.Pezzi.

Educational project from 2006 to 2009

by Simona Gilli, Tatiana Talarico, Elena Virzi. P.O. Dott. Marco Valdemi

The 3 years project “Experience, imagine and multimedia” started after a careful observation of children's free game and the knowledge of their interest. The Educators decided to explore the animals' world, in particular, the life, the habits and the habitat of a squirrel and of a foal.

The first year finishes with a first approach to the creation of a story using the tool of a **“tale”**, created by the educators with the characters who have accompanied the children during the year. The following year we started the activities with a first approach to multimedia. The children watched a video together, made in the previous year and analyzed its components (sound, pictures, movement). Due to the children interest for the photos in the DVD, the educators proposed some activities in order to work with pictures.

“Multimedia education ... recalling and reproducing experiences and situations which then become games, speeches, comparisons, knowledge, rich representation in order to compensate the magic, stereotypes and all-absorbing effects of the current approaches”.

by D.M. June1991

First year – Pictures' activities

1. Exploring a picture.

Through a choice of a picture, and objective description of it through the spatial orientation (up and down). **“Read the images”** giving a spatial indication, allows the children not to lose any aspects of the figure, to facilitate their mental organisation.

Matteo F: We have read the images.

Matteo M: The images explain the text.

2. Creation of short tales through the pictures

The educators, in order to give to children the possibility to create stories with a logic structure, analyse together with them the components of a story: Characters who assume expressions and act – environment – time: day/night, yesterday/today/tomorrow, past/present/future. Comments from the children: Chiara B: Through pictures we can tell stories alone. Emma: We have told stories.

3. Learning about the components of a story.

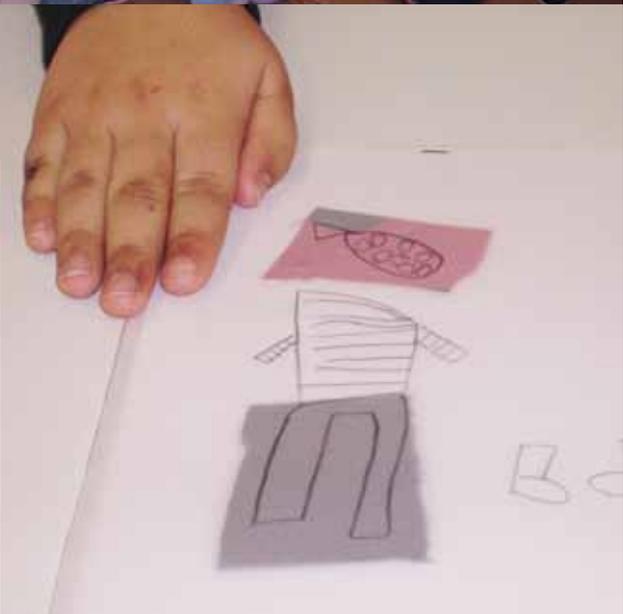
- **Observe, recognize, experiment with the expressions of the face**
- **Looking at oneself in a mirror, drawing on its surface our sad, happy, angry expression**
- **“Magic square” space in which children act inventing stories.** In the magic square, every child is free to express himself/herself in the space with and through the others, s/he is the main character and the author of the story and shares his experience with his mates. This tool has been chosen by the educators in order to understand what children want to communicate through the movement. They are free to express themselves, thanks to their imagination



Le nostre espressioni



Exploring oneself through aesthetic expressions



and without external influences. Thanks to the Magic Square, group dynamics (conflicts, aggregations, leadership..), identification abilities, respect of time, and respect of the other can emerge. These activities allow to pay attention to the “Actions” of the characters in the story. It is a technique used also last year for drafting the scripts.

- Graphic representation of his own actions, first approach to the technique of drawing

4. Analysis of feelings through the music

- **We paint blindfolded and listening to the music.** This modality helps the children to listen and to express the feelings the music arouses in them, without worrying about what they draw.
- The educators give them the freedom to say or not to say what they draw, respecting their emotional background.
- **Draw the feeling that different types of music can arouse ... happiness, sadness, fear.**
- **Talk about our fears and throw them in the “Fear bin”, after having drawn them.**

5. Construction of four sets chosen by children:

We made observation and collection of pictures and planning. We made Panels’ drawing of Africa, Space, City and Castle. We also created the weather, day and night sets with additional panels.

