Methods and Tools to improve collaborative lifelong learning

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Abstract

This paper describes a three-stage method for teachers and researchers to collaborate and co-create ideas for future practice, to improve collaborative lifelong learning. Using a thematic network group, practitioner-researchers and practitioners associated with the European Association for Practitioner Research on Improving Learning (EAPRIL) came to a shared understanding of possible teacher actions, methods and tools which can be used to improve collaborative lifelong learning processes and support the professional development of teachers.

Three case studies are given as examples of developing lifelong learning processes through collaboration. The EAPRIL thematic network group borrow and adapt the concept of ''interthinking'' (Littleton & Mercer, 2013) as a process of investigating collaborative talk in the pursuit of collective intellectual endeavour. The focus was on collaboration, as this can have positive effects of social interaction for learning (Littleton, Miell & Faulkner, 2004). *"Of all the conditions that feed deep learning, collaboration is at the heart of them"* (Fullan, Quinn & McEachen, 2018, p. 97).

Roundtable discussions were held in an international 'interthinking' group' to collate practitioners' perspectives on ways of encouraging and supporting creative collaborations and lifelong learning for staff and students. Following this, a call was sent out for international case studies which form part of this article.

Methods and Tools to improve collaborative lifelong learning

Introduction

Practitioners from one of EAPRIL's[1] thematic networks (https://eapril.org/node/16) worked together to gather examples of professional experiences, ideas, educational visions, methods, tools and/or results of research. The question we asked ourselves was: how to improve collaborative lifelong learning for the future of education? These professional insights formed part of an international roundtable workshop which collated practitioners' case studies and instructive examples.

Part of the roles of Universities of Applied Sciences (UAS) is to encourage creative practices and educational research. Richardson and Placier (2001) consider that teachers can change practice by learning, development, socialization, growth, improvement, implementation of education with new or different visions, cognitive and affective change, and studies. In this sense, our international 'interthinking group, was largely drawn from UAS institutions within the context of the EAPRIL Conference in November of 2017 in HÄME UAS, Hämeenlinna, Finland.

The thematic network group felt that it was important to build collaborative relationships both internally and externally, even to the extent of encouraging schools, and other educational institutions, to plan ways of incorporating collaborative skills alongside discipline-specific competences, for both staff and students.

The 'inter-thinking group' used a three-stage method which involved:

1. The leaders of the thematic network pose questions within a roundtable workshop where interthinking groups collate their answers.
2. Members of each interthinking group share and collate their answers in a plenary session.
3. The plenary group co-create a shared understanding through a Cloud-based shared document.

The thematic network group leaders and one member of the interthinking group use the shared understanding to write this article and to include three international case studies focusing on collaborative lifelong learning.

Interthinking group Stage 1

The interthinking group was asked to arrange their roundtable discussions so that each table, comprising three to six members in the same room, was made up of people from different countries. They were asked to focus on exploring the ways in which each country introduces new forms of thinking and acting to improve collaborative learning and lifelong learning in education for all. Participants were asked to focus on three topics:

a) Given any recent educational reforms in your country, what is the role of Universities of Applied Sciences in encouraging creative practice and educational research on collaborative competencies and lifelong learning?

b) Identify any new approaches to teaching quality improvement. This includes teacher actions and research perspectives within your context/level of education, instruction, or vocational training.

c) From these discussions, please write down any new teacher actions and research perspectives you have highlighted in your group.

Methods and Tools to improve collaborative lifelong learning

Interthinking group Stage 2

Each table was asked to appoint a chair who would take notes and share their group's ideas and observations in a plenary. The thematic network group leaders helped facilitate these discussions.

Interthinking group Stage 3

During the plenary, each chair summarised their group's comments whilst the thematic network leaders wrote these down in a shared document. As the document was projected on a screen, it could be checked immediately and amended in real time.

