

www.sails-project.eu



European conference presentation on the SAILS CoP

SAILS
Strategies for Assessment of
Inquiry Learning in Science

D5.3 European conference presentation on the SAILS CoP

Authors: Deirdre McCabe
Project name: Strategies for the Assessment of Inquiry Learning in Science (SAILS)
Project number: 289085
Start date: 01/01/2012
Duration: 48 months
Lead partner for this deliverable: Intel, ATiT
Project coordinator: Dublin City University
Contact: info@sails-project.eu
Website: www.sails-project.eu



The research leading to these results has received funding from the European Union's Seventh Framework Programme for research technological development and demonstration under grant agreement no 289085
This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both. This document does not represent the opinion of the European Union, and the European Union is not responsible for any use that might be made of its content.

Presentation of SAILS CoP at European level

RECRUITMENT TO CoP

The current focus on the SAILS CoP is to support and engage with teachers that have attended SAILS Teacher Education Programmes. Therefore, dissemination efforts relating to the CoP have up to now largely been concentrated at national events. This report provides a description of two European level events in which a presentation of the SAILS CoP was made along with a list of national events that SAILS partners took part in to disseminate the CoP.

AFIRSE, LISBON, PORTUGAL, 30 JANUARY -1 FEBRUARY 2014

About the conference

AFIRSE (Association Internationale Francophone de Recherche Scientifique en Education) aims to further the development of scientific research in education and the international diffusion of the use of such research to improve the conditions of education, as well as the set of activities and educational practices. AFIRSE is based in France with sections in countries such as Portugal, Brazil, Canada, Mexico and Belgium. The 21st Colloquium was hosted by the AFIRSE Portuguese section with the title of "EDUCATION, ECONOMY AND TERRITORY: The place of education is developing".

The following themes were discussed:

- Education and development
- Local Education Policies
- Economy and funding education
- Management of education organizations
- Curricular policies and teachers training

The audience of this conference included policy makers, pedagogical researchers and practitioners.

SAILS Presentation

The SAILS project presentation (Appendix 1) was entitled "Pathways of knowledge construction in teachers' education". The SAILS project was presented, placing emphasis on the inquiry activities and assessment as well on teachers training, piloting activities and the community of practice. Data from the Portuguese experience with teachers from the first cohort, based on two questionnaires and a written reflection submitted by all teachers at the end of the first cohort were presented.

SiS CATALYST CONFERENCE, GHENT, BELGIUM, 2-5 MARCH 2014

<http://www.siscatalyst.eu/>



About the conference

SiS Catalyst is an initiative to foster and support ethical, effective and sustainable engagement between children aged 7-14 years and the social, cultural, political, scientific and educational institutions which make the decisions that will shape their futures.

The first part of this conference aimed to discuss the policy implications of involving young people in the decisions that will ultimately affect them. SiS Catalyst believes that children's voices should be systematically included in their current reality as well as the planning for the future. The ethics of genuinely listening to children requires empowering their autonomy in order that they can make the most informed choices about their present and their future.

The programme included a series of roundtable discussions with several European Commission funded projects, including SAILS, with the aim of sharing experiences and ideas about engagement and impact on European and national policy. Further workshops included discussions on how the policy implications of SiS Catalyst can be developed with key players including European policy makers, senior academics and journalists etc.

The audience (~120 participants) of this conference was international and included researchers, educators, policy makers, civil servants and youth groups.

SAILS Presentation

The SAILS project was one of five EU projects running roundtable sessions at the SiS-catalyst conference. The focus of these sessions was to discuss dissemination strategies, particularly those relating to the engagement of projects with national and European policymakers. SAILS Partners Deirdre McCabe (DCU) and Joasia van Kooten (ATiT) led a session on the SAILS project and presented (Appendix 2) SAILS project outcomes, the dissemination strategies used by the SAILS project such as the CoP, videos and teacher workshops, and the engagement with policy makers through the national stakeholder reference groups.