We face the topic of the chronological time observing some antique photos of our town and we discovered the differences. To understand the idea of the future, we watched a film about an imaginary future. During this activity children understood an important component of the film: music can arouse feelings in the audience.

Second year – storyboard

The second year we finished with the creation of four stories represented using the **story-board** technique which involved; choice of sets, invention of characters, creating a story, story dramatization, matching the music to the feelings that the facts and the characters communicate. This activity encloses all the project’s passages and laid the foundations for the approach to the cinema, a topic that we will face in the following year.

Third year – first face, exploring the possibility to make a film

During the third year, the hypothesis to make a film was born from the interest towards the narration of stories and different representations. In order to deepen the elements of a story and promoting a free interpretation of the creative thought, the educators at the beginning of the year proposed to analyse together the novel “The Wizard of Oz” written by F. Baum, adapted for the children’s age and without any pictures. The educators chose a version without pictures in order to allow children to not be influenced by the visual stereotypes leaving them free to analyze some elements (the characters, the expressive modalities) and to create something new.

Omitting the images, children have the possibility to imagine the characters, the environment in which they move etc ... it is a richness that demonstrates how the personal interpretation of the mental images and the feelings aroused by the novel allow several “different stories” of the same novel.

6. Free explorative interpretation of the story

- **Reading the book without pictures.**
- **Graphic representation of the characters imagined by the children.**

Giovanni C: We have not seen the pictures because we have invented them.
Everybody: When we read the book we invent them.

- **Comparison of the papers and conversation in a large group.**
- **Observation and comparison of kind or bad witch’s drawing.** They compare their work with those of the others, stressing the idea of free interpretation.

ED: Look at your Dorothy, are they all the same?

Tutti: No

ED: Could you describe your Dorothy?

Davide M: She has curly hair, a dress and green trousers.

Each child describes his own Dorothy

ED: Is there one correct and one wrong??

Matteo F: No

ED: Why?

Matteo: Because we have used imagination to create them.

- **Graphic representation of the witches: bad or nice, stressing in the drawing the differences.** This activity helps educators to observe that:

The bad witch is not always represented as an ugly character with black clothes; the nice witch is not always represented as a beautiful woman with soft-coloured clothes.

These are elements that typify these characters in the mind of the adult.

“The bad witch has the wrinkles when she is angry, also in the mouth and we understand why the nice witch smiles.”

“They have black clothes because they are witches, the nice one smiles, the bad one has the tooth that I don’t know how it is called”

“The bad witch has black clothes, the nice one has a blue dress”.

For the development of the story, among the different expressive possibilities, the children decided to choose the cinema even if, at the very beginning, there was a problem concerning the difference between animated moves (cartoons with drawings) and movies with real actors appeared at the beginning. This problem was solved by the educators thanks to practical tests, objective data, and DVDs which have facilitated the comprehension of the differences.

Margherita: in the cartoon people are painted, in the film they are real.

In order to develop the cinema theme the educators went with the children to the “National Museum of the Cinema”, in Turin, one of the most important and interactive. This Museum explains the birth of the cinema, its tools and elements. The



Characters and filmmaking



possibility to use special effects and sets and to discover optical effects, costumes and objects reinforced the interest of children to make a cinema project.

Third year – making the film

The third year, the project finished with the production of six short films realized by the children, in all its phases, except the editing. This has been possible because the curiosity of the children focused on the modalities and the processes of filmmaking. Children discovered that a film starts from a story (topic already treated the previous year); they proposed to “make a film” with invented stories and, in this way, they began their travel in the cinema world.

Starting from the storyboard of six novels invented by the children at the beginning of the year, it has helped the children to understand the natural and social world and to build their own identities. The temporal sequences are used to organize the familiar events, in order to elaborate the most complex notions and abilities that consist in rebuilding the past and anticipating the future.

We have explored the different components (story, scripts/dialogues, costumes, set, shooting and editing) and the professional figures for a realization of a film (producer, scriptwriter, director, costume designer, set designer, makeup artist). To remind to the children the five phases we used the fingers of the hand which, enclosed in a fist, represented the “*making*”, the editing phase.

