POLICY IMPLEMENTATION THROUGH A LANGUAGE COMMITTEE

Technical report, January 2014

VIGGO KANN

Department of Theoretical Computer Science KTH Royal Institute of Technology Stockholm, Sweden viggo@kth.se

RICHARD NORDBERG

Department of Language and Communication
KTH Royal Institute of Technology
Stockholm, Sweden
richard1@kth.se

ABSTRACT

KTH Royal Institute of Technology is the largest and oldest technical university in Sweden. As several other Swedish universities, KTH in 2009 started to write a language policy, encouraged by the Swedish Language Act, which was entered into force in 2009. The principles for the language policy and the main contents of it are presented, to give the basis for the need of establishing a language committee realising the policy.

We give an account of the tasks and activities of the KTH Language committee during its first three years. For example, two questionnaires on language use at KTH, one for teachers and one for students, were carried out. Some of the results of the questionnaires are reported, and we give examples on how these results have guided the direction of the work of the Language committee.

In order to increase the chance of getting a language policy implemented, establishing a language committee is a good choice.

Keywords

Language policy, language committee, language use, language questionnaire.

1. Introduction

The Swedish Language Act entered into force in July 2009 (Hult, 2005; Boyd, 2011). The Language Act contains some paragraphs that are relevant to Swedish universities (which in fact are government agencies in Sweden):

"Swedish is the principal language in Sweden."

"As principal language, Swedish is the common language in society that everyone resident in Sweden is to have access to and that is to be usable in all areas of society."

"The language of the public sector is to be cultivated, simple and comprehensible."

"Government agencies have a special responsibility for ensuring that Swedish terminology in their various areas of expertise is accessible, and that it is used and developed."

How should the universities react and ensure that they follow the law? In the preparatory work of the Language Act a solution was mentioned: every university could write a language policy. The first Swedish language policy documents are from 2006: Gothenburg university (2006) and the Faculty of Science and Technology at Uppsala university (2006). There were at the same time several Nordic universities that wrote language policies, which could also be called language plans, language principles, or language strategies (Jansson, 2008). In February 2009, a Nordic conference about language policy writing was held in Finland, where the authors of this paper participated. We later the same spring were elected members of the Language Policy Group at KTH, whose task it was to write the first version of the KTH Language policy. The group adopted the following principles for the writing:

- The policy should build on the language policies of other similar universities and experiences from these (mainly Uppsala, Gothenburg, Lund and Helsinki universities, see the references).
- The policy should take into consideration the Swedish Language Act and the goals and vision of KTH.
 - The policy should not be rigid and inflexible.
 - The policy should be constructive.
- Parallel language use (Swedish and English) and linguistic consciousness should be guiding-stars.
 - The linguistic quality of the policy itself should be high.

During autumn 2009 the policy was referred to the faculty and students in many ways and rounds. Every student or staff at KTH had the possibility to react. Finally, in April 2010, the University Board decided to adopt the Language policy. The policy was immediately translated from Swedish to English.

In order to realise the policy a Language committee consisting of five faculty and two students was established. The committee, of which the authors have been members since it was founded, has now worked for three years. In this article we will describe the main contents of the KTH Language policy, the work of the Language committee and the results of this work.

2. THE LANGUAGE POLICY OF KTH

KTH is one of Sweden's most international universities, with operations that span the globe. KTH is also one of Sweden's oldest universities, cooperating closely and actively with Swedish society. The university develops its national and international role with great care and strives for active participation in the development of the community.

KTHs overarching goal and most powerful driving force is to attain excellence in education and research. This goal requires KTH to act wisely and with insight in all of its endeavours, whether it be at local, national or international level. KTH aims to be an outstanding Swedish and international university.

KTH has set up a number of goals, several of which have a direct bearing on language use. Some of these goals are explicitly international, for example, that KTH is committed to being an international university and to ensuring that its students will be attractive on the international job market.

Within research, English is a lingua franca for communication between people with different mother tongues. Most researchers at KTH use English daily when working with international colleagues and when publishing their findings. When working with Swedish colleagues, native speakers of Swedish naturally use Swedish, as they do for publishing in research areas where Swedish is the language of publication.

Within education, KTH uses mainly Swedish for the first three years of study. In order to adapt the education to the Bologna process and to promote internationalisation, tuition during the subsequent two years is mainly in English.

The demand for KTH to live up to its role as both a national and an international university, where Swedish and English are used in parallel, focuses on the importance of language ability. The interest among staff and students to be active on a national and international level means that language competence in Swedish and English is developed even without measures initiated by the university. There are, however, certain situations and issues that require linguistic skills to be the subject of policy in order to clarify the principles and rules according to which language is used and promoted at KTH.