Following this presentation, a discussion was held about the use of different dissemination tools like Face-to-Face events, Online Communities, Social Media and the use of Video to get a message across. Four twenty-minute sessions were held.

Recommendation from the discussion on the Community of Practice included the need for ongoing face-to-face meetings/events in order to build the community and drive engagement and the connection of the CoP to social media channels.

In the afternoon more plenary and discussion sessions were organised around the theme “how to communicate change”. Some interesting ideas were shared by speakers as well as participants:

- don't try to influence policy makers by telling or showing them, instead turn up with a solution(s) to a problem they have
- when considering stakeholders, use social network analysis to identify stakeholders beyond the usual suspects
- journalists are not our tool to use for media coverage they are a tool for society, therefore help them see the new and unique stories within the project and involve them throughout the process
- make your 'matters of fact' a matter of concern and then create a public around it and own your story, be clear about the change you want to see and then choose your stories accordingly.

PRESENTATION OF SAILS AT NATIONAL EVENTS

At present, the main driver for recruitment of participants to the SAILS CoP is through SAILS Teacher Education Programmes. Partners are also disseminating the SAILS CoP at national events such as those described below.

Germany: MNU Bremerhaven



The MNU is an important association of mathematics and science teachers with a series of annual conferences in the federal states of Germany. This time the program of the 2-day conference consisted of almost 120 oral presentations and workshops. In addition, a large number of companies for teaching aids and publishers for school books participated at this conference.

SAILS partner Gunnar Friege and co-workers Tobias Kopp and Eike Walbaum, gave a 45-minute oral presentation about the aims of SAILS and the results of the first workshops with teachers in 2013.

Greece:

Conference	Date & Venue	Target/audience
1st Pan-Hellenic Conference of School Consultants of Ministry Education (PESS): Modern Teaching Approaches	23-24 November 2013, Korinthos, Greece	School Consultants of Ministry Education, In-service and pre-service teachers from primary & secondary education, Students-researchers-scientists in science and technology education, etc.

e-Learning Expo 2013 Innovative e-learning practices for promoting active citizenship	14 & 15 December 2013, Athens, Greece	In-service and pre-service teachers from primary & secondary education, Students-researchers-scientists in science and technology education, School Consultants, etc.
15th Pan-Hellenic Conference of Hellenic Physical Society (EEF): Modern Physics and Society: Achievements - Technology - Research	6 - 9 March 2014, Nafplio, Greece	In-service and pre-service teachers from primary & secondary education, Students-researchers-scientists in science and technology education, School Consultants, etc
Microsoft in Education Global Forum	March 11 – 14, 2014 Barcelona, Spain	School leaders, innovative teachers, School Consultants, representatives from the educational technology industry
"New Technologies in Educational Practice" Conference organized by the Private Contemporary School of Avgoulea - Linardatou	15-16 March 2014, Athens, Greece	In-service and pre-service teachers from primary & secondary education, Students-researchers-scientists in science and technology education, School Consultants, etc
3rd Pan-Hellenic Educational Conference of Imathia: Integration of ICT in education	4-6 April 2014, Naoussa, Greece	In-service and pre-service teachers from primary & secondary education, Students-researchers-scientists in science and technology education, School Consultants, etc

Portugal: XV ENEC National LEVEL



The SAILS project was presented in XV ENEC, Algarve University, Portugal. This was the fifteenth meeting on National Science Education. The main subject was "Current trends in Science Education". It was an opportunity to share and discuss several issues related to teaching and learning, teachers' professional development, curriculum and educational policies, the relationship between school and the community, didactic innovation and teachers training in sciences.

Cecília Galvão and Cláudia Gonçalves presented the SAILS project at two different moments. Respectively in a plenary session, under the subject "Sciences curriculum, between research and politics" and a communication entitled "Project SAILS – Partnership in knowledge construction, between the academic community and teachers' professional practice".

