

III.3 REVIEW of NGS LT (Nordic Graduate School in Language Technology)

Objectives and strategy of the research school

The goals set out in the application were the following:

- (1) to provide a forum for graduate students in language technology in which they can obtain advanced research training of a standard and breadth which is not available at any of the individual participating institutions, not even in any single Nordic country alone*
- (2) to raise the general standard of language technology education in the Nordic countries in order to meet the increasing need in industry and academic research of researchers and developers with competence in language technology*
- (3) to create a broad interdisciplinary platform for graduate education in language technology. This platform should provide a multidisciplinary basis on which the student can build further*
- (4) to create an international profile by inviting instructors from foreign universities and research institutes and by encouraging interaction between students from the Nordic countries and their peers in other countries (including non-Nordic countries)*
- (5) to exploit similarities between many of the Nordic languages by encouraging students to reuse linguistic resources and technologies designed for one Nordic language as a base for creating similar tools for the other Nordic languages*

The assessment is that NGS LT has achieved its goals excellently in every aspect, with some reservation regarding the last objective, which has not been specifically addressed in the courses. However, this is said to be indirectly included in some activities. With the establishment and growth of the field this aspect will become increasingly important.

The courses that have been offered have addressed virtually all aspects of the field of language technology that are currently viewed as relevant to ongoing research and, judging by the tutor research and the comments from students and supervisors, must have been of top quality.

Innovation and creativity aimed towards strengthening Nordic research training

The idea of combining intensive resident teaching with distance learning, and combining the attachment of graduate students to a local supervisor with participation in the Nordic research school, are an interesting innovation in graduate education and appropriate and fruitful in the context given. The response by graduate students and their supervisors as reflected in the self-evaluation report is univocally positive. The scientific quality, judged mainly by the themes and content of the courses offered and the quality of teachers is very high.

Research school activities (hereunder the extent and composition of relevant activities)

The activities focus on courses offered and are supplemented by the support offered to relevant conferences and financial support to students to attend conferences. The choice is well motivated by the aims of the programme. The school reported some problems in getting enough students to attend some activities, but the reasons for this remained

somewhat unclear and without more quantitative measures it is hard to say if this is a real problem.

The Nordic partnership (hereunder the extent of participation of relevant Nordic research environments) and qualification of the coordinator and partners

It seems all relevant research environments have participated, both in offering their expertise and in using the expertise offered by others. In some cases (Reykjavik) the programme would seem to have had significant influence on the establishment of a local Master's education.

The Nordic synergy effects of the collaboration

Nothing anywhere near the quality of this programme could have been achieved for the graduate education in any of the institutions involved on their own. The student output in terms of papers published and conference presentations also seems very impressive.

International orientation

This is ensured by the integration of teachers active in the course work of the programme, many of whom were educated outside the Nordic countries, and their active current participation in international research. Occasional teaching by teachers from outside the Nordic countries on topics less well represented there has been a useful supplement.

Supervisory competence and resources

There are considerable differences among the participating institutions – and because of these differences the programme was set up to make the commonly available competence and resources available to the graduate education in all participating institutions. Although some of the better equipped institutions may have had an additional strain on their resources, having to offer more courses to more students (thus involving much more supervision etc), this will also have been beneficial to the quality and attendance of many courses. One challenge would be the further development of the format of distributed teaching.

The organisational plan, hereunder the cost-effectiveness of organisation and administration and quality of leadership

The organisation is running with an admirably low overhead (due to restrictions set by the programme) and could hardly be run more cost-effectively. The central tasks of coordination are obviously being looked after very well. The level of leadership and coordination of the activities are the only aspects which seem to make NGSALT something more than a network.

Continuous evaluation and monitoring

There is a central scheme in place for monitoring student participation and success in the courses offered and passing information to local supervisors. The evaluation of individual courses is left to the course teacher, which seems like a sensible approach.

Plans for continuing the co-operation/activities after the end of the funding period

We are told that courses will continue to be available to all students also after the end of the funding period. This is already a very positive prospect. There will obviously be a big problem though in financing the participation of students when no further funding is available.

The initiative for a Nordic Master Programme is definitely a very good idea and should by all means be encouraged and supported. This does not, however, ensure the needed support for PhD-level training, where the problem is more severe.

Also the idea of continuing and expanding on Web-based teaching is a good idea, but can only be a supplement to a more comprehensive cooperation structure for graduate education.

It is clear that the formal structures and informal networks that have been built up are essential for ensuring the quality of graduate education in language technology. This cannot be done by the individual institutions. Except possibly in Gothenburg and Helsinki, without the high risk that graduates will simply leave for countries where suitable high quality graduate programmes are in place.

The need for training of researchers within the field concerned

The need for research training in language technology in the Nordic countries and many of their neighbours is as urgent as ever. The prospects for the application of LT are increasing virtually day by day and languages and countries that are excluded from participation will soon feel the economic consequences. In view of the fact that all languages involved, with the exception of Russia, are "small" languages with comparatively few speakers, we cannot rely on industry for the development of LT for these languages. The perspective of LT development for small languages is typically not sufficiently viable commercially and the result will be a disadvantaged position, resulting in a threat to the languages involved. The issue of developing LT locally and with the help of public funding in the participating countries is thus not only of economic urgency, but is a question of linguistic, and thus national, identity.

Impact on research training within the fields concerned¹

The NGSLT has built upon informal connections among researchers that existed previously and has developed them into a structure for graduate education that has clearly proved its validity already in the few years of its existence. Since we may not expect that each participating institution can, as a result, set up its own graduate training in LT, simply for lack of students locally, some such structure must be maintained. Metaphorically speaking: We all need air transportation, but not every village can and should build an airport. Some essential needs just cannot be catered for locally in each place. In view of population size and size of languages, LT in the Nordic countries and some of its neighbours is one of those essential needs that require cooperation and structures within which the cooperation can take place.

¹ Including the short-term perspective (the impact of establishing a Nordic Research School), the medium-term perspective (the impact on research training of the results achieved during the five-year funding period), and in the long term perspective (the impact and the anticipated effects of the continued collaboration).