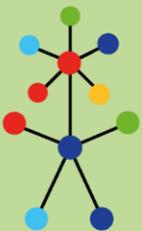
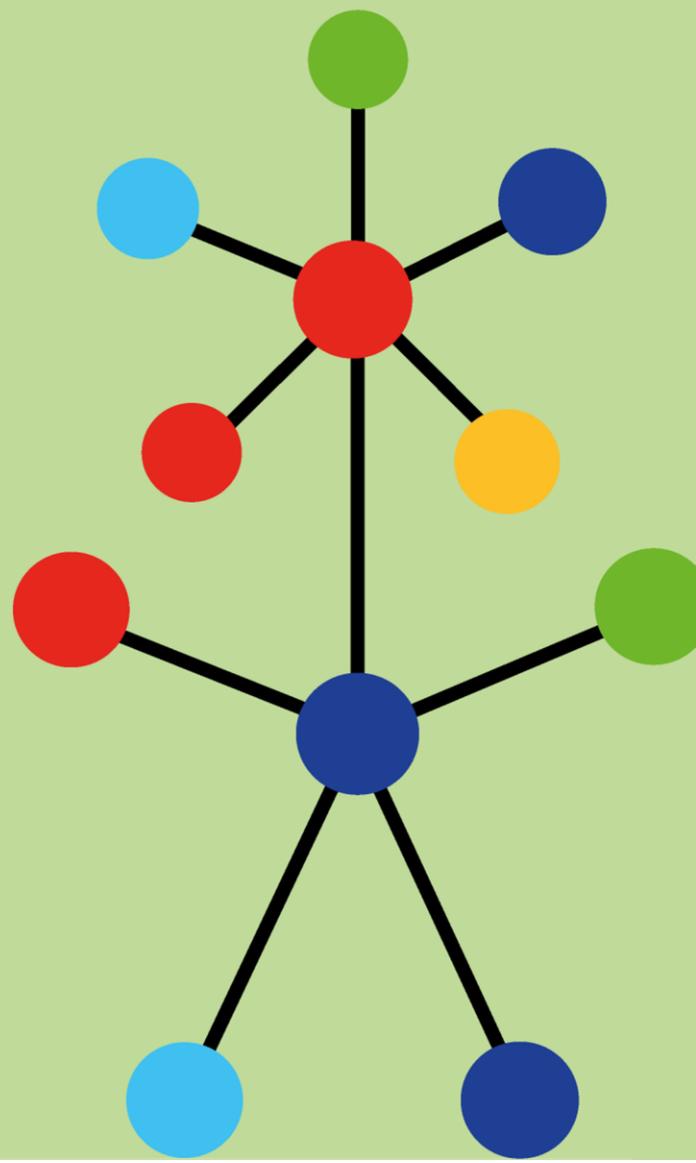


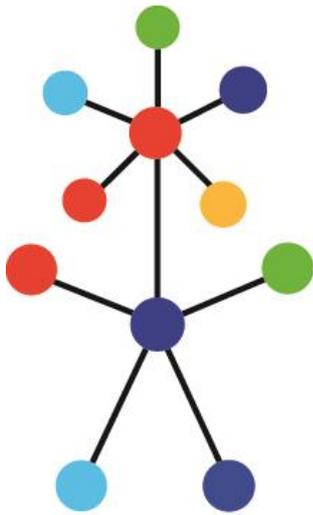
A curious traveller's tale of the development of the methodological framework



EFFeCT

European Methodological
Framework for Facilitating Teachers'
Collaborative Learning

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Framework for Facilitating Teachers'
Collaborative Learning

Final publication of the EFFeCT project on collaborative teacher learning involving 6 countries: Hungary, Finland, Latvia, the Czech Republic, United Kingdom, Ireland

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Foreword

DEAR READER,

The paper you are reading can be regarded as the final publication of a project entitled **European Methodological Framework for Facilitating Teachers' Collaborative Learning** (EFFeCT project), launched in 2015, finalized in 2018 and supported by the European Commission.

The EFFeCT project partners were involved in the two and a half year long collaborative research process based in six European countries (Czech Republic, Finland, Hungary, Ireland, Latvia, and United Kingdom) and they have sound experience in the field of education. The majority have practical experience working in schools or educational/related institutions (from early years of education to postgraduate and doctoral levels), and all have or have had a management function in a variety of fields, as heads of curriculum subjects, heads or principals of schools, of faculties, of district or national bodies or government background institutions.

The project started with us finding our common language, followed by sharing and accepting of our different beliefs and knowledge about collaborative teacher learning (CTL). Then we laid down the principles of CTL, which was experimental in practice, and finally, based on these experiences, we did immense amounts of work in the interpretation and conclusion of the results both in scientific and practical fields.

This is an unusual report, as the research and writing process itself were unusual. This paper is a kind of storytelling rather than a scientific or synthetic paper based on the partners' reports and publications, and in line with the author's intention. Glynn KIRKHAM, the representative of the Czech partner, undertook the challenge of unravelling the secrets of CTL and he then put together the pieces of the puzzle from all the results coming from four pilot programmes, from hundreds of written outcomes of the EFFeCT project provided by the six partner countries. He also launched the partners' experiences and the project conclusions to the wider audience. I would like to express my sincere gratitude to all contributors, and a special thanks to Glynn, who chose this form and who is the co-author and editor of this publication. All the other authors' publications are available on the EFFeCT portal in their original form. All in all, this is a special tale with a mix of a little bit of science, some practical content and heaps of inspiration.

Every tale is supposed to have a moral and as tales and storytelling can be used for edification our learning process should also have an exciting story which is worth telling the others. This publication seeks to develop a serious message, although it comes from the mouth of a curious young child, and this, not surprisingly, is proved to be very useful in terms of problem solving and the gaining of insights in the business world or in organisational (e.g. school) development as well.

This story is about the performance of an international team who took part in the process of ‘co-operation’ in their own context. Our journey was comprehensive, but nuanced to cater for individual differences, providing users with opportunities to raise questions, debate and create their own contribution to the process. Such an undertaking will always be a ‘work in progress’ no ‘definitive’ results are ever carved in stone.

There were lots of results, and probably the most important is the learning experience of the pilot programmes’ participants, but the newly produced publications of the partner countries’ experts are just as important as our elaborated portal (www.effect.tka.hu) which we call European Methodological Framework for Collaborative Teacher Learning, and on which the consortium has arranged and published all the project outcomes. The use of the website is very simple, the contents, under a rainbow design, are interconnected, allowing users to start the learning process from wherever they are, - just as in good tales – to find the most important ideas, tools, or inspiration to develop their knowledge and skills of collaborative learning according to their personal learning needs.

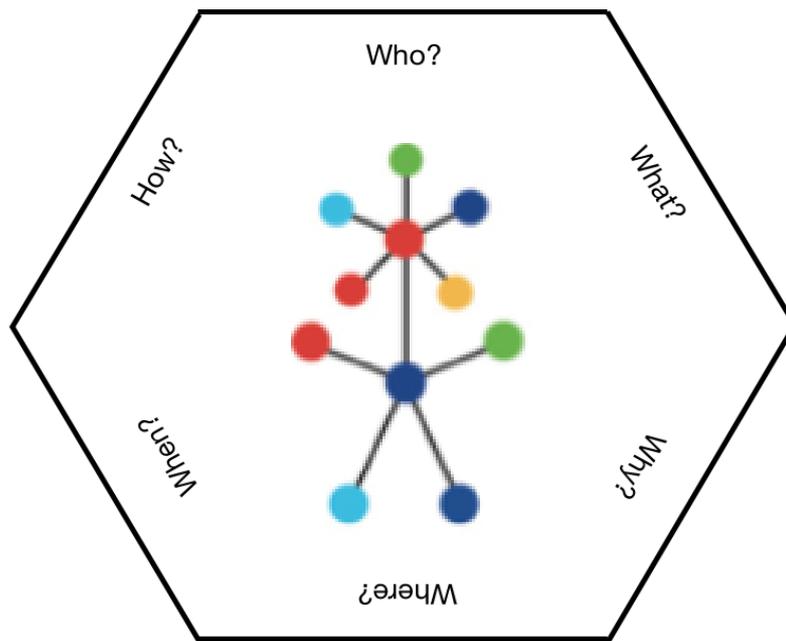
This tale is a *Curious Traveller’s Tale*, and we hope that that will soon be you, dear Reader! Discover the variety of knowledge on the colourful [EFFeCT portal](#), where you will find scientific articles, case studies, practical tools and their reports and guidelines for facilitators of CTL. We wish you an exciting journey!