Appendix 1: SAILS Presentation at AFIRSE



*Training and Curriculum Policies
Teachers and Trainers Training*



Context

- European Project – FP7

- **12 countries** - Ireland (coordinator); Denmark; Germany; Greece; Hungary; Poland; Portugal; Slovakia; Sweden; Turkey and United Kingdom

- **Support Teachers** – Lower and upper secondary



Context

- Inquiry Based Science Education (IBSE)

- Strategies and frameworks for assessment of IBSE skills and competencies



How to

- Teachers Education Programme

- Community of Practice (CoP)



Community of Practice
<http://www.sails-project.eu/portal/>



Portugal CDP

SAILS: Strategias para Avaliação de aprendizagem baseada em descobertas Investigativas em Ciências

Compreta SAILS de abstracção de formação sobre os princípios de IBSE com conferências de especialistas portugueses. Tem sido concebido durante vários anos, e agora SAILS pretende desenvolver um modelo internacional de formação de docentes em português a partir de experiências e práticas de ensino de aprendizagem e de avaliação baseada em práticas Investigativas

Uma comunidade de prática europeia de investigação em ciência baseada em práticas de investigação em IBSE

A comunidade online está aberta a professores, investigadores, estudantes, entre outros, sobre experiências de uma abordagem inovadora de ensino baseada em práticas Investigativas para o ensino de ciências e abstracção sobre avaliação e avaliação. A comunidade de prática está a ser criada de forma a proporcionar e proporcionar acesso aos recursos do projeto SAILS e às outras práticas de ensino Investigativas em IBSE. Serão desenvolvidas atividades de formação, acompanhamento, apoio on-line e outras atividades, com o objetivo de facilitar a implementação de práticas Investigativas em aulas regulares, atividades e atividades não tradicionais, com possibilidades de formação ao nível nacional e Europeu.

Para informações adicionais, por favor contactar o endereço de e-mail: info@portugal.cdp.eu

Info Portugal CDP

- Inicializar CDP
- Registar CDP
- Tornar-se CDP
- Desinscrever CDP
- Invitar CDP
- Atualizar CDP
- Recuperar CDP
- Home CDP
- Portugal CDP
- Espanha CDP
- França CDP
- Itália CDP



Teachers Education

- **1st moment** – IBSE and CoP Introduction (2013)
- **2nd moment** – Assessment and CoP development (2014)
- **3rd moment** – Increasing teachers autonomy in IBSE and assessment, and the CoP with a progressively self-sustaining nature(2015)



1st workshop for teachers



Curso de formação

- IBSE - Discussion and concept appropriation
- Sharing experiences focused on IBSE
- Discussion on formative assessment perspectives
- Sharing experiences focused on IBSE assessment
- Sharing difficulties either in IBSE approach or in assessment



Objectives

- Understand how do position teachers with regard to IBSE
- Identify teachers expectations and perceptions regarding their involvement in the CoP



Methodology

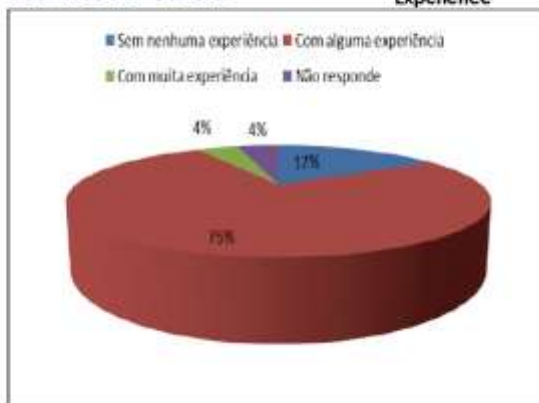
- Qualitative approach
- 24 teachers were involved
- DATA COLLECTION
 - 2 questionnaires
 - Teachers individual written reflection