7. Film making:

- ***We became “writers” and invented six illustrated novels.***
- ***We became “scriptwriters” and composed “the words” and the actions of the actors.***
- ***We became “costume designers” and invented/made our costumes.*** In specialized magazines we found the inspiration to create the sketch of the costumes. We took actors’ measurements, we realized their models, we basted and prepared the costumes. In the meantime another group of children prepared the accessories and the objects for the set.
- ***We became “set designers”, we decided the set.*** We decided to use three types of set. The school for indoor taping, the parks “Bosco in Città” and “Parco Ravizzaand for external taping and the green-screen for special shootings.
- ***We become “actors”.*** After having learnt the script and put on the costumes, we began the film shooting.
- ***We became assistants to the editing*** discovering how the shootings become a movie.



A house of Creation

SUMMARY

*– The alfa-omega relation,
the beginning of the book
is the end...*

With these words we invite you to, after the last paragraphs in this summary, to go back to the beginning, to our introduction, which is actually part of the summary. If you have not yet read the whole introduction, you might want to start there before reading this last part here. We also hope that the reading of the whole book will give birth to new cycles of inquiry for all of us.

Sharing of knowledge – our transformative cycle

The meeting and learning arena created in the Milan conference (see photo Conference of Milan) gave us the opportunity to share knowledge framed by our emerging analytical framework combined with presentations from staff and teachers from the different examples. This is where we could recognise in our own transformative cycle that the examples had started to talk to us, and help us release some of the old understandings. New connections between creativity, enterprise and how one can organise learning environment, activities, relations and involvement had started to emerge, as well as the understandings of the difficulties and challenges connected to them. Re-configurations in our collective understandings was beginning to help us to support each other in dialoguing our way into validating and forming our new attitudes and approaches, as well as questions. We worked hands on in explorative processes in the room through a creative process led by some cultural pedagogues. The extraordinary experience of the conference hall - an open space that was rearranged for different activities and illuminated on all four walls - gave us a very special environmental setting to explore this together. We were creatively experiencing how we could build our own learning power together to keep reorganising our educational activities and settings in our own countries. One could say that we also simultaneously started our "summary face" of gathering and conserving our new understanding and ways of doing things. We started to get an understanding about what was driving the combinations of old and new teaching- and learning methods as well as different strategies. Sometimes even a sense of a sustainable and resilient continuity was discernable.

At the conference in Söderhamn we closed the dialogues in a creative way, making a kind artistically pictorial summary, gathered in a long, long book (see photo Conference of Söderhamn). Personally I had a vision of the educational culture actually becoming an intimate, full hearted and meaningful part of the human experience



of living one's "whole book of life". This last face of our learning journey starts nurturing the conserving part of our transformative cycle where we are giving our understanding and experience a physical and structural form in this handbook.

Bengt adds to this saying that there has been a long journey and some of us did even jump of on the way. "It was complex and sometimes difficult to find the right means of locomotion to travel with. But I realize that some of the aggravating blindness was due to the fact that you are always swimming in your own waters or we cannot understand another way of swimming in someone else's. And inviting each other into our different ways of swimming in our lakes and pools have made us see both our own and others use of waters in a new way, as well as a new horizon at the sea. That was the richness we hoped to offer in these stories. Different streams running towards a multiple horizontal view, telling us more about how historically and culturally complex education is, and how the sun that sets in every example sheds it's own and specific light on that".

The teacher student relationship

In the examples and in our dialogues the topic of the teacher and the teacher-student relationship emphasised that teachers as well as students need to use their own starting points in relation to visions, learning aims and governing principles, and to be constant learners in a long term, contextual and open-ended learning process and culture. One corner stone is to have confidence grow. That happens in the connection between one's own motivation and inner starting points, in relation to experiences that create the ambience and a feeling of being comfortable in a concrete challenge. In other words an affirmative validation of the own risk-taking, where daring to make mistakes, as well as to express one's own individuality is one side. Curious and spontaneous exploration and "inventions" of one self, the others, environment and different forms of knowledge in different contextual frames is the other.

This is a very different dynamic quality of learning activity and of teaching processes, than what is happening in a school culture that is reduced to transmitting the known and to test and produce verification of pre-set objectives. In a receptive-creative and actively enterprising learning culture, all that we know and want the educational system to deliver in forms of objectified modules of knowledge, is a living material mediating and adopted into the pro-creative knowledge and skill-producing process that also make things happen in real life.