Eszter SZEGEDI, project leader

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Introduction



I Keep six honest serving-men:

(They taught me all I knew)

Their names are What and Where and When

And How and Why and Who.

I send them over land and sea,

I send them east and west;

But after they have worked for me,

I give them all a rest.

from "The Elephant's Child" in the Rudyard Kipling, (1902) 'Just-so Stories'

It is suggested (http://www.kiplingsociety.co.uk/rg_elephantschild1.htm) that Kipling may have been aware of the Latin epigram found in the 14th century Register of Daniel Rough, Clerk of Romney, Kent in England.

"Si sapiens fore vis sex servus qui tibi mango

Quid dicas et ubi, de quo, cur, quomodo, quando."

If you wish to be wise, I commend to you six servants,

Ask what, where, about what, why, how, when

Whatever the source of the maxim, in the story of the Elephant's Child, the young animal was - like all young children - filled with " 'satiableness'"¹ or, more accurately in plain English, "insatiable curiosity", a never-satisfied inquisitiveness, an unending desire to know more and more about the world of which it was a part. As a consequence of its adventurous exploration of the world, Kipling implies to his readership, that the young elephant came to be as we see elephants today.

Perhaps, it was the same " 'satiableness'" which brought together the six partner countries involved in the EFFeCT project. Those six questioning words will also frame the content of this contribution which relates the development of a methodological framework for collaborative teacher learning. The six interrogative words (Who? What? Why? Where? When? and How?) act as anchors in defining the concept and the practice of collaborative teacher learning. They also serve as significant to the processing of the methodological framework.

¹ Curt" means "short" or "brief" as the six questioning words are and thus Kipling had playfully linked the words 'curiosity' and 'curt' to create 'curtiosity'.

1 What is the EFFeCT project about?

The abbreviation, 'EFFeCT', stands for the Erasmus + funded project entitled, 'European Methodological Framework for Facilitating Collaborative Learning for Teachers'. The goal of the project was to design a methodological framework and to disseminate the same by means of an e-publication on which teachers' professional collaborative learning might be initiated and then might be built.

Amongst its definitions, the publishing group, IGI Global Group, (<https://www.igi-global.com/dictionary/methodological-framework/18485>) presents just two facets of methodological frameworks. The first is that it is an "approach for making explicit and structuring how a given task is performed". The second indicates that it is a "set of structured principles". The goal of these principles is to give foundational guidance to programme designers.

"What is a methodological framework?"

1. (An) approach for making explicit and structuring how a given task is performed.
2. Set of structured principles ... that lay the foundation for the inception of education modules supported by online pedagogy elements linked to innovative teaching methodologies. Its goal is to bring some contributions to those who are in charge of course design, providing useful insights to improve active technology enhanced collaborative learning in similar environments."

The first definition is relevant to the EFFeCT project in that it is a description of the process: the story. The latter definition also clearly sits well with the goals of the EFFeCT project, particularly in terms of any reference to collaborative teacher learning (CTL).

Why do we need a methodological framework?

In any competitive environment found in enterprises in the private sector and increasingly in the public sector, an organisation's success depends heavily not only on the nature of the work and the funds invested and available but more and more on effective and efficient management knowledge of and management of a human capital and also of elements which are available in the virtual world, (that is, the "weightless wealth" described by Adriessen and Tissen, 2000).

In response to an apparent gap in the field of knowledge management, a methodological framework for the explicit management of knowledge was developed through collaboration between researchers in Sweden and Brazil (Andrade et al., 2011). They claim that this established "a formal basis for achieving an increased level of detail". They suggest (op. cit.) that they identified "all the conceptual elements needed for understanding and representing the knowledge of any domain". They found that **when basing the process on various descriptive characteristics of effective good practice**, the "development of (the) systems could be guided more effectively".

Thus, a methodological framework provides the skeleton: the rationale, principles, structure and guidelines to enable successful replication of a process to achieve a desired or desirable product, which, in terms of the EFFECT project, is collaborative teacher learning.

Who was involved?

Experienced educators and key players from the following institutions were involved in the project partnership: Tempus Public Foundation, Hungary - Co-ordinator; Faculty of Education, University of Jyväskylä, Finland; Valsts izglītības satura centrs (NCfE), Latvia; NIDV Národní ústřední ústav pro vzdělávání, the Czech Republic, University of Hertfordshire, England; Mary Immaculate College, Ireland

During the course of the thirty months long project, several hundred individuals were involved including representatives from ministries of education, higher education, NGOs, policy-makers, headteachers and teachers, all of whom provided or contributed to the case studies of good practice, participated in the piloting of a draft methodological framework, in national workshops, in discussion, in evaluation and in dissemination.

The focus for our collaboration was the phenomenon of collaborative teacher learning and the potential for a methodological framework to be derived from an examination of good practice and relevant academic research.

One important factor in the collaborative activity of the project is the development of a shared understanding of concepts and a common language. The three terms (that is, 'collaboration', 'teacher' and 'learning') need to be commonly understood. We start with the last.

What is learning?

There are a myriad of well-researched and other more contemplative texts exploring this question and time and space does not allow more than an operating definition of the concept here. Learning leads to a change in how we perceive, how we interpret the world (including one's self) and how we act. Learning arises from reflection on direct and indirect experience; it has both cognitive and affective aspects. It is recognised that learning is necessarily an individual process of aggregation and alteration and has many variables and determiners. Further, it is agreed that learning leads to a change in attitude or behaviour and thus learning can be either invisible or observable. The phenomenon is explored more in the chapter, "What is CTL?"

What is a teacher?

For operational purposes, it was agreed that the term, 'teacher', would include those who are employed, as their main role, to teach others in a formal education context, such as at a school or other place of initial formal education or training. It includes those with formal qualifications as a teacher and those others less qualified who are recognised as contributing to facilitating

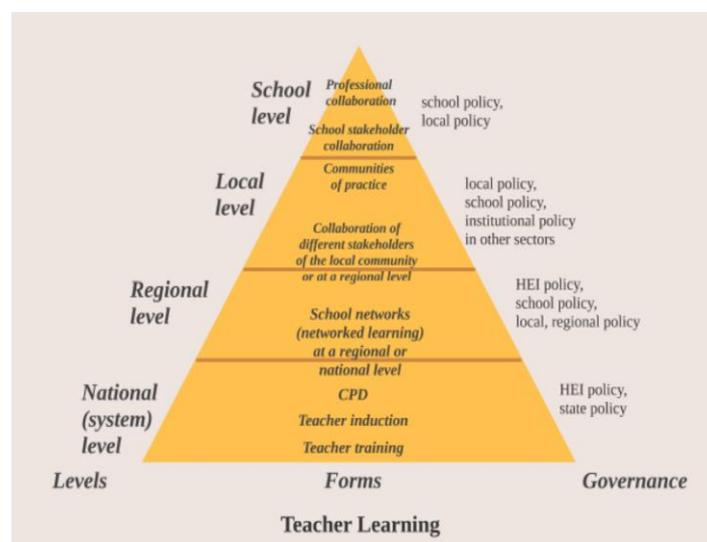
the learning of students (and others, including colleagues) at any level. The generic term, 'educator' is appropriate here.