The thematic group leaders used the data selected during the interthinking group session to write this article. They invited members of the interthinking group to contribute case studies to add to the article. One of the members accepted and together this article was written.

We begin by reporting on the findings of the interthinking groups' roundtable discussions from the EAPRIL conference; then we present the more in-depth cases which provide instructive examples of collaborative lifelong learning. Each case is structured in the same way highlighting their context, methods and tools, contribution and implications; and finally, we discuss our conclusions.

Interthinking groups' roundtable findings

Methods and tools used by Universities of Applied Sciences to encourage creative practice and educational research on collaborative competencies and lifelong learning

In general, for schools, colleges and universities, the interthinking groups reported that one of the ways in which UAS encourage collaborative competences and lifelong learning would include peer review and observations in classrooms. This could take the form of 'Learning Walks', where teachers allow colleagues to observe their classrooms on an informal and non-judgemental basis. The interthinking groups described this peer evaluation as a form of learning, citing other examples such as structured professional discussions between teachers; the creation of personal teaching logs, vlogs (a blog in which postings are primarily in video form) and diaries which can capture important aspects of classroom practice; regular informal meetings and networking, so that teachers share best practices across contexts and institutions; and lifelong career support through mentoring and/or coaching.

Several people suggested 'intervision' or 'action learning' (McGill & Brockbank 2004), a peer coaching activity which aims to develop professional expertise and help colleagues gain insight into their work problems (see Case Study 2). Practitioners of 'intervision' or 'action learning' claim that it can bring a practical understanding of theory, as well as contributing towards a collaborative culture where people feel collectively responsible for their organisation and its performance.

Whether it's through informal learning over a cup of coffee; or through supported experiments, action research or student co-creation, it was felt that collaboration remains an important part of the professional development of educators and students (see Case Study 3).

However, teacher collaboration is a means to achieve an end. The interthinking groups stressed that space must be made for a research-based and scholarly approach in order to help define goals and shed light on outcomes and sustain visions of education's future. Otherwise, collaboration can become a content-less waste of time. Teachers must feel that collaboration helps them teach and integrate into a professional learning community or community of practice (Wenger, 1998), instead of feeling forced to collaborate and

experiencing loss of autonomy. Collaboration only works within a climate of openness and trust, as demonstrated in Case Study 1 (Van Grieken, Meredith, Packer & Kyndt, 2017).

Participants in the 'interthinking' groups were contacted after the EAPRIL 2017 Conference and asked if they would like to contribute more in-depth case studies, three of which are presented later in this article.

Professional learning communities as a form of collaborative and lifelong learning

Over the last few decades, the language of collaboration and collegiality has shifted more towards the terminology of 'professional learning communities' or 'communities of practice' (Wenger, 1998) which comprise different types of institutions or organizations coming together in the interest of a shared enterprise or purpose.

This is illustrated by Little's research (2006) focusing on community and professional development as foundations for learning-centred schools. She argued that when schools systematically support professional learning, they are more likely to be effective with students. Little's paper (2006) examines a selective sample of research, looking for the ways in which investment in teachers' professional learning in North American schools might have an effect on students' learning.

Little (2006) concluded that schools exhibiting a high level of success with students tend to have working environments that are also conducive to teacher learning:

> *In these schools, teacher learning arises out of close involvement with students and their work; shared responsibility for student progress; access to new knowledge about learning and teaching; sensibly organized time; access to the expertise of colleagues inside and outside the school; focused and timely feedback on individual performance and on aspects of classroom or school practice; and an overall ethos in which teacher learning is valued and professional community cultivated. (p. 23)*

In professional learning communities (PLCs), professionals collaborate on improving student learning and share the responsibility for all students to learn (Lomos, Hofman & Bosker , 2011). This collaboration also contributes to the professional development of the teachers (Stoll, Bolam, McMahon, Wallace & Thomas, 2006; Vescio, Ross & Adams, 2008). If teachers focus on changing their instructional practices, PLCs are successful in improving student achievement (Supovitz, 2002).