The language policy stresses *parallel language skill* in KTH activity as a rule.

The above text constitutes the introduction part of the KTH language policy. Its purpose is to set the scene and motivate the second part, which is a more reasoning policy text. All in all the language policy consists of four parts:

- 1. Introduction.
- 2. The policy, structured in five different aspects: internationalisation, quality in education, the language of science, diversity, the Language Act.
- 3. Overarching goals motivated by the policy, namely high linguistic quality, language competence of the students, linguistic competence of teachers and researchers, multilingual education, Swedish and English specialist language.

4. Commitments and plan of action in twelve paragraphs: administrative language, high linguistic quality, conscious language choice, the students' parallel language competence, the students' communicative competence, language workshop, bilingual education, examination, language competence of the employees, abstracts of dissertations and theses, trial lectures for appointment as a docent, Swedish specialist language.

3. REALISATION OF THE LANGUAGE POLICY

As soon as the language policy was adopted the president of KTH set up a committee responsible for the implementation of the policy. The committee was called the Language committee and was composed of five members of the faculty and two representatives for the students, chosen by the student union (one undergraduate student and one doctoral student).

The president thought that the eight pages long policy text was too long to be read by most students and staff. Therefore he assigned to the language committee the task of distilling a short version of the language policy. The short version, consisting of 15 lines of policy and one page of goals and commitments, was soon produced by the committee, and was adopted by the University Board only eleven months after the original policy.

3.1. Manifesto of the Language committee

The Language committee could not and cannot realise the whole language policy by itself. The policy has to be made known by the staff and the students and become accepted by them. Also, the Language committee is not a decision-making authority and has no economic resources. Thus, its role has to be to suggest changes and new regulations that can be decided by others. Furthermore it could fill an empty space by collecting information about how language is used at KTH and become a resource in language related issues. Here follows the manifesto of the Language committee.

The committee should:

- 1.define which new activities are required for the policy to be implemented and estimate the costs,
 - 2. disseminate information on the policy inside and outside KTH,
 - 3.monitor language issues at KTH and in society so that the policy is kept up-to-date,
 - 4. act as a resource when important decisions on language issues are to be taken at KTH,
- 5. collect data on how language is used at KTH, for example language of instruction in courses at different levels, language of course literature, language in degree projects and theses, language at thesis defences and docent lectures, language competence of international students, doctoral students and teachers,

6.conduct investigations that may affect the language policy in the future, for example new students' and teachers' desires for language competence, the industry's desire for language competence of engineers.

4. RESULTS OF THE ACTIVITIES ON THE LANGUAGE COMMITTEE

The Language committee meets three or four times each semester. The committee tries to spread awareness and knowledge of the language policy at KTH, for example by informing through its web site and by inviting to discussions on the use of language. The members of the committee regularly go to conferences on language in higher education and research.

Below we describe the outcomes of some of our activities.

4.1. Questionnaires to teachers and students at KTH

In order to get a good understanding of the use of language in the education at KTH in the reality, and to get to know the opinions of the teachers and students in language related questions, the language committee has carried out two questionnaires, one directed to teachers in 2011, and one directed to students and doctoral students in 2012. The questionnaires also were a way to inform the teachers and students about the existence and spirit of the language policy and the Language committee.

The questions were carefully chosen to cover different parts of the language policy, while not requiring more than 10 minutes to answer. We got quite good response rates for both questionnaires, which means that the results should give a good picture of the current situation and existing opinions.

During spring 2011, the questionnaire to the teachers was sent out. The questionnaire could be answered either in Swedish or in English. All teachers, including teaching doctoral students, were invited to answer. 524 teachers answered the questionnaire. 434 of them answered the Swedish version and 90 answered the English version. This means that about a third of all active teachers answered.

Table 1: KTH teachers who have taken language courses in order to improve their teaching

| | in Swedish | in English | in other language |
|---|------------|------------|-------------------|
| Have taken (Teachers answering in Swedish) | 6% | 10% | 3% |
| Have taken (Teachers answering in English) | 45% | 17% | 10% |
| Wants to take (Teachers answering in Swedish) | 9% | 36% | 8% |
| Wants to take (Teachers answering in English) | 71% | 29% | 16% |

The questions were divided into the following areas:

- Mother tongue (Swedish 70%, English 5%, other 25%).
- Language ability of the teacher in Swedish and English in different situations (lecturing, producing written course material).
 - Interest in taking language courses to improve teaching, see Table 1.
 - Use of language in each course given during the last year, see Table 2.
- Experiences of studies or work in other countries than the teacher's native country or Sweden.
- Open questions about which language skills the students most often lack and general thought about language use in KTH courses.