What is teacher learning?

Again, there are literally thousands of texts addressing this question but teacher learning is, necessarily, related to the individual as a member of a distinct profession.

Some of the forms and influences on how teacher learning might be conceived even in an experiential hierarchy within particular contexts was developed as a starting point for the EFFECT project partners to consider.

The model below indicates one conception of a hierarchy of teacher learning and some influences.



What is collaborative teacher learning?

In a carefully-crafted chapter on 'Constructing Knowledge Together', Dooly (2008:21) recognises some similarities but highlights the clear difference between co-operative and collaborative learning among students. She declares that, "collaboration is more than co-operation. Collaboration entails the whole process of learning. This may include students teaching one another, students teaching the teacher, and of course the teacher teaching the students, too." She asserts that, "Collaborative learning requires working together toward a common goal." Whereas, "co-operative learning is a process meant to facilitate the accomplishment of a specific end product through people working together in groups. ... in the co-operative model of learning, the teachers still controls most of what is going on in the class, even if the students are working in groups. Collaborative learning, on the other hand, is aimed at getting the students" (here we would also include teachers and headteachers as learners) "to take almost full responsibility for working together, building knowledge together, changing and evolving together and, of course, improving together. ..."

Concerning the professional learning and collaboration of teacher, Bell (2016:27) -derived from the literature- searched for his doctoral thesis the following definition of collaboration, “working together, towards a shared vision of purpose and outcome for personal, professional or system-wide benefit.”

The operational definition derived from initial discussions among project partners and on which piloted activity was based is as follows: “teachers working together through purposeful processes of interaction intended to advance teachers’ learning”.²

Collaborative teacher learning comes about as a role-dependent activity. Professional learning is purposeful and personal.³ That is not to say, however, that two or more teachers cannot learn the same lesson about, for example, what might be an enabler of professional understanding or an innovation in practice. It is to recognise what they might do with that learning. As Tam (2015) detected, three patterns emerge: change in practice but not in belief, change in belief but not in practice, change in practice and belief.

Collaborative teacher learning is teachers working together, purposefully interacting and is intended to advance teachers’ learning, based on participative and inclusive values and with a commitment to co-construction of professionally-related concepts and ways of understanding and of practising their profession.

All of this takes place within a set of jointly-agreed and commonly-held professional values and identified principles derived from analysis of good practice. Each of the partner countries had identified what might be agreed as examples of good collaborative teacher learning at national, regional and local levels. These examples were shared between the partners and analysed for commonalities seeking in the words of Argyris and Schon (1978: 317), “to name, frame, group, and describe the phenomena.”

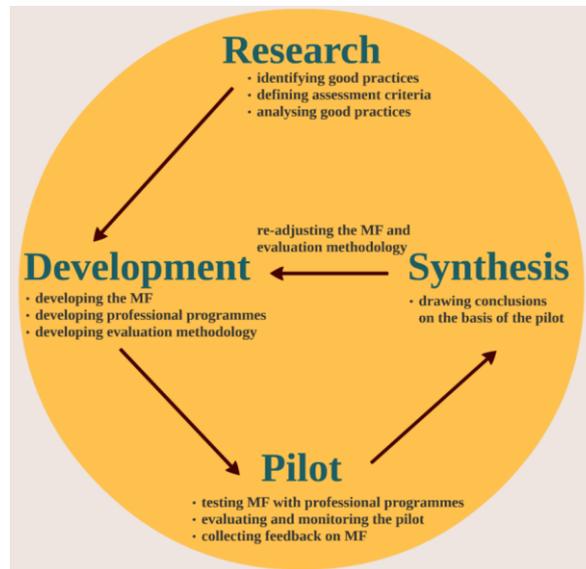
² Researchers interested in the field should read an excellent review of the literature by Vangrieken et al. (2015)

³ Those related to teachers might suggest that it is not possible to separate out the teacher as a person from the teacher as a professional. “When will you stop being a teacher?”

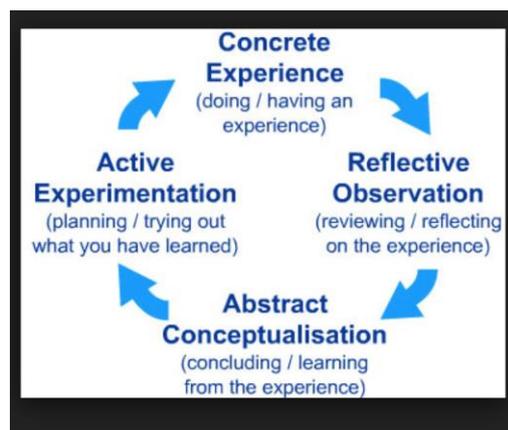
2 How was the project to be carried out and who was to do what?

The model below shows the original representation of the process on which the final methodological framework was to be developed and built

Figure 2 The development cycle



In essence, owing to its cyclical nature the model above is very much one based on action research (Kemmis & McTaggart, 1982) or Participatory Action Learning and Action Research - PALAR - (Zuber-Skerritt 2002) but, due to the composition of the membership of the group and the nature of the issue under the lens, its development soon became more a participatory (Bergold & Thomas, 2012), action or a learning science (Argyris & Schon, 1985) approach following a Kolbian (1984) cycle.



Kolb's (1984) Experiential Learning Cycle

At each stage reference was made to both internal and external data, thus, the process looked outwards for information as well as inwards; aggregating knowledge and questioning understanding.

Who did what?

As in any project, plans were set to maximise the efficiency of the activities and to make the best use of those involved. That is not to say that the roles were not potentially interchangeable, they were, but that activities and accountability for their completion were to be allocated to institutions. Clearly, for partnerships to be effective in any enterprise, roles and responsibilities need to be clear with co-operative understanding and empathy as givens.

When did the project take place?

The project took place in and between the six countries for the two and a half years' between November 2015 and April 2018. Following the initial meeting in Hungary, there were three further partnership meeting and three bi-lateral meetings. The timing of activities relating to piloting the draft methodological framework was determined by both the schedule and timeframe of the project and local conditions.

Why were bi-lateral meetings built into the project?

The bi-lateral meetings enabled various partners to observe the pilot programmes and workshops in practice and thus to act as 'critical friends' in discussions in the piloting countries about the development of the methodological framework. Together with the reports of host country evaluators, the contributions of the bilateral partners gave a non-partisan but informed view of the piloting process. Such criticality is essential in the development of collaborative learning and practice between professionals.

Examples of educators' professional collaborative engagement identified as good practice were collected for analysis. The foci of such recognised good practice included:

| Focus | Focus |
|--|--|
| Activity-Centred Education | Education for Democracy |
| Headteacher & Leadership Development | Languages' Teaching: Content and Language Integrated Learning CLIL |
| Literacy Combatting Social Deprivation | Peer Group Mentoring |
| Raising Student Achievement University Schools Network | Teacher Learning Communities & Networks |
| Unity Network Higher Education | Working with the Community |

Four dominant elements emerged from this analysis: participative professionalism, deep level collaboration, equity, and deep learning. These and their component aspects are shown below.

| Element | Aspect |
|--------------------------------------|--|
| Participative professionalism | De-centred agency / distributed leadership |
| | CTL is an expression of participative professionalism - active involvement |
| Deep level collaboration | Structural framing of collaboration: |
| | Institutional |
| | Cultural |
| | Social |
| | The role of senior leadership |
| Equity | The overt purpose of equity is to address inequalities between areas, schools and students |
| | Inequities in teacher opportunities or relationships are addressed |
| | Inequities in teacher opportunities or relationships are recognised |
| | Participative and cultural justice is claimed to be strong |
| | Open to everyone |
| | The process of collaboration leads to more equal relationships |
| | Includes non-teachers |
| | Better community relationships and civic engagement |
| | Transforming dialogue in the contexts of division and conflict |
| Deep learning | Construction of Individual's Professional identity |
| | Construction of professional identity as a Collective |
| | Reframing concepts and understanding |
| | Institutional or community socialisation |

| | |
|--|--|
| | Emotional learning |
| | Strengthening of professionalism and expertise |

Why collaborative teacher learning?