Many elements identified by the interthinking groups also appeared in the following three case studies.

Case study 1: Collaboration between an English UAS and community colleges for innovative curriculum design

Context

This case study relates to an innovative initial teacher education course in the UK, which was re-designed by Rebecca Eliahoo in her role as UAS programme leader, in collaboration with course leaders from eight different community colleges. The aim was to improve in-service, part-time courses, for example, by correcting over-assessment and employing a greater variety of assessment for learning methods. The courses offered professional qualifications for teachers in the Lifelong Learning Sector, which has several definitions in the UK, but is generally understood to cover education for students over 16 years of age, as well as adult and community education. This case study is empirical in nature as it deals with the gathering of information through direct personal and professional experience and concerns research applied to a specific group of UK teacher educators.

Methods and Tools to improve collaborative lifelong learning

Method and tools

The course leaders from each college met regularly at the University for professional development workshops facilitated by the UAS programme leader, using Cloud technology to share ideas, resources and draft modules. Module leaders from all the colleges were also invited to assignment writing seminars, research days and cross moderation meetings, where they were provided with discussion materials and resources to discuss ways of improving practice and re-designing the curriculum.

New module leaders and course leaders were given written and oral guidance on their role and offered mentoring, as well as opportunities to collaborate with more experienced practitioners on marking and moderation.

Contribution

This collegial involvement (Little 1990) provided a benign environment for colleagues from different institutions to exchange practice, design assessments and share resources. The University-college teacher education consortium also jointly won two research bids. For example, two of the colleges worked together to create free resources to help teachers support their learners' literacy and literacy (see link: http://supportingliteracyandesol.blogspot.co.uk/).

The UAS and colleges' investment in their lecturers' time together resulted firstly, in the development of closely bound groups with high levels of trust in each other's professionalism (Van Grieken, Meredith, Packer, Kyndt, 2017) and with '*collectively held beliefs, ideas and intentions'* (Little 1990); and secondly, their collaborative work had a positive impact on teacher trainees and ultimately their learners. However, it took a couple of years to embed these collegial working practices, building sufficient trust between colleagues from different institutions.

For example, the emphasis of the courses shifted towards inquiry learning and critical thinking within an ethical framework. Going back to first principles in teacher education, it was felt that assessment of trainee teachers had to be rooted in practice. Course assessments were therefore linked directly to observed teaching practice, so that these were spread throughout the course. Different educational learning theories were actively modelled by module leaders during course delivery; and trainee teachers were asked to evaluate the impact of their teaching on their own learners.

Collaborative and inquiry learning, which exemplified the notion of teaching as action research, were used throughout the courses through supported experiments (Petty, 2017) and then in action research projects, so that the teacher trainees could engage critically with educational literature. Supported experiments involve teachers in experimenting with their teaching, changing something important and reflecting on this in the light of learner and colleague feedback. The assessed research project focused on researching an aspect of subject specialist practice.

Module leaders, who were also tutors and mentors, were asked to audio-record professional discussions with teacher trainees and these were particularly effective for vocational and Science, Technology, Engineering and Maths (STEM) teacher trainees, non-graduates and those with dyslexia. The piloting of audio recording professional discussions had shown that teacher trainees could identify their strengths and areas for development more critically within a dialogue, rather than in an essay.

The design of valid and innovative assessment methods was a direct result of the grass-roots curriculum development and ideas creation which had emanated from the UAS and college practitioners' collaborations.

Methods and Tools to improve collaborative lifelong learning

Implications

This case shows the crucial role of Universities of Applied Science in supporting the professional development of colleagues from different types of institutions who are also teaching Higher Education courses; as well as the richness and diversity of design ideas and resources which can be garnered from teachers who are not based in Universities.