This seems to be one way that entrepreneurial as well as creative competencies can be trained as part of being experienced in different contextual settings. To grow multiple connections to "knowing thy self and the vision" in relation to others and learning is a crucial part of building a supportive base in the learning culture. It contains in an intrinsic way all the "operational imperatives" I do, I can, I dare, I adapt and I innovate.

Expanded view of cognition and the artful ways of learning

Many of the examples use different forms of artistic or art-based processes to promote enterprising and creative competences. Or they use all the senses in artful ways to inquire with depth into the world of phenomena, using multimodal and varied forms of expressions to mediate and get a grip of the new understanding. Dewey

(2005) and Eisner (2002) both explore the nature of learning and therefore cognition in relation to art processes. An organic interplay that involves; all the senses, the intelligence of emotion, mind, body and spirit, materials, the environment and others are included in understanding the nature of learning. From a purely cognitive and learning point of view, according to Dr. Maria Montessori:

...artistic activity is a form of reasoning, in which perceiving and thinking are indivisibly intertwined. A person who paints, writes, composes, dances ... thinks with his sense...[but] genuine art work requires organization which involves many and perhaps all of the cognitive operations known from theoretical thinking (in Eisner, 2002, p.)

This implies that the notion of cognition might need to be widened and deepened to be able to conclude this understanding of the nature of learning. It is interesting to start to inquire into the connections between the dispositions and learning qualities that is promoted by learning by creating in an artistic process, and the competencies that are sought out to be developed in entrepreneurial learning.

To build a culture of "learning and creating" power

In these stories learning power involves the power (a generative dynamic) to participate with depth and influence in all the different levels of the learning culture. For that to happen it is essential to be involved with all aspects (mental, emotional, physical, energetic and existential) and to use the meta-cognitive conscious reflection in thinking and in action. The power to be co-creating includes to use the rational and strategically within the intuitive and to train the "serendipity-muscles" that generates connections between opportunities, chance, the unknown and the realization of curricula, dreams and visions with a high presence of synchronicity.

Another crucial insight is that different professional roles on the different levels in the overall learning culture are agents for the whole culture. Therefore the long term resilient renewal and transformative quality of the learning culture is dependent on the depth of participation of all participants, because it equals the depth of the quality of co-empowerment. That means to initiate participation on equal terms no matter the different position or level of wisdom in a learning culture. Several teachers and staff express that they can only participate in this kind of process by doing themselves, what they want to make happen. It seems that one has to embody and simultaneously learn, to be able to initiate the agent of change one is seeking.

In other words, building "learning and creating" power into the culture is profoundly connected to the ability to share power in a status-flexible (Johnstone, 1985) ways, as well as operate dynamically rather than dualistically polarizing. This is important perspective's that supports why the co-empowering and actively enterprising as well as receptive-creative relationship between teacher and student is so crucial in all the examples. Also why the involvement between all kinds of traditionally hierarchical positions need to be understood "panarchically". This turning point has been expressed with words like. "Everyone needs to be leader & this needs to be embedded within curricula - teacher must facilitate this carefully". Teacher and students can be seen as co-workers. This has been explored as letting go of control as a teacher through learning to supportively and creatively organise and structure contextual learning journeys that can contain the process driven by inner motivation and spontaneity.

Practical application in learning activities and environment

Almost all examples seem to make these new relationships and dynamics manifest in different forms of contextual learning that has continuity - learning journeys and themes. They differ in length from a day, a week up to three years as in the Italian example. Another important feature is that they, in systematic and strategic ways, can incorporate subject matters and different educational learning aims. They do that in a co-empowering, teambuilding and networking process with the world outside the educational institution as well within it, which allow the educational learning culture to be inspired by the creative regimes in other professional cultures. That seem to procreate the deep participation and more profound learning qualities aimed for in all participants. This in turn helps create a base for embedding the use of creativity and enterprise. All examples use both the artistic expressive, scientifically inquiring and socially relational mind, in very practically informed and playful processes that use the outer environment consciously in different ways.