Collaboration is recognised as a valuable activity (not only based on organisational theory) and, in some countries, by legislation, but it is also good practice in order to maximise one's own learning. For teachers⁴ and other educators, collaboration within schools and between schools locally, regionally and nationally (and, today, often internationally) can lead to enhanced professional learning, practice and professional identity. It is also an example of teachers modelling for students' good social learning practice.

As one of the recognised, central 21st century 4Cs (critical thinking, communication, collaboration, and creativity⁵ - see <http://www.nea.org/assets/docs/A-Guide-to-Four-Cs.pdf>), *collaboration* is seen as a key skill for all. The four skills combined might perhaps be seen as fundamental for survival. They are seated within the concept of lifelong learning. As recognised and system-established facilitators of learning, teachers and other educators need to model the acquisition of these skills. This could be seen as part of how we define teachers as professionals. It is a professional and contractual requirement in some countries that teachers engage in continual professional development or continuous professional learning. The nature of the development⁶ or learning is often not prescribed nor necessarily based on any needs' analysis. Funding availability rather than the needs of the individual teacher or teachers in a school may be the driver to determine what the teacher may pursue.

From the examples of good practice in each of the countries involved in the EFFeCT project and from the outcomes of the piloting and the workshops in relation to the draft methodological framework, it is clear that when teachers come together (or are brought together as those having a common role), they evolve a professional ethos with a great desire to go beyond their isolated or individual needs, and support and challenge one another in order to achieve solutions to determined set of circumstances. They tell their own stories but listen with genuine interest to the stories of others often asking deep and penetrating questions. They are genuinely interested in and sometimes surprised by the situations and contexts in which their fellow educators find themselves. They make use of their experience as educators and as human beings – no matter how great or little - to reflect upon and then share how best to resolve complex situations. Some solu-

⁴ Under the term, 'teacher' shall also be assumed the role of 'headteacher', which in many (though not all jurisdictions) may only be held by a qualified teacher and may also have contractual obligations to teach. Further, collaboration within and between schools may be facilitated through that role.

⁵ Along with a fifth C (and possibly a 6th C), these are explored a little further in Annex A of this section.

⁶ Although there can be self-development, development is normally done **to** the individual or **for** the benefit of the individual whereas learning is done **by** the individual.

tions proffered are seen as creative and innovative but such descriptions are dependent upon the history, context and culture of the recipient and of the 'profferer'.

The vast majority of teachers (and other educators) practise in isolation, that is, one teacher and a number of students within an enclosed space. Teachers' time for dedicated professional learning is limited. Their primary role is the facilitation of the learning of their students. In order to carry out their role as professional educators, teachers need to keep up-to-date with developments and research in their own fields or disciplines, and in the pedagogy of these. As practising professionals, they seek to meet the needs of their clients (the students) by devising plans for learning, implementing these, reflecting upon the implementation, reviewing and revising for future action.

As professionals, teachers recognise that there is not only a body of knowledge in digital or paper form but also a body of other teachers practising and facing similar challenges to themselves. They recognise and value the benefits of belonging to professional networks and meeting either virtually or face-to-face to enhance their own understanding and professional practice in the field. They know that they can learn from one another. They recognise that they, as individuals, cannot and do not know all that there is to know about their profession and its practice.

(See also this piece based on Major, 2016 "Top Ten Tips to Improve the Learning of Teachers and Educators – the Staffroom" <http://www.thestaffroom.com/top-ten-tips-improve-learning-teachers-educators-staffroom/> and embedded links.)

3 What's helping us? What's hindering us?

From the EFFECT project, six key areas were identified as pivotal to the success of CTL:

- 1. Management**
- 2. Plant - the physical architecture and environment**
- 3. Curricular demands**
- 4. Cultural factors - the school climate; local, regional and national practices**
- 5. Attitudes**
- 6. Knowledge**

Some brief additional references, factors and illustrative materials are presented here in support of that chapter and in telling this curious tale and reflecting on some of its influences.

Undertaking research in education (albeit in the southern hemisphere), Anderson shows the commonality of much of our target group, finding that, 'Increased organisational demands, workload,

norms of privacy, departmental membership, timetables and the physical nature of the institution are often used as an excuse for not having time to collaborate.’ (Anderson 2002:21)

Bell recognises that a competitive culture incited by political dogma, the development of individualism and a ‘me’ and ‘mine’ culture also act as inhibitors to collaborative practice.

“The ‘marketisation’ of schools, encouraging autonomy, I would propose, reduces the desire to share ideas and generates an atmosphere of suspicion between schools, creating a system where schools are competitors not partners.” Bell (2016:15)

“Why should I share? The other will steal my ideas.” was also an initial fear expressed by some participating in the EFFeCT project; at its conclusion they understood the benefits.

Overcoming such attitudes and developing a nurturing culture of recognition of sources and a common approach to enhanced professionalism takes time. It may be appeased by quoting, “Imitation is the sincerest form of flattery that mediocrity can pay to greatness.” (Oscar Wilde or earlier, the first seven words in Charles Caleb Colton <http://ruwriting.blogspot.cz/2015/10/imitation-is-sincerest-form-of-flattery.html>).

It does behove educators as educators (where they are aware of doing this) to reveal their sources for their beliefs and their consequent actions, to share these and to recognize and acknowledge why they have come to believe what they believe and why their practice is as it is.

The generally law-abiding and conformist nature of professionals within the education service also acts as an inhibitor. Challenging the status quo in terms of traditional expectations of educators to be the ‘sage on the stage - the sole ‘knowledge-giver’ in a classroom with a group of students - is not necessarily built into the training and education programmes for new teachers nor even required at later stages in their career. Although the practice is increasing, (Christie et al., 2004; Laal & Ghodsi, 2012; <http://diylib.eu/>) few students who seek to become teachers will themselves have been encouraged to challenge the status quo in a constructive manner and thus there is a vicious circle impeding the progress of collaborative learning.

One collaborative phenomenon, *team-teaching*, formerly practised (Armstrong, 1977) and requiring clear collaboration between teachers (Johnston & Madejski, undated) and other educators, is a rare practice today and is little referred to in the texts relating to and in pedagogic literature, this being exceptional in the field of special and inclusive education (Friend et al., 2010; Mulholland & O’Connor, 2016; Krammer et al, 2018). There was some evidence of this approach to facilitate learning during the EFFeCT project but without overt reference to the term, ‘team-teaching’. (‘Co-teaching’ seems now to be more commonly the reference term but the phenomenon remains rare.)

How?

There is no easy answer to the “How” question, since each set of circumstances is unique. While there are common characteristics where there are examples of good collaborative teacher learning which are identified elsewhere in this e-book, the absence of some or all of the characteristics must necessarily impede CTL.

Some factors to consider include the size of the school or educational facility, the time available for such CTL, leadership (Silva et al., 2017) and attitude.

Size of schools

From experience within the project and findings from research in the field, size is only a problem if you perceive it as one.

As one principal of a large school declared: “...there is a large number of teachers with similar interests and aims who can come together and have a conversation on their everyday challenges. As an example, in a small school in the countryside there is maybe one mathematics teacher but in our case there are 10-12 teachers who can have a meeting and they can consult about various issues, they can get an insight into each other’s work, they can share their expertise, and this is what leads us to success.”