Case study 2: School leader development programme created through UAS and primary schools' collaboration

Context

This case study relates to a two-year innovative school leader development programme in the Netherlands led by Loes van Wessum in which nine principals of primary schools (from three school boards) collaborated with five advisors from the UAS. Three of the UAS advisors had pedagogical expertise and two - including the project leader – had expertise in educational change, CPD and leadership.

The focus of the programme was to help principals to develop an analytical culture which could stimulate professionals to work with an inquiry habit of mind within primary schools. In Dutch schools, data are available, but teachers and principals don't use them very often as information to improve student learning (Schildkamp & Lai, 2013). Three school boards turned to a UAS for help so that schools could develop their capacity to enhance data driven teaching. In line with developing professional learning communities, data driven teaching can also be used as a professional development strategy. Principals were stimulated to use leadership practices which could contribute to the development of PLC's.

Methods and tools

Principals collaborated with advisors on two intertwined topics: enhancing their learning results in maths and language through collaboratively analyzing and reflecting on these results within school; and enhancing the inquiry habits of minds of teachers by using new forms of leadership practices.

Developing an inquiry habit of mind can be described as a habit of using inquiry and reflection to think about where you are, where you are going, and how you will get there; and then turning around and rethinking the whole process to see how well it is working, before making adjustments (Earl & Katz, 2006). It involves teachers thinking about what they can do to contribute to student learning, acting on it and checking the effects of their instructional practices on students' learning.

UAS advisors took the role of 'critical friend' on the understanding that they would be encouraged to speak truthfully, but constructively, about weaknesses, problems or emotionally charged issues. Principals collaborated with each other on the same topics in three workshops each year using an 'intervision' or 'action learning' peer coaching approach (McGill and Brockbank 2004).

These workshops were facilitated by the project leader, UAS advisors and a senior researcher. The preparation of the workshops also included the central office administrators from the three boards, who were participating in the workshops. One unexpected result was that these office administrators also started to collaborate within the bounds of the innovative leadership programme.

At the end of each workshop, principals completed learning reports in which they answered two questions about their learning outcomes ('what did you learn in this workshop?') and their learning activities ('what contributed to this?').

Methods and Tools to improve collaborative lifelong learning

Contribution

Analysis of all the learner reports showed that principals expanded their practical and theoretical knowledge base; reflected on their roles and underlying assumptions; and learned to experiment with new leadership practices. They mentioned collaboration with both the advisors and other principals as the most important learning activity.

In the first year of the programme, principals collaborated through storytelling and sharing ideas, as well as asking and providing each other with assistance in the form of giving suggestions. In the second (ongoing) year, the programme will also use deeper forms of collaboration (Van Grieken, Dochy, Raes & Kyndt, 2015), such as sharing and analyzing data together, reflective dialogue (in which an analysis is made before giving suggestions to solve the problem) and providing aid and assistance.

Implications

Principals' professional development can be stimulated if it focuses on teachers' learning and school improvement. Principals' learning processes can also be enhanced through the development of explicit collaborative reflection, which can help them in several ways. Firstly, to realize how leadership practices can contribute to teachers' learning and school development; and secondly, reflection can help them to widen deliberately their repertoire of leadership practices (Ericsson, 2006). This UAS-school collaboration helped them to become aware of their own tacit knowledge and mental models (Senge, 1990) and in becoming more aware of their own mindsets, they felt able to question them.

As mentioned by the EAPRIL interthinking group, the combination of formal and informal learning activities which contribute to teachers' learning and school improvement, together with peers and experts, seems to be a fruitful approach for enhancing principals' professional development.

Case study 3: Group creation & innovation method: professional and collaborative visions of the assessment of cross-curricular competencies

Context

This case study relates to an innovative method of practitioner research in Switzerland, which was designed by Marcelo Giglio in his position as head of research project (UAS HEP-BEJUNE), and in collaboration with Céline Miserez Caperos (HEP-BEJUNE), Régine Roulet (Heads of teachers' continuing education programmes), Christiane Droz Giglio (Department of Education, canton of Neuchâtel) and thirteen different community colleges.

