

What is the GELS project?

GELS stands for **Global Engineers Language Skills**. The aims of the GELS project are to better understand the communication needs of engineers and to ensure that this understanding informs directly the teaching and learning of language and communication (LC) skills at technical universities and departments of engineering.

Currently, many LC teachers who work with engineers are poorly placed to recognise their students' broader learning needs. We seldom have a technical background ourselves and are rarely included in engineering faculty. To better prepare students for international study and future employment, LC teachers should be better informed about engineers' specific language and communication needs (i.e. **Language for Specific Purposes**, LSP).

The GELS team would also like to provide an opportunity for LC teachers working with engineers to **network**, share expertise and good practice, and ensure continued professional development. A more detailed description of GELS and LSP can be found in Tual et al. (2016) at the GELS project's webpage <http://www.language-unit.eng.cam.ac.uk/news/GELS>

Who is the GELS team?

The GELS team is made up of **Teresa Geslin**, **Jamie Rinder** and **David Tual**: three experienced LC teachers working in France, Sweden and the UK respectively. We want LC training to be better integrated in engineering curriculums and for budding engineers to use a range of languages for academic and professional purposes – not just English. We believe that such training can be more effectively integrated in engineering education if LC teachers have a clearer picture of 1) what engineers really do, and 2) how these tasks can be a source of inspiration for meaningful teaching and learning activities in the LC classroom.

We are keen to create a **GELS network** for future work, and already have established representative teachers from Finland, France, Germany, Poland, Sweden, and the UK.

What has the GELS team already done?

Autumn 2015 – Spring 2016

We surveyed engineers from diverse countries, companies and industries about their LC needs. We investigated by means of two **questionnaires** how and how often engineers e.g. verbalise numerical data, need to negotiate, describe technical processes to non-experts. The results of these surveys can be found in *Rinder et al. (2016)* (in English) and *Geslin et al. (2016)* (in French), both available at the GELS project's webpage <http://www.language-unit.eng.cam.ac.uk/news/GELS>

We applied for **Erasmus+ funding** to meet the costs of future training days and travel between the UK, Sweden and France.

Summer 2016

We experimented with a progressive framework to act as a scheme of work. This framework was an adaptation of the Council of Europe's CEFR for Languages self-assessment grid and reflected the skills required by engineers as shown in the questionnaires. The aim of the

GELS framework was to show LC teachers how to prepare students for the realities of studying engineering abroad and working in technical industries. The first version of the framework can be found in English in *Rinder et al. (2016)* and in French in *Geslin et al. (2016)* at the GELS project's webpage (see above).

We presented the framework in **three articles**, all available at the GELS project's webpage, and at three **international conferences** in the UK, Finland and Spain.

We ran a **training day** in Cambridge, UK for LC teachers from eleven technical universities in Finland, France, Germany, Japan, Poland, Sweden, Switzerland and the UK. A detailed description in French of the GELS project's work in 2016 can be found in *Geslin et al. (2016)*, available at the GELS project's webpage.

Our application to Erasmus+ was unsuccessful.

Autumn 2016

Based on feedback from the conferences and the training day, we made revisions to the framework. The updated version of the **GELS framework** is available at the GELS project's webpage.

Despite the lack of Erasmus+ funding, we ran a **training day** in Helsinki and presented the GELS project at one **international conference** in Brno, Czech Republic. We began to establish an informal network of LC teachers representing a range of countries and languages.

What will the GELS project do in the next year?

Spring 2017

We aim to establish an informal network of LC teachers representing a range of countries and languages. With this group, we aim to make **a stronger application for Erasmus+ funding** in March 2017 and to create **a basic catalogue** of teaching and learning activities that complements each stage of the GELS framework. This catalogue should ultimately show language teachers how they can better prepare students to engineer in an additional language.

We will run a **training day** at Poznan University of Technology in April 2017. So far, we have applied to present the GELS project (and a spin-off project focused on frequently-encountered lexis for engineers) at two international conferences.

Autumn 2017 – Spring 2018

We aim disseminate the results from the GELS project via training events and academic conferences and encourage feedback.