Yet teachers in another much smaller institution believed that “being a small school, it’s easier for us to talk to one another”.

Collaborative teacher learning recognises the importance of the individual as a learning practitioner but also as a contributor to the learning of colleagues. Sharing and viewing one another’s actual practices, exploring different ways of achieving shared goals and sharing the underpinning knowledge so that there is greater understanding not only of how but also of why, working together with others (often from and inside the organisation but sometimes through expertise from outside the organisation) to increase professional and developing relational skills increases competence to serve the needs of the client and possibly the whole community. Working together also reduces the feeling of isolation deriving from “the cellular organisation in schools” (which) “means that teachers struggle privately with their own problems and anxieties”. (Everard and Morris, 1996:226)

Writing on the Theory of Action and the importance of the individual within the organisation, Algeo (2014) cites a number of sources and suggests that this theory frames a social reality, enabling us to manage work within an organisational reality that requires individuals to understand “... actual practices and not their formal descriptions” (Klee & Levin, 2012, p. 84). These actual practices shape and change the organisation “... by learning processes over time” (Klev & Levin, 2012, p. 25) where “... the individual is key to organisational learning because it is the thinking and acting of individual practitioners that produces learning.” (Argyris, 1995, p. 26)

This individual learning, when shared, discussed, analysed and reflected upon adds to the professional knowledge base of the community within which it is shared. This has the potential to lead to reform in practice when seeking to serve the needs of the students and of colleagues. Research adopting a similar action learning approach found “a three-stage process comprising: changes in teacher learning, changes in classroom practice and changes in student outcomes. Furthermore, it can be concluded that these changes can only occur given sufficient time.” (Flanagan et al., 2017)

Time - a when question

Setting time aside (dedicated time over a sustained period with intervals for reflection, experimentation and further reflection in preparation for the next session) is an essential planning prerequisite.

The time allocated and dedicated to the purpose is valuable. This precious and finite resource requires purposeful planning and built-in flexibility, but not lassitude. Additionally, the value of informal (non-directed) time like coffee-breaks and other social space cannot be underestimated as opportunities for collaboration and learning exchange. Refreshment of the body and of the mind are both considerations when planning professional learning opportunities. Be aware, though, of potential drawbacks. One headteacher confessed that when the regional meetings were held at his school, he was so busy “making sure everyone was fed” that he was unable to participate in all of the sessions. His confident absence also enabled others to take more leading roles in the development of the co-learning activities. Elsewhere, teachers were pleased to have food and drink freely provided saying they felt they were being “treated like real professionals!”

In professional development sessions, the time given over to active learning opportunities should generally exceed the time given to the ‘learned’. Time for discussion and development of new skills is essential as was the opportunity to have learned about and talk about - and then the chance to have the opportunity to practise new skills was greatly appreciated. Contact with others in the ‘same’ situation led to greater understanding and empathy.

Additionally, collaborative teacher learning fosters a sense of belonging to a valuable and valued community of learners within a profession. When the learning is articulated and disseminated to a wider audience through local, regional, national and international opportunities (and today through digital media, ideas can be spread around the world), the sense of belonging to the global noble profession as an educator is greatly enhanced. Active participation and engagement in the moral purpose, which causes many to enter teaching in the first place and retains them in their role as educators, of “wanting to make a difference to children’s lives through education” is essential for professional growth.

But not everyone likes change. Among others, Kotter and Schlesinger (1979) propose six ways of overcoming resistance to change, the first three of which are (in pairs) education and communica-

tion, participation and involvement, facilitation and support. These critical aspects are central to collaborative teacher learning and are embedded in the project's principles and practice and are referred to here in the contributions of the project partners.

Culture - a where and how question

The different national histories, language and consequent traditions and cultures of teacher education and the professional development of teachers do set some constraints on the transfer of ideas even in the 21st century, where global perspectives (via research carried out by, for example, the OECD) on the development of teachers, are becoming widespread conceptually, if not in practice.

The value and actualisation of key concepts of “trust” and “sharing” were most significant for our participants. In this formulation, the teachers involved saw the “moral purpose” but would not necessarily have used that term. Lesson learned: keep the language comprehensible to the audience and its experience but always seek to ensure that horizons are widened and that new language learned is understandable and understood.

Schools' climates can be critical in determining the likelihood of the success of collaborative teacher learning and the role of the school leader has been found to be significant in many studies (for example, Silva et al., 2017; Carpenter, 2015; Macbeath, 2006; Senge, 2006). This was found to be no less true during the EFFECT project. One rewarding outcome, however, was the change in some initially querulous school leaders' attitudes from reluctant agreement to becoming more positive and then enthusiastic as a direct result of teachers who were participating in the project demonstrating their learning back in the workplace.

While it is easier to develop a culture of learning where the designated hierarchical leader is enthusiastic, supportive and actually engaged as a part of the learning community, it is clear that that alone is not sufficient nor is it absolutely necessary for collaborative teacher learning to occur.

Space - a where question

The actual physical space (and environment) available for collaborative learning opportunities can determine what is possible (even for the most creative facilitators and learners). This aspect needs to be integrated into plans when putting the revised methodological framework into practice.

New ideas and consequently new practice by individuals and within schools and regions have emerged from the piloting of the MF and, in that simple sense, the value of collaboration for learning even within the draft methodological framework has been shown to be successful.

The potential for learning exchange through online fora was available but participants exploited this medium less than anticipated, choosing to rely more on e-mail and Skype - again, this may be a

contextual issue relating to digital accessibility and competency. Nonetheless, the level of intellectual engagement shown by the exchanges suggests that its value is there for some (but not yet all are happy to subscribe to this medium professionally).

A further key finding from the piloting was the value of sharing learning not only between individuals within schools but also across a whole school and between teachers in different schools and in different contexts. Such learning added not only to the professional learning but to professional understanding and feeling part of a connected profession.

Among the many ‘tools and resources’ derived from, designed and created during the project was a national set of mentor competences derived from the activities by the course facilitators. Along with innovative learning games and workshop activities, this too may be seen to be a product of collaborative learning which, in this case, involved the course facilitators and their learning. In addition, through collaboration with an international expert and author on the mentoring process with teachers, the facilitators gained new knowledge and insights which they shared with course participants. This example reinforces the vital element of the openness of individuals to new ideas and the trust and confidence in the relationships of the ‘sharers of knowledge’.

This kind of participatory methodology means that learning emerging from collaborative opportunities leads to new insights for facilitators and project managers (and for their employing institutions). Since those who act as professional learning facilitators also tend to be members of the teaching profession the impact of collaboration on their learning should not be ignored.

4 What is involved?

| aspect | Action |
|-------------------------------------|--|
| Developing shared vision and values | determining together how ‘our world’ can be |
| Determining a focus | deciding together on a key priority / key priorities for action |
| Reflection and action inquiry | engaging in examining beliefs and practices, and changing practice |
| Collective responsibility | clarifying individual and common roles and removing a sense of isolation |
| Individual & team learning | from one another & learning with one another; co-creating knowledge |
| Collaborating | working together to achieve commonly-agreed and purposeful ends |

| | |
|--|---|
| Developing trust between colleagues | sharing, and open and honest professional discourse |
| Open and honest dialogue about professional matters | focussing on evidence and reason in professional discussion; listening attentively and speaking with clarity; giving constructive feedback |
| Seeking to overcome barriers | opening doors to colleagues so that each can observe, learn and support; by opening minds to new ways of thinking and practising as professional educators by reference to external (as well as internal) research findings |
| Making plans and co-creating | Devising together creative and/or innovative solutions to address prevailing (and possible future) issues. |
| Developing skills in leadership, research, communication and personal, professional efficacy | Individually taking opportunities to present and drive initiatives, working with colleagues to achieve them |

It is good to share

“In imaging studies, the reward centre in the brain was activated when they were sharing their opinions with others, which is a good thing because otherwise we would die with our knowledge.” Tali Sharot, cognitive neuroscientist (2018). Dopamine, the neurotransmitter chemical related to reward-motivation, is released when we share and it makes us feel good.