The learning situations are designed to carry clear intentions of learning but allowing for the curricula to "happen" in a dynamic interplay of spontaneity and persistence exercise, including individual, collective and contextual interactions. Historically embedded strategies of outer disciplining to motivate learning of both individually, practically and professionally de-contextualized pieces of knowledge are abandoned. New strategies of education are elaborated with that support self-motivated organisation, carried by inner interest and desires. This mobilising driving force is put in use and creatively challenged rather than assigned, to perform in situations that contextualize the personal, professional/vocational and wider educational purposes in meaningful and practically experiential ways. It is combined with formative assessment.

Cultural embedding

In the Söderhamn example we can see the beneficial impact on the educational setting when it is driven by clear and all permeating vision, situated in a surrounding local, municipal and regional world of equal involvement. When the level of the municipality and region are getting involved, in the transparency and conscious interconnected dynamic of sharing and participation from their role, learning starts to involve the creative enterprise of building a sustainable situated future. All the examples seem to be able to build the same strong integrity and vision-driven creative learning culture within their scale of influence, for example the municipality, a network of schools or pre-schools, the school or pre-school entity.

It is in relation to the grand scale levels in the "panarchy" of the educational learning culture that many of the difficult challenges occur (once the inner challenges are started to be involved and met in a dynamic and vitalizing process). The levels set up conditioning framing factors emerging from state institution and political powers. The clashes between outer governing principles of evaluation, assessment and school politics are becoming even more poignant, when the local and municipal level actually starts to support the transformative initiatives in the school (and the conditions to operate in the ways described in the examples, we have heard by word of mouth, is getting more and more restricted, as we write).

This is also touched upon by the ILE network and the OECD research programme. They identify it as a "Big Gap" (Dumont et al, 2010, ILE, 2012) between educational research and praxis on the one hand and the educational policies in relation to both educational research and praxis on the other. We would also suggest that the most destructive gap is the lack of interconnection between renewal and continuity in the educational system as a whole. We identify that this is mostly driven by the quickly changing political trends and different status-fixated power games. This creates swings between dualistic polarizations that shallows and reduces the learning and the culture. This instead of a deepening dynamic of learning and continuity that can experiment with the new without reducing the sustainable complexity of opportunities, and it's vitalizing inter-dynamic interchange between wisdom and novelty. This is how change can be contained and used as an agent to build resilience, resourcefulness, reliability, reflectiveness and reciprocity.

In the English examples, Creative Partnerships is a very advanced institutionalisation of a new and autonomous form of professional interchange that has invigorated the school and educational culture, as well as the entrepreneurial competencies in a wider sense. The political decision to stop the funding for their work could be interpreted as an "abortion" of a new and potent body of knowledge in praxis that could have helped make creativity and enterprise operational on an educational as well a societal level. It was also a wide internationally spreading role model that could have helped to inform many. In this case the benefits were shown in evidence in research and manifested in statistical figures of surplus of working opportunities and economical growth. According to Price Waterhouse Cooper every pound spent on the creative partnerships programme has produced another 14 pounds.

In the global research perspective if represented by Ann Bamford (2006)¹ it is proved that the impact of the arts in education is extensive, given that it is conducted with a certain level of professional quality (as in the case with Creative Partnership and the artistic processes that the Swedish and Italian examples are developing). The transmitting cross-roads between art, creativity and entrepreneurial enterprise is showing its limited but clear contours in this hand-book. The conclusion from the above indicia reinforce the insight that there is widening gap between the political policy makers and the educational both practise and research.

Overall strategies for embedding a culture of creativity and enterprise into the curriculum

Macro and meso levels

- Having a living and formulated vision, fuelled by personal engagement, action and perseverance that permeates the whole organisation and culture of learning
- Investments in long-term educational strategies, courses and sharing of knowledge that educate all staff and the organisations to build a transparent and explicit communal container of sustainable experiment, dialogue and praxis
- Cultivating a "panarchical" conscious structure and culture of organisation, rather than traditionally hierarchical, that can handle the cross-scale and dynamic nature of transformative between different actors and levels of organisational learning communities

¹ Here you can read in her book *The wow-factor*: <http://www.e-cademic.de/data/ebooks/extracts/9783830916178.pdf>