- No experience
- Some experience
- Much experience
- Doesn't respond

Results IBSE

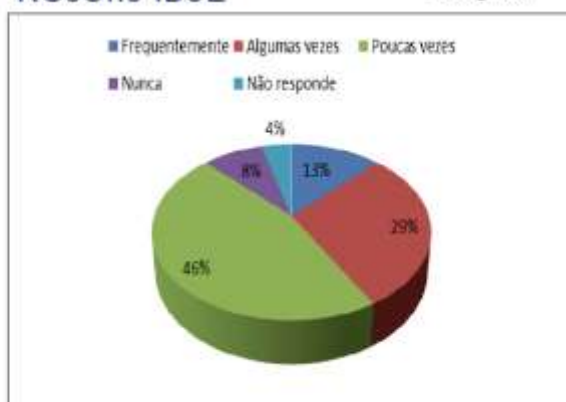
Previous IBSE Experience



- Frequently
- Sometimes
- Rarely
- Never
- Doesn't respond

Results IBSE

Teach through IBSE





Teachers' perception of the use of IBSE

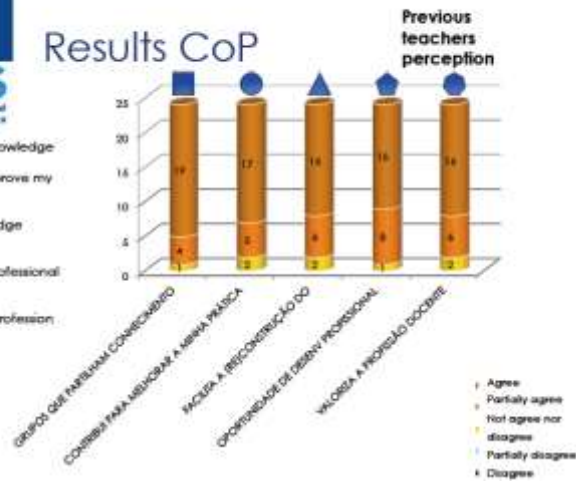
Results IBSE

- **Potentialities**
 - Development by students of a very large range of Inquiry skills
 - A way to make classroom lessons more attractive both for teacher and for student
- **Constraints**
 - Time management in different moments: construction and planning, implementation and reflection on the process
 - Students assessment in this learning environment



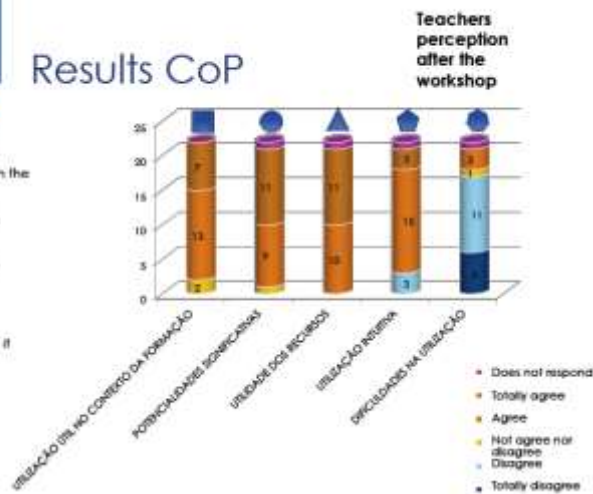
- Groups sharing knowledge
- Contributes to improve my practice
- ▲ Facilitates knowledge (re)construction
- ◆ Opportunity for professional development
- Values teaching profession