To view ten things teachers should know from the OECD 2016 research which relates to sharing and with several references to observation and feedback which are pertinent here, see <http://www.thestaffroom.com/top-ten-tips-improve-learning-teachers-educators-staffroom/> Everyone benefits from constructive feedback and it is a professional expectation that educators at all levels are given this, to enable professional learning, understanding and enhanced professional practice.

Who is involved and why?

Collaborative teacher learning also implies educator involvement with different stakeholders in the process of realising or actualising school-based and community-based activities. Through a variety of channels, teachers collaborate not only with their co-educators and colleagues, school administrators, educators in other schools, students, their students’ parents or carers, the local community, teacher educators and policy-makers. The degree to which collaboration occurs with different stakeholders varies according to learning needs, customs and traditions.

Why

The essential message is that the world is changing in ways that demand individual learning increasingly to connect with organisational learning for organisations and their members to meet the

demands of the changes. (It is well to remember that Revans (1985) indicated that in order for us to survive, the learning of individuals and organisations needs to be equivalent to or greater than the rate of change.) The role of the professional educator clearly defines the parameters for collaboration as focussing on those activities which enhance the learning opportunities for the students, making the experience coherent and meaningful while, at the same time, raising the knowledge and understanding of co-educators and of the individual. (See also http://www.educationworld.com/a_admin/admin/admin297.shtml on teachers observing teachers and its rationale.)

Creating the conditions by which collaborative teacher learning might occur is a responsibility of all members of the profession. It is recognised that owing to the hierarchical nature of some systems it is falsely perceived to be the responsibility solely of the headteacher. It may be easier in terms of potentially managing the time and space but it does not preclude others from demonstrating creativity and initiative, risk-taking, organising and managing meetings in order to achieve mutually agreed, desirable, professional goals.

In a significant text, ‘Principle-Centred Leadership’, Covey (1992:161) presents an enduring rule, the law of the farm (and harvest), which needs to be remembered by all engaged in leading and managing others to grow a culture of learning.

“The only thing that endures over time is the law of the farm. According to natural laws and principles, I must prepare the ground, put in the seed, cultivate it, weed it, and water it if I expect to reap a harvest.”

Preparing the ground for collaborative teacher learning is essential but it should rather be thought of as a collective professional responsibility.

It is clear from the words of some of the participants that that initial preparation and other groundwork and nurturing had occurred since, in their own words, they saw the benefits of CTL in practice.

5 Benefits

The following are direct quotes from teachers and headteachers involved in the EFFeCT project.

“(collaborative) teacher learning communities can contribute to positive results in terms of pupils’ outcomes because every teacher is motivated to bring out the best in their pupils.”

“CTL raises the level and intensity of teacher professional conversations and discourse.”

“None of us are centres of best practice. We can all learn from another.”

“Teachers have become empowered.”

“Teachers are smarter now about doing their business.”

“CTL is happening now organically, from the bottom up.”

“Before, we were afraid to admit that we did not know something. Now we feel free to admit that we do not know, but we know who to ask. We are in this together so we help one another.”

“The greatest benefit is unambiguously working with other teachers, sharing experiences, ideas and insights, possibly establishing further co-operation.”

“We now expect to see others coming into our classrooms.”

“It is opening debates on education - teachers' approaches to pupils, application of some principles of mentoring in teaching, but also in co-operation and collaboration between the teaching staff.”

“I thank the entire team that prepared the project - it was a very valuable contribution to pedagogical practice, with an overlap in effective leadership in education.”

An additional advantage of CTL is that of teacher retention as highlighted and commented upon by, among others, Mulford, (2003: 17) "Teachers who work together in a meaningful and purposeful way have also been found to be more likely to remain in the profession because they feel valued and supported in their work."

6 The Methodological Framework

Thus, the methodological framework was developed on and was derived from steps taken during the project, broad reflection and reflection on action, learning through action, further research and reflection, sharing, discussing and analysing. Evaluating and co-creating. Its steps were:

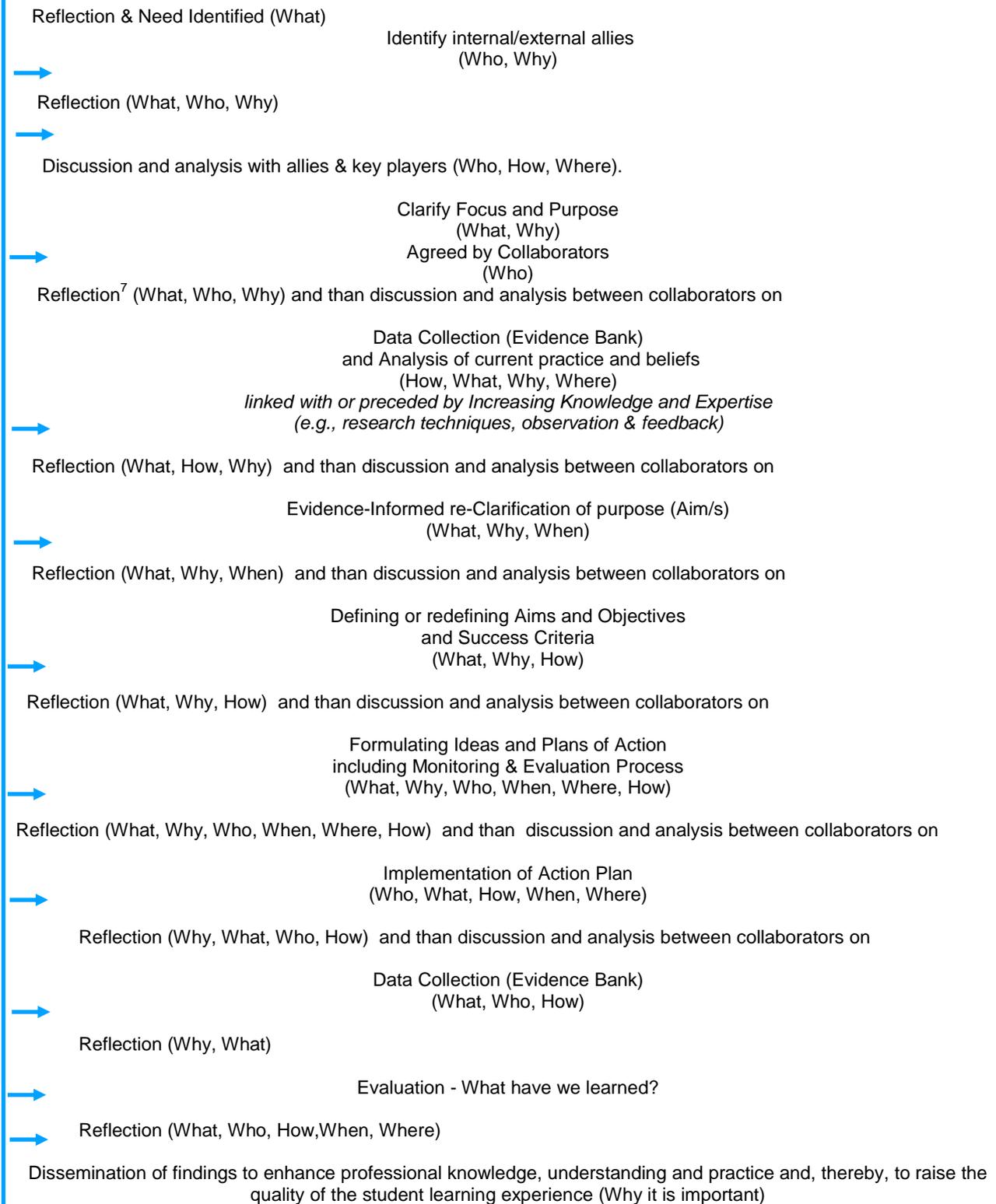
- the selection of a purposeful theme/focus
- the original conceptual proposition of a methodological framework; this involved a literature review & sharing with partners
- Exemplification of current good practice - to develop an evidence-base grounded in good practice
- Analysis of examples of current good practice - using a recognised research approach
- Reconceptualisation of the derived methodological framework - establishing core principles
- Piloting the revised conceptualisation - testing out the principles in practice and their comprehensibility in the workplace and among stakeholders.
- Distribution of findings emerging from the piloting and workshops with stakeholders
- Analysis of findings from interaction with stakeholders
- Evaluating
- Revision of the methodological framework
- Presentation of findings with recommendations for practice
- Dissemination: e-book, containing a Guide to how to use the methodological framework, a Toolkit, academic papers highlighting support for changes in practice based on theory.