This case study is illustrated by a dynamic method of co-creation, innovation and co-diffusion of groups among different actors: collaboration and networking between different positions of primary school, teacher education and educational research. The objective is to improve ways of thinking and acting on assessment for learning as part of the prescribed cross-curricular competencies which form part of the new curricula of Switzerland: PER (*Plan d'études romand*) which apply to school pupils up to the age of 16.

The Swiss canton of Neuchâtel proposed assessment for learning progression with competency expectations across multiple developmental stages, ages and grade levels in primary schools. It isn't easy for teachers when they have to categorise and organize progression by subject area and by cross-curricular competencies (such as creativity, collaboration and reflection). Children are expected to learn these skills as they progress through their education by using assessed portfolios. Furthermore, these collaborative, lifelong learning skills are always evolving towards the future; are never exhaustive; and need to be assessed.

Methods and Tools to improve collaborative lifelong learning

We can define assessment for learning as a process of collecting and interpreting evidence for use by pupils and their teachers to decide where learners are in their learning progression, where they need to go and how best to get there (Black, Harrison, Lee, Marshall & Wiliam, 2007; Broadfoot, Daugherty, Gardner, Harlen, James & Stobart, 2002). How can teachers learn and develop new forms of assessment for learning in class? In particular, how can teachers assess *learning progression* on cross-curricular competencies in terms of creativity, collaboration, communication and reflection?

Methods and tools

This case study relates to a three-phase method of *Group creation & innovation* carried out since 2013 in the canton of Neuchâtel in Switzerland. The goals of this project are:

- To improve the practices of assessment for learning in primary schools.
- To increase the quality of teachers' advisors in assessment for learning progression by portfolios.
- To enhance the scenarios of teacher education and workplace internships on assessment for collaborative lifelong learning.

Cross-curricular competencies and skills require new teaching actions that focus on collaborative learning progression. This means that pupils could be committed to verbalizing, drawing, writing or presenting a plan, model or theory in the form of a schema, using different ways of thinking, acting and interacting creatively and reflectively in class. Such competences can also benefit their lifelong learning habits.

Indeed, it is necessary that pupils learn to self-evaluate, distinguish and compare their point of view about their own learning progress with the teacher's (Giglio & Rothenbühler, 2014). This is a challenge for the future of education and learning: to train pupils in lifelong learning, using what is available in today's world, so that they can adapt to an unknown new world, in ways that are collaborative, creative and reflexive, as well as in ways which encourage deep learning (Fullan, Quinn & McEachen, 2018).

In terms of collaborative learning, social and cultural skills, as well as competencies, can be considered as important as different school subjects. They require both teachers and pupils to use different assessment for learning approaches (Tessaro, Gerard & Giglio, 2017).

Phase 1 - Collaboration as the driver for creativity:

The first phase of this *Group creation & innovation method* was inspired by R. Keith Sawyer's study of '*group genius'* (2007) which considers collaboration to be the driver for creativity. Rather than concentrating on an individual's capacity to develop creative ideas, Sawyer's studies focused on innovations emerging from the dynamic of a group.

Each *Group creation & innovation* comprises six members with different educational professions and institutional roles:

- teacher,
- teachers' student,
- teacher mentor,
- teacher advisor,
- teacher educator, and
- researcher

The researchers coordinate 90-minute collaborative sessions which aim to provide favourable conditions so that each group member can think about their shared current good

practices, on the one hand; and about the future of education and learning, on the other hand. This is not only from their own educational profession and position, but also in a collaborative situation from the point of view of other educational professions and roles.

