

STEAMINQUEST NEWS No. 1

January 7th, 2009



Happy New Year to all our readers!

This is a combined newsletter for participants in S-TEAM and INQUEST (which is not necessarily the last word in acronyms).

A special welcome to new INQUEST partners in France (L'Institut National de Recherche Pédagogique INRP), Italy (Universite degli studi Torino), the Netherlands (University of Leiden) Scotland (University of Aberdeen) and Spain (Universitat Autònoma de Barcelona).

The relationship between the two projects is somewhat tentative at the moment, of course, since S-TEAM is about to enter the negotiating phase whilst INQUEST is about to be submitted, subject to the usual last minute emails and a few phone calls, as Per Inge or Andreas try to pin me down on some esoteric budgetary details!

Urgent question about teacher release from classes

Given that INQUEST has some very specific work packages concerning teacher engagement and school partnerships, we will undoubtedly come across the problem of teachers' working time and payment (Thanks for reminding me, Sibell!). For example, in the UK it is common for teachers to be 'seconded' to

an external project and for that project to pay the teachers' employer (usually a local authority) to cover the cost of a replacement class teacher. There has been some discussion about whether this counts as 'subcontracting' for budgetary purposes. In order to make a case for funding teachers to participate, it would be useful to know what the situation would be in other countries, and what approximate amounts (e.g. € per day) would be involved.

Other things to do (as if you didn't have enough...)

We will soon be starting on the preparation of S-TEAM Annex 1 (STAN?), which is essentially a re-written proposal as a basis for negotiation. This means that we have to be sure that our original ideas for WP contributions (the dreaded PoDs) are realistic and relevant. We will have to be more detailed about how these will contribute to the overall success of the project.

NTNU have had a meeting of staff members who will be contributing, and we will report the outcomes from this in the next newsletter, as it will undoubtedly have raised some interesting questions. The process of refining the proposal may have

changed the nature of your original ideas, and it will be important to come to a shared understanding of what is going to be done before we are finally committed to delivering reports, DVDs and the mysterious training packages which are going to revolutionise science teaching...

S-TEAM Work package Leaders, come forward!

After the INQUEST proposal has been submitted, we have to consider STAN and the detailed planning of work packages and deliverables. We have been asked (in the invitation) for more detail, especially on timescales. I will be in touch with individual WP leaders soon to start this process off, probably circulating some sort of template and generally being a pest, but now you know it's coming. We'd like the WP leaders to take ownership of this, collaborating of course with other partners as necessary

New INQUEST abstract for comment by Friday 9th Jan

To promote scientific literacy and science careers, teachers need support in the reform of science teaching methods. Existing projects on inquiry-based methods in science teaching have focused on identifying and developing 'best practice'. INQUEST will complement these projects by actively engaging with schools and teachers through creative partnerships in order to implement innovative practices.

As a learning organization (WP1), it will create a shared purpose amongst its 30 consortium partners (WP2), in order to align the overall aims of the Call with their local knowledge and cultural sensitivities. A National Working Group will be formed in each of the 17 consortium

countries. The institutions and prevailing educational ideas within each national context form a pedagogical field which determines the pedagogy and curriculum content of science education. INQUEST will use the concept of the 'pedagogical field' to analyse the roles of, and to engage with, the appropriate institutions in the national contexts (WP3).

This will lead to the creation of partnerships with schools (WP4) and teachers (WP5) which will enable it to disseminate IBST resources effectively and efficiently. In addition, through these partnerships, INQUEST will develop a new model of teacher networking, based on existing professional development structures and teaching practices (WP6). This network will be part of an emerging European Pedagogical Field in which innovations such as IBST can be effectively and sustainably implemented, building on the knowledge currently held by national players.

INQUEST will be able to report detailed, scientifically-justified results from its activities (WP7). Its largest work package (WP8), will disseminate materials using the above partnerships and networks and will ensure these are of high quality and are appropriate to national contexts, cultures and curricula. It will also ensure that INQUEST activities are brought to the widest possible audience.

S-TEAM and INQUEST - an odd couple?

As you may have noticed in the last two S-TEAM newsletters, the relationship has evolved somewhat, from a backup plan to a stand-alone project to a possible S-TEAM extension. The exact outcome will depend on how the negotiations for S-TEAM proceed and how the Commission see the overall future of inquiry based

science teaching and the projects which have formed around it.

I have some thoughts below, but after discussing the 'why' question with several of you, the main reason is to head towards a more open teaching and learning environment in Europe, one which does not proceed in short bursts (project-based) but is continuously improving through dialogue. Clearly there have to be structures in place for this dialogue to happen, but at the moment these only exist at a local level, and are called 'schools' (and even then people don't have enough time to talk). There is no equivalent at European level - conferences are infrequent and expensive, websites are often too quiet and there is nothing much in between.

What might this future look like? As someone new to science education, I can see that there are many projects already doing what we say we are going to do - connecting teachers with research, identifying best practice in science teaching and so on. But there also seem to be a lot of empty spaces where there should be things happening.

This is partly the nature of the web, which is perhaps not as dynamic as we like to think. A website can be a bit like a holiday home, somewhere which is fun for a short time but which doesn't get much attention during the rest of the year. The spaces where things are happening are places where people actually interact on a daily basis like classrooms or schools. There are networks which contribute to this daily interaction, and there are networks which don't.

It also seems to me that resources are not a problem. There are thousands of science resources out there, but maybe

these resources are like the books in an airport bookshop - they make the journey more interesting but they are not substitutes for an aircraft. To extend this metaphor, there are two reasons for travelling - you want to go somewhere, or you have to go somewhere. The aircraft - science education - can give you a pleasant flight or a bumpy ride.

For school students, the 'want to' and 'have to' reasons are usually difficult to separate. Theories of motivation are usually inadequate to explain why students go to school at all, let alone why they might or might not want to study science. I think that the social aspect of schooling is under-theorised, and has many similarities to the world of work. The bottom line might well be "to make money to live" but there are other, less distant goals and there are activities, rituals and conditions which make everyday school life or work bearable. Students cope with school, rather than sitting passively on the aircraft reading a book.

End of extended metaphor!

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