- Cultivating resilient - long term sustainable developmental - strategies. Building on what exist, yet experimenting with consciously evolving things on a scale - personally and collectively - that is challenging behaviours, attitudes and approaches in a creative way, without adventuring the whole stability
- Cultivating opportunities, manifold and serendipity to harvest synergies
- Cultivate a pro-creating rather than reactive-responsive orientation in the culture. Incorporating changes, challenges and difficulties as a means to actualize the vision, rather than focusing on solving problems, conditioned by the paradigm that created them
- Develop tolerance, support and understanding about individuals and groups differentiated and dispersed evolving paces. Allowing personal engagement as well as a step-by-step enfoldment of change and growth

Intentions and Means on meso, micro and atomic level

- To create contextual learning
- To create deep learning processes
- To make meta-cognitive competences made explicit and embedded
- To develop strategic and systematic tools and structures that incorporate means to device and evaluate
- To create cohesive learning journeys that thematically hold together and contextualise, subject matters and learning goals, making the curricula happening in creative and enterprising ways
- To use the "learning for real quality with imagination". To create a concrete result for a real and meaningful end, are two determining factors
- Make the outdoor environment, the city, different actors and the rest of the world, part of a "living expanded classroom" and relational context that incorporates the learning processes and the school culture into the bloodstream of life and a changing world
- Use holistic, multimodal, creative and explorative inquiry and multi-tasking
- Using the artistic, inquiring and artisan mind, heart and body in practical application of knowledge making

To develop new teacher strategies through:

- Use a willingness to see through the personal perceptual constructions, and the habitual mental assumptions and understanding as grown ups. To raise consciousness about how one interprets others and see the world. Learn how to identify and break the patterns of being a possible inheritor of a teaching culture that operates from past conditionings. This to be able to create a genuine and receptive rapport with the children's assembling points of view. To be able to meet their starting point as a guiding and driving force that confidently affirms and creates challenging stretches. To guide them by the adult deeper perspective of life experience, without moulding them into ready made solutions and answers, but rather co-creating innovative reconfigurations of knowledge, of the understanding of the world, oneself and others in it.

- A teacher capacity to use an attitude and approach of co-creating learning with student and the environment, with a creative and enterprising leadership
- To use deep listening, improvisational skills and the self as an engaged interacting instrument
- To change perspective on the relationship between motivation and discipline
- Develop a manifold knowledge base that understands organise the learning situations and journey from these new criteria's, and to use almost any situation as learning situation
- To support the intuitive over-all operational focus with analytical reflection and systematic strategies in a shared transparent culture of learning colleagues
- Be able to use the help of creative structures, structuring dramaturgies, rules of engagement that allows for co-empowering and holistic oriented participation that invites the use of all senses in a multi-cognitive dynamic and organic creativity
- To catalyze by being and doing what you want to make happen

Develop new pupil roles through:

- Trusting and allowing pupils interest, inner motivation, dreams and passions to be a leading driving force for learning, supported by creative and enterprising strategies
- Trust the personal and subjective experience and world of meaning of the learner, using the connection to inner motivation, interest, meaning and purpose as a motor and driving force that is directed and engaged into learning journeys, which draw the subject and learning aims indirectly into a contextualised process of learning that can result in both performed and formulated understanding.
- Trusting children's natural attention and attraction to nature and the outdoors environment as a driving force. Intimately connecting it to emotions, feelings and curiosity of experiencing with all senses the everyday surroundings as a way of being and to learn relationally to one self, others and the world
- Create intentional changes of rhetorical viewpoints and use of new discourse, like pupils and teachers being co-creators, like pupils being the protagonist in their own learning journey
- Allow and support pupils responsibility and deep participation, also through consciously letting them take part in designing the rules of engagement
- Support meta-cognitive strategies to consciously learn how to learn
- Let pupils "build learning power", "seize the knowledge of learning" by becoming resilient, resourceful, responsible, reflective and reciprocal
- Help student develop professional attitudes in their own learning in the direction of lifelong learning
- Support pupils learning by teaching

- Support pupils learning by co-create and collaborate
- Allow pupils to build up internal entrepreneurship to make external entrepreneurship
- Allow and support the children to become entrepreneurs within their own lives
- Support deep meaningfulness that is generated by real life connected concrete learning goals that generate practicing skills and self-organised attraction to learn which can include different subject matter knowledge

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