From each other's current experiences, each group member contributes, in a creative and innovative way, to professional development and teacher training. In addition, this type of collaboration between teacher educators, teachers' students, practitioners and researchers is an activity that can trigger what Engeström describes as Expansive Learning (1999). It is by analysing new situations that these education professionals can create and innovate tools, try them out, consolidate them and come up with a new and improved step-by-step educational contribution. This work can help develop new, future uses, creative and perhaps innovative teaching practices, as part of a collective work geared towards education and learning in the future. All these *Group creation & innovation* sessions were recorded, transcribed and analysed by researchers.

Phase 2 - Sharing, compiling and consolidating collaborative visions in a professional community:

The second meetings are for researchers to present examples of future visions of assessment for learning progression to each working group of teachers' advisors or to teacher educators. The aim is to collaborate towards a compilation and consolidation of these visions of future education. Each separate 90-minute session was recorded, transcribed and analysed by researchers.

Phase 3 - Co-dissemination and enriching to other colleagues:

The third phase of this *Group creation & innovation method* is for these visions, as well as the research results, to be shared and enhanced with other colleagues in another session. This is implemented by every team formed of a researcher, or a teachers' advisor or a teacher educator separately.

Examples of future visions of assessment for learning progression are separately presented to each working group (teachers' advisors and teacher educators) by the researchers, to consolidate these visions of future education.

Lastly, these visions, as well as the research results, are co-disseminated to other colleagues. This is implemented by every team formed of a researcher, a teachers' advisor and a teacher educator.

During these co-dissemination approaches, teams use the following approach:

1. Introduction of the objective of the session;
2. Presentation of the project's theoretical and methodological aspects and researchers' results;
3. Audio recording of participants' discussions and noting pathways for proposed visions of future education, especially assessment for learning progression;
4. Sharing of these creative and innovative visions of education;
5. Selection and analysis of data (recorded discussions, documents and researchers' notes).

Contribution

In the content of the participants' discussions, we can identify the challenges of collaboration between different institutions (schools, minister and UAS-teacher education) and between different educational roles to improve evaluation in the present and in the future of education. Among these challenges, there is only some coherence between the usual field practices and the tools needed to assess learning progression on cross-curricular

competencies in terms of creativity, collaboration, communication and reflection. These competencies are constantly evolving in the face of an unknown future. Evaluation tools must be open to the uncertain future of society and education. In addition, the pupil's place in the assessment for learning process is very important for their collaborative lifelong learning in terms of creativity, collaboration and communication. We are currently studying the actions of teachers by supporting, coaching and advising pupils in their learning or self-regulated learning.

Implications

The Group creation & innovation process allows members of the teaching profession to create a collective group of reflections and analyses, in order to produce certain lines of action and perspectives which are based on the results of the study. These documents and recordings are used by the researchers to witness and supervise new research objects with practitioners from most of these groups of educational professions.

What do these three collaborative lifelong learning cases demonstrate in terms of methods, tools and contribution to professional development?

These three international instructive examples were used as short case studies which showed firstly, that for collaboration to be effective, it requires time to build up trust between participants, as trust and group cohesion are building blocks for innovation. A prerequisite of effective collaboration is the identification of goals and/or aims which should be clearly articulated. The cases highlighted the roles of peer mentoring and coaching which can be powerful tools for group integration and sustainability. Importantly, in all the cases, collaboration between different types of institutions (for instance schools and UAS; colleges and UAS) stimulated positive pedagogical changes that also helped change individuals' professional mindsets.

Clearly, evaluations of collaborative learning (for example, learner reports) can also contribute to widening the repertoire of pedagogical and leadership practices. Indeed, collaborative learning can be a driver for creativity through triggering expansive learning (Engeström 1999), thereby enabling practitioners, teachers, teacher educators and students to create, experiment with and review new teaching practices.

In all three cases, the ultimate goal was to enhance the assessment performance of teachers or teacher trainees which contributes to students' learning, especially where this helps develop students' capabilities to assess their own learning (Hattie, 2009; Dewitt, 2017).