Table 2: Language use in courses at KTH

| | only in Swedish | only in | n English | in both languages | |
|---|------------------------|---------|------------|----------------------|--|
| Official language of instruction | 48% | 52% | | - | |
| Lectures are given | 39% | 46% | | 15%1 | |
| Supervision is given | 36% | 25% | | 40% | |
| Complete administrative info exists | 35% | 43% | | 23% | |
| The textbook is | 18% | 60% | | 21% | |
| The examination assignments are given | 43% | 52% | | 4% | |
| The student's solutions may be | 15% | 22% | | 63% | |
| The most important terminology is given | 18% | 43% | | 40% | |
| | | • | share of a | ll courses | |
| First cycle (bachelor's level) | | | 40% | | |
| Second cycle (master's level) | | | 51% | | |
| Third cycle (doctoral level) | | 10% | | | |
| At Swedish lectures questions may be stated in English | | 62% | | | |
| At English lectures questions may be stated in Swedish | | 60% | | | |
| The linguistic level of the solutions may influence the grade | | 26% | | | |
| Linguistic feedback on word level is given by the teacher | | 31% | | | |
| Linguistic feedback on structural lev | el is given by the tea | icher | 31% | | |

| Swedish | 69% |
|-------------------------|-----|
| English | 9% |
| German | 2% |
| Spanish | 2% |
| Other European language | 4% |
| Mandarin (Chinese) | 4% |
| Persian | 3% |
| Other language | 7% |

Table 1 shows that many KTH teachers want to take language courses in Swedish, English or other languages, to improve their teaching. Teachers answering the English version of the questionnaire naturally want to take a course in Swedish most. In table 2 answers regarding the language use in teaching are summarized from about 1,100 courses. We can see that, in spite of the fact that the language of instruction formally is only one of Swedish and English, it is quite common that students may state questions in both languages give solutions in both languages and get supervision in any of the languages. In fact the Swedish Language Act implies that a Swedish citizen should always be allowed to hand in solutions in Swedish, unless language skills are explicitly examined in the assessment. Discouragingly, only in 40 % of the courses the subject specific terminology is given both in Swedish and English.

During spring 2012 a similar questionnaire was sent to all students and PhD students at KTH. The questionnaire could be answered either in Swedish or in English. 2480 (76%) students choose to answer the Swedish version and 797 (24%) answered the English version. This means that about a quarter of the students answered.

The questions were divided into the following areas:

- Language skills in different languages and situations (self-assessed) see Table 3 and 4.
- Language skills used in courses at KTH.
- Interest in taking language courses at KTH, see Table 5.
- Awareness of the Centre for academic writing and the language policy.
- Issues when not knowing Swedish (only answered by non-fluent speakers of Swedish), see Table 6.
 - Need of teaching in courses given in Swedish (only answered by PhD students).
- Open questions about the benefits of education in Swedish, language issues in group assignments and further comments about language in the education or the language policy.

Table 4: Language skills among KTH students

| | answering Swedish questionnaire | answering English questionnaire |
|--|---------------------------------------|---------------------------------------|
| Is bilingual | 51% | 66% |
| Studied at college level outside Sweden | 20% | 71% |
| Speaking Swedish sufficiently to get along well in Swedish society | 99% | 15% |
| Benefits fully from education given in Swedish | 86% | 8% |
| Benefits fully from education given in English | 71% | 92% |
| Able to understand technical instructions written in Swedish | 99% | 13% |
| Able to understand technical instructions written in English | 81% | 99% |
| Able to use correct Swedish terminology in all subjects studied | 79% | 3% |
| Able to use correct English terminology in all subjects studied | 49% | 86% |

The languages that the students are most fluent in are shown in Table 3. Swedish, English, Mandarin, Persian, German and Spanish are the only languages spoken fluently by more than 1 percent of the respondents. The language skills summary in Table 4 shows, quite naturally, that the skills differ between the students answering the Swedish and English version of the questionnaire. The exchange students are given a crash course in Swedish when they arrive to KTH, but the international master's students are normally not given the opportunity to take a course in Swedish as part of their studies as all mandatory courses in the international master's programs are taught in English. However, many of the international students would like to take a course in Swedish, as seen in Table 5. This could be explained by the feelings of students who are not fluent speakers of Swedish, that they are inhibited in discussions with friends or isolated in the Swedish society outside KTH. More than half of the students are at least sometimes feeling so, as shown in Table 6.