For the purposes of application it appears as a modified skeleton since, after all, each set of circumstances requires a slight amendment to fit the situation. The central components are derived from experience, reflection, research, further reflection, discussion, analysis and evaluation and representation and the solid anchors derived from the insatiable curiosity and critical reflection of the project partners.

Collaborative Teacher Learning



Stimulus



⁷ In all cases, at regular meetings and informally, reflection of individuals is shared between collaborators to become joint and common understanding

When, following reflection on a stimulus, a certain need for a response or a change in belief or practice is recognised, it is good to remember that, in most cases, schools and other educational institutions have more than one person working there. Even in those rare phenomena, in single teacher schools, that individual has membership of the education profession. Thus, he or she has the opportunity to seek and gain help and support, if required. (What am I to do? How can I respond? Have I understood correctly?)

Within any process of change and to satisfy the need arising from the stimulus, it is important to establish a starting point. (Where am I now? Where do I want to be? How can I reach there? How will I know when I have arrived?)

Realisation that I am not alone leads to the questions: Who can help me? Who might help? And how might they help?

Seeking co-educators, school leaders and managers and other educators as co-professionals and as allies requires skilled communication to ensure clarity and a common understanding. Discussion and analysis moves from “Where am I now?” to “Where are we now?” Have we understood correctly? What are we to do? How can we respond? How can we work together to resolve the issue? Who else can help/be involved?

Progressing together critically and appreciatively through the steps shown above can lead to greater self-efficacy, professional pride, increased knowledge, skills and changes in attitudes and competence to carry out the role of educator and the previously heralded dopamine cerebral reward

The EFFeCT Methodological Framework (MFCTL) is built on both practice-informed theory and related, relevant external understandings of how collaborative teacher learning might be achieved. The structure of the MFCTL is the bare bones on which a body might be built. The building of this body will depend on local needs and is, therefore, context-dependent. Where there already exists a strong heart, there is no need to replace it but to focus now upon other organs would seem appropriate to those circumstances to achieve the desired goal. Each collaboration is a unique opportunity to learn.

Nonetheless, in all contexts, the same questions - Kipling’s “honest serving-men” - need to be employed and, thus, the other elements of the e-book are elemental if we seek to bring CTL and our methodological framework to life.

As stated earlier, learning leads to change. In a world of uncertainties, there is one certainty. The journey of change and learning from one another and with one another as educators, from co-educators near and far, from co-educators past and present will not necessarily follow a smooth road. Thus, we need to learn continually and, where possible, anticipate and recognise potential barriers together and devise means to overcome them.

Farewell

While there may exist versions of this message in other forms and languages, in the spirit of sharing, we offer this extract from an Irish song as a valediction. *On your collaborative learning journey as a co-educator...*

“May the road rise to meet you

May the wind be at your back

May the sun shine warm upon your land

May the rain fall soft upon your face until we meet again

May God hold you in the palm of his hand”.

<http://www.cathieryan.com/lyrics/may-the-road-rise-to-meet-you/>

Epilogue or Closing Thought

Telling our stories as co-educators to co-educators in an honest, open and trusting manner in order to improve our own and joint professional understanding and practice can be a risk. The risk is much reduced when we feel that we are in a safe, professional environment and that we will be listened to with due interest and respect but also that we shall expect to be challenged. The research informs us that where teachers collaborate, their students achieve more. Today, alongside mellifluous adjectives and fine descriptions of our work, we need to be and are expected to be rigorous and to include relevant data. How much greater is the power of our words of reflection if they can also be supported by the hard evidence of colleagues (from within or beyond our institutions) who were in attendance at the time and place as critical friends and who witnessed the experience being presented. ‘My story’ becomes ‘Our story’ and adds to the tale of educators’ professional learning through collaboration.

Through participation, action inquiry of our own and others’ practices, taking the lead when and where necessary and reflecting alone and with others, we not only deepen our own learning and self-efficacy but we also contribute to the story of pedagogues as, collectively, we seek to facilitate the learning of students and to promote their success. We should also celebrate our own learning through collaborative opportunities by continuing to share. “A trouble shared is a trouble halved!” and although “Two heads may be better than one”, it becomes less troublesome when more are involved in working together to achieve their goal of enhancing professional learning and consequent student success.

The End of the Beginning

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Annex A

6 Significant Cs

What follows is a brief reference to an augmented set of key 21st century skills. The first four are well-known but not necessarily all well-established; the last two are situations in which the first four are applied. All the 6Cs have many thousands of articles, books and other materials dedicated to their understanding. The purpose in drawing them to your attention here is merely to acknowledge them and their significance in relation to collaborative teacher learning.

The first C to be considered has already received much attention in this text and other parts of the EFFECT project's disseminated output. Thus, *collaboration* needs little further elaboration. There is a recognised continuum of collaboration from simple sharing to deep professional engagement and civic impact. This set of differences was also found both within and between the project partner countries. There is, however, no doubt that - as Vangrieken et al. (2015) declare "... effective collaboration ... has vital importance for the future as it is needed to build schools into learning organisations, to anticipate the growing importance of collaboration in society and to use education as a role model for students to properly prepare them for the future." Thus, collaborative teacher learning creates a virtuous circle.

Communication

One of the participants involved in the piloting process, an educator, offered the following insight:

"Collaboration," she said, "is just a matter of good communication!"

Without doubt, she had stumbled upon what is, perhaps, a universal truth.

In the figure below we can see the available number of communication channels between the six partner organisations of the EFFECT project.⁸ When establishing collaborative teacher learning opportunities, it is important to recognise the potential for such links between the participating individuals and any impact on the depth of the interaction.

The sum of the project team members present at the four meetings of the partners was at least twelve, so the potential for interaction moves from $6(6 - 1) / 2$, that is, $6(5) / 2$ or **15** and increases to $12(12 - 1) / 2$, that is, $12(11) / 2$ or $132/2$ being **66**. Each of the participants from each partner institution also had contact with a network of individuals directly or indirectly involved in the project through engagement in administration or in piloting the draft methodological framework or in workshops. The actual number of communication channels is, therefore, much greater.