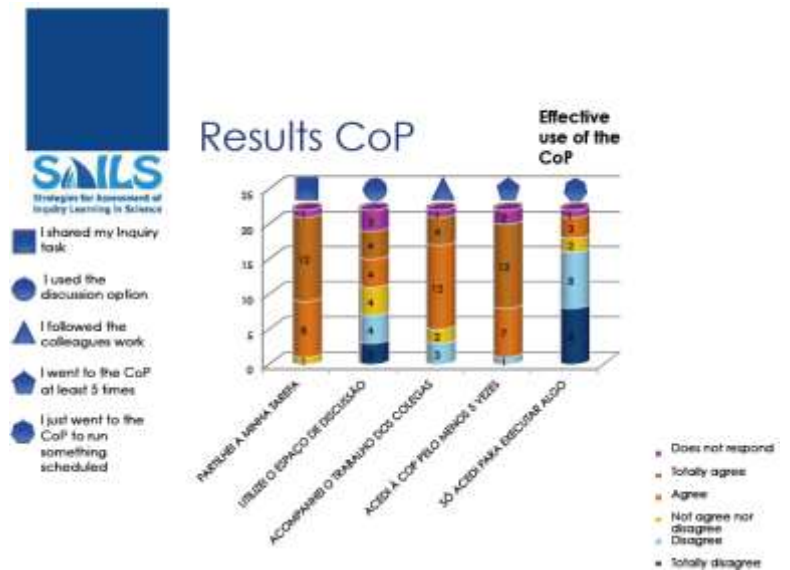
Results CoP



- The CoP was useful in the workshop context
- Reveal considerable potential
- ▲ Resources were very helpful
- ◆ It is intuitive
- Felt difficulties to use it

Results CoP





Conclusions

- **INQUIRY** – Lack of knowledge and teaching experience
- **CoP** – Provides a place to share resources, strategies, learning experiences, and a collaborative workspace, indicating the opportunity for reflection and knowledge construction



Challenges

- **INQUIRY** – Empower teachers with a set of strategies that enable them to effectively assess students outcome in IBSE context
- **CoP** – Promote the development of the CoP as a tool for knowledge construction that combines teachers practice and scientific research



Institute of Education
University of Lisbon

Cláudia Gonçalves
Cláudia Faria
Sofia Freire
Cecília Galvão

AFRSE, 2014

Appendix 2: SAILS Presentation at SIS-Catalyst




Deirdre McCabe (DCU) and Joasia van Kooten (ATIT)

This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 289085



SAILS partners



















SAILS - A European approach (2012-2015)

The project is coordinated by Dublin City University. The SAILS consortium consists of fourteen partner organisations, including universities, SMEs and a multi-national organisation, from across twelve European countries.



SAILS Kick off Meeting, January 2012, DCU, Ireland

“SAILS aims to prepare teachers not only to be able to teach through IBSE, but also to be confident and competent in the assessment of their students’ learning through inquiry.”

Aim of SAILS project

“SAILS aims to prepare teachers not only to be able to teach through IBSE, but also to be confident and competent in the assessment of their students’ learning through inquiry.”



Objective 1



Enhance existing IBSE teaching and learning materials

by incorporating inquiry assessment strategies and frameworks

Objective 2



Partner with teachers to identify and implement assessment strategies and frameworks to evaluate key IBSE skills and competences in the classroom

Objective 3



**Provide Teacher Education
workshops in IBSE and CoP**
in 12 European countries

Objective 4



**Promote the use and dissemination of
inquiry approaches to teaching, learning
and assessment**
with national and international stakeholders.

SAILS

**Strategies for Assessment of
Inquiry Learning in Science**

strategies for assessment of inquiry learning in science

info@sails-project.eu

www.sails-project.eu

This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 289085



SAILS Dissemination

- Stakeholder Reference Group in each country
- Engaged with through face-to-face meetings, seminars, etc.
- Brochure for Policy makers
- CoP (national and international)

Community of Practice

- Have you use CoPs in your projects?
- What were the difficulties?
- What works/doesn't work?
- How do we engage teachers in a Community of Practice?

Social Media

- How is social media used in your project?
- What channels did you find most effective to reach **policy-makers** in particular? (Twitter, Facebook, LinkedIn, Google+) why?
- Is it more effective to create your own channel OR to use existing channels, why?