Within schools, research shows that teachers have the greatest impact on students' learning (Hattie, 2003; Mourshed, Chijioke, & Barber, 2010) followed by the impact of school principals (Leithwood, Harris & Hopkins, 2008). School principals and teacher educators have an important, if indirect, impact on students' learning because they can enhance teachers' professional development (Robinson 2007).

In the cases presented above, a systematic and sustainable approach was used. We believe that stimulating the professional development of the secondary contributors towards student learning - teacher educators and principals – as well as focussing on the professional development of teachers and teacher trainees will have a greater influence on learning. This is because school principals and teacher educators would be enabled to facilitate better quality and more targeted professional development for teachers and teacher trainees who, in turn, can enhance student learning.

The cases also show that inter-organizational professional collaboration between teacher educators or principals can benefit from the participation of UAS colleagues in the role of critical friends. When collaboration concerning authentic problem solving is used as

deliberate practice for professional development, for example, by setting and reflecting on learning goals or using assessment performance instruments like learner reports, it enhances the cognitive, emotional, motivational and behavioural learning of teacher educators and principals. This is comparable with effective features of professional development programs for teachers (Darling-Hammond, Hyler & Gardner, 2017).

Deeper forms of collaboration as joint work (Van Grieken, et.al.,2015) contribute to professional development of teacher educators and principals. But context also matters. Collaboration contributes to and depends on the development of professional capital (Fullan & Hargreaves, 2012) through sharing and creating knowledge and beliefs as well as mutual trust and respect.

Conclusion

We now return to the initial question posed to the interthinking group: *how to improve collaborative lifelong learning for the future of education and learning?* Answers came from the participants who were asked to work in roundtable interthinking groups comprising educators from different countries, including Belgium, Switzerland, the Netherlands, Brazil, and the United Kingdom. The principal examples of effective practice that they discussed, based on their own practical experiences, were:

• 	The use of video to capture and reflect on one's own teaching, which participants felt it was relatively easy to set up and which has the potential to enhance teachers' own learning.

• 	Collaboration and networking were effective where school and college leaders provided time for such activities.

• 	Students were given a real-world task which was a joint assignment. One example asked students to go through a cycle identifying what the problem was and what research questions there were. Lastly, the students were asked to cooperate and discuss progress with their supervisor and groups of peers. This made them communicate with their peers, tutors, and a real-world assignment holder before the work was assessed by tutors.

• 	Another example cited used student groups to tackle a real-world task, with the best assignment being sent to the client as a finished project.

• 	Some participants wanted to use 'ill-defined problems' in order to provoke discussion and argument around these problems, before being in a position to reach a consensus.

The participants of the interthinking' group not only came from different countries, but also from a variety of disciplines. They therefore had different theoretical backgrounds and different methodological approaches to learning in their own disciplines.

Researchers in collaborative learning (Littleton, Miell & Faulkner, 2004) highlight the need to discuss the different facets of interaction, within which lie the important roles of conflict, planning, negotiation, exploratory talk and professional dialogue.

The group also highlighted the difficulties which arise in the act of collaboration itself. For example, lack of time - even with online meetings. As social beings, teachers may prefer to collaborate face to face, even when the goals are not very clear. Participants felt that it was important to avoid situations when it's easier just to muddle along on your own.

The group agreed, however, that without reflection on the experiences of collaboration and networking, there would be no educational benefit. A research-based and/or scholarly approach needs to be taken and actions should represent more than just being 'a good idea'.

Methods and Tools to improve collaborative lifelong learning

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Methods and Tools to improve collaborative lifelong learning

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Methods and Tools to improve collaborative lifelong learning

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Key Words: Collaboration; Lifelong Learning; 'interthinking'

Glossary	
Adviser	Educational developer
Lecturer	Teacher working in a Further Education college or a Higher Education Institution
Principal	Head teacher of a school
Pupil	A person, especially a child at school, who is being taught
Student	A person who is learning at a college or university
Teacher	School teacher
Teacher trainee	In-service or pre-service teacher in training