⁸ The formula for calculating the potential channels of communication is $n(n - 1) / 2$, where n is the number of people

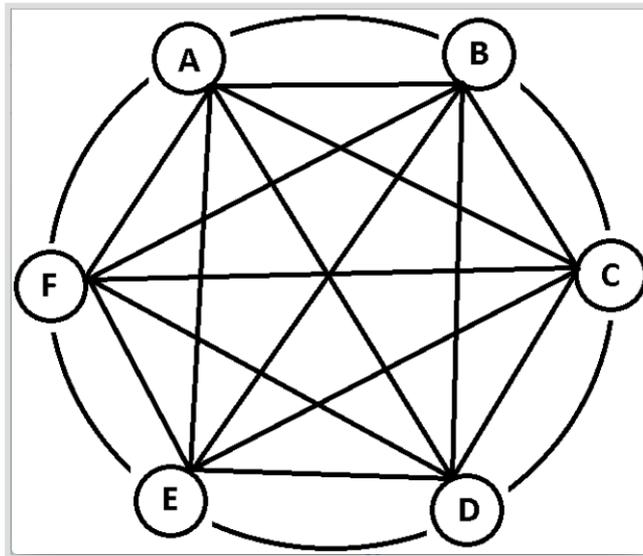


Figure XX Communication channels for a group of six

Figure XX Communication channels for a group of six

Drawing by Jakub Oriniak

To ensure active participation and the opportunity for all members of the group to have their voice heard and to be listened to with respect, each being a co-professional with their own perspectives in the enterprise which we call education, some consideration needs to be given to group size to ensure effective professional dialogue. The smallest group size would be with just two; the maximum depends on the excellence of facilitation/chairing and the time available but when run in large groups, individual contributions, sense of involvement and interaction tends to be reduced. (Some modern technology (see, for example, <https://www.clikapad.com/>) gives more opportunities for individuals in large groups to contribute to voting and / or to comment on any aspect of a meeting (even at a distance or from a different location - see <https://www.eventbrite.co.uk/blog/audience-engagement-tools-2016-ds00/>) with instant feedback, but this is not yet commonly available. The silent majority also have a chance to 'speak' through handheld devices or mobile telephones.)

Communication involves not only speaking and writing but also reading and listening. For communication to be effective, it has to be transmitted and received in an open and honest manner. It must demonstrate professional respect for others and for their declared perspectives. Each participant's contribution should be acknowledged and valued. Much energy, effort and creativity will be lost unless each has the opportunity to declare their views on the issues in hand, knowing that they will be listened to and respected.

In both speaking and writing, it is the responsibility of the speaker or writer to express her/himself in such a way that the audience or reader will understand the message that is intended to be transmitted. Listeners and readers necessarily interpret the words with which they are presented in the light of their own experience of both the subject of the message and of the sender of the message, and in terms of how it is presented.

Discussion and analysis of educational matters is central to collaborative teacher learning. It is therefore important that when required to listen to others, the following five rules of effective listening are applied.

1. Concentrate on the words of the speaker and stop thinking about your own contribution.
2. Hear the words without judging them or assessing them.
3. Eliminate other thoughts which interfere with your ability to concentrate on the speaker's words.
4. Stop hearing only the message that you want to hear.
5. Maintain your concentration on the focus of the discussion or debate.

(Additionally, before the discussion begins, turn off your mobile telephone.)

Constructive people also seek consonance between words (written and spoken) and deeds

Critical thinking - a Why question

Critical thinking may be defined as the process by which the accuracy, authenticity and value of data, information or knowledge claims are determinable.

As early as 1941, in a seminal examination of critical thinking and education, Glaser defined critical thinking as: "The ability to think critically, ... involves three things: (1) an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's experiences, (2) knowledge of the methods of logical inquiry and reasoning, and (3) some skill in applying those methods. Critical thinking calls for a persistent effort to examine any belief or supposed form of knowledge in the light of the evidence that supports it and the further conclusions to which it tends. It also generally requires ability to recognise problems, to find workable means for meeting those problems, to gather and marshal pertinent information, to recognise unstated assumptions and values, to comprehend and use language with accuracy, clarity, and discrimination, to interpret data, to appraise evidence and evaluate arguments, to recognise the existence (or non-existence) of logical relationships between propositions, to draw warranted conclusions and generalisations, to put to test the conclusions and generalisations at which one arrives, to reconstruct one's patterns of beliefs on the basis of wider experience, and to render accurate judgments about specific things and qualities in everyday life."

In elaborating the concept of critical thinking as he did, Glaser establishes the base on which such activities as professional learning and frameworks for this might be established.

Some fifty plus years later, Scriven is somewhat more succinct. "Critical thinking is the intellectually disciplined process of actively and skilfully conceptualising, applying, analysing, synthesising,

and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action" (Scriven, 1996).

Clearly, within the collaborative teacher learning approach we have wittingly or otherwise incorporated the key elements in the search for the truths within a professional context – also seeking to discover who we are, what we do, how we judge our self-efficacy and that of others, how best we can achieve the vision we share together and the future to which we aspire.

Creativity and innovation - a How question

Creativity refers to having a unique idea, one which no-one else has conceived of before and communicating this through some medium. An innovator takes some thing or some idea that already exists and amends or improves it in some way which has not been introduced to the 'marketplace' before.

Every day in schools across the world, teachers and headteachers devise innovative (and sometimes truly creative) ideas and plans in order to carry out their professional duties as they conceive of it. Regrettably, very little of this rich material is ever made public.

Findings from our project (see, for example, the conclusion in the section in the Guide on "Who?") demonstrate that through collaboration, teachers' reflections on the challenges faced and benefits gained within each collaboration channel showed that the teachers managed to: a) use the opportunities offered by the collaboration with the stakeholders successfully; b) overcome difficulties related to the creation of any interdisciplinary study environment for solving school and community related problems, enhancing their professional competence; c) motivate the stakeholders to overcome a formal attitude and a lack of interest, and to apply their energy to making the ideas come true; d) research, plan and organise all the human, intellectual and time resources in order to realise their projects and to analyse their own learning experiences.

Collaborative teacher learning pools the brainpower of a collective to find innovative and occasionally creative solutions to issues which they have to address on their journey to reach a shared vision through professional participation and their desire for equity, a deep sense of moral purpose and a love of learning.

CPD/CPL and CTL

A fifth "C" required for educators might be seen as Continuing Professional Development (CPD) or Continuing Professional Learning (CPL). This is professional lifelong learning.

The effectiveness of such involvement and engagement in order to enhance and improve one's professional knowledge, understanding and practice is dependent on a number of factors: the rel-

evance of the activity, the clarity of purpose and expected outcomes, one's own prior knowledge, expertise and experience, the learning and teaching strategies involved and the ways in which any impact is evaluated.

(See https://www.erte.dge.mec.pt/sites/default/files/Recursos/Estudos/21st_century_teacher.pdf)

In the words of a number of teachers involved in the EFFeCT project, good quality CPD can be “life-changing” both personally and professionally, creating a desire to increase even further one's own professional knowledge, understanding and expertise. It also helps if this CPL is based on and intended for practice or sharing so that teachers and other educators can see and understand how to implement the ideas presented within their own classrooms and schools. Teachers researching their own and others' practices (and who are supported by and where appropriate to the focus working with other researchers in education) achieve greater insights into their own work and practice.

Change

Learning leads to change; change in attitudes, beliefs and behaviour or practice. When we learn something it changes how we view the world or parts of it. We cannot undo learning - except perhaps through manipulation of neural networks. Unless they are articulated and acted upon, changes in beliefs and attitudes are not visible. Collaboration enables visibility and transparency.

Change needs to be managed. There are literally hundreds of thousands of references to the management of change. Making reference to such guidance as it works in an alternative public service, the health service, makes the point that the process of change and its management is similar in most

systems. TeamSTEPPS 2.0:(2014) can assist in achieving a greater likelihood of success.

(See <http://www.ahrq.gov/teamstepps/instructor/fundamentals/module8/slchangemgmt.html>)

Change is a natural phenomenon. It is thus to be acknowledged, understood, respected and prepared for if we are to survive. We do this by working together, learning together, aggregating our knowledge, understanding and sharing our ideas within and between our schools, our administrations and our nations. Then we can achieve our individual and collective goals and will be more likely to thrive and survive.