Three quarters of the students were not aware of the Language policy when the questionnaire was sent out, almost two years after the date it was adopted, according to the answers. Since no marketing of the language policy had been targeted to the students, this result was expected. But the questionnaire itself was a marketing of the Language policy, which we believe made many more students (and teachers) aware of both the existence and spirit of the policy. Similarly, simply the existence of a question about the Centre for academic writing in the

questionnaire made the centre more known, and the number of students visiting the centre immediately increased.

Table 5: Students' interest in taking language courses at KTH

| | answering Swedish questionnaire | answering English questionnaire |
|---|---------------------------------------|---------------------------------------|
| Have taken course in communication skills | 30% | 38% |
| Have taken course in technical English | 7% | 26% |
| Have taken foreign language course | 23% | 27% |
| Wants to take course in Swedish as a foreign language | 5% | 73% |
| Wants to take course in Swedish, rhetoric, etc. | 49% | 49% |
| Wants to take course in technical English | 61% | 58% |
| Wants to take course in another foreign language | 52% | 45% |

The Language committee has used the results of both questionnaires to guide the direction of the committee's work. For example, the committee could see the large interest, both from teachers and students, in language courses. There are courses for employees in Swedish as a foreign language as well as courses for students in Swedish and English. However, for some categories of doctoral students and master's students it has been difficult to enter these courses. For example, it is often the case that the doctoral student's supervisor personally decides whether the department can afford the tuition fee that all doctoral students have to pay (whereas the courses are free for undergraduates). Many of the students outside the EEC (who are required to pay tuition fee) are also excluded from language courses since they are not allowed to study courses on top of their mandatory amount of credits.

Below we will give an example on how the Language committee started an effort to improve the Swedish and English subject terminology, based on the results from the questionnaires.

The answers to the open questions of the questionnaires have also been categorised and analysed by the committee. In many respects they confirm the results of a similar survey, done at

Table 6: Issues when not mastering Swedish well enough (only answered by students who are non-fluent speakers of Swedish)

| | Yes | From time to time | No |
|---|-----|-------------------|-----|
| Experienced problems following teaching | 10% | 19% | 71% |
| Feeling inhibited in discussions with friends | 22% | 33% | 45% |
| Feeling isolated in the Swedish society outside KTH | 22% | 32% | 46% |

Stockholm University (Bolton & Kuteeva, 2012), for example the complex problems introduced by changing language of instruction from Swedish to English in courses in the master's programs. Several open answers mention problems related to the teaching in English done by Swedish teachers and the teaching in Swedish done by non-Swedish teachers.

4.2. Changes to the official regulations of KTH

A few commitments in the Language policy directly affect the official regulations of KTH. For example the policy states that every PhD thesis should have a summary both in Swedish and in English. The language committee therefore ensured that the KTH regulation for PhD theses was updated according to this. Changes in the regulations do not happen by themselves, just by the adoption of a policy. There is a need for a body (like the language committee) to identify the regulations that need to be changed and formulate the changes.

4.3. The KTH dictionary

KTH consists of a central administrative unit and ten schools, each with its own administrative unit. During many years, a common Swedish administrative terminology for KTH has been developed. For every reorganisation, new administrative terms are invented. When the administrative (or academic) staff at KTH should write about KTH in English these terms have to be translated. Often there are several possible translations, which means that if the same Swedish term may be translated differently in different documents, this would not fulfil the language policy's goal of high linguistic quality. In order to obtain a uniform administrative terminology, the Language committee has constructed a Swedish-English dictionary of about 1000 administrative KTH terms. First the Swedish terms were chosen, by performing a term search through a large amount of administrative documents of different types. Thereafter the committee investigated whether the Swedish words were included in the national Swedish-English academic dictionary hosted by the Swedish Council for Higher Education¹, and in this case the recommended translation in the national dictionary was chosen. Otherwise the committee looked for the most commonly used English translation of the term at KTH. When there are different common translations in use at KTH, the Language committee has decided which of the alternatives should be recommended. The complete dictionary can be downloaded from the Language committee web site, and it has become a very valued resource by the staff.

4.4. Swedish and English terminology

As already mentioned, one of the key words in the KTH language policy is *parallel language use*. The term implies that although Swedish is the official language of KTH as a Swedish public authority, English often is on par with Swedish, as it is the natural language for the international scientific community. Thus, English must be a natural part of undergraduate education as well as the main language for PhDs and researchers. The language policy states:

"Students' language competence is important both for understanding and for exchange of ideas. By parallel use of Swedish and English in undergraduate education, the students strengthen their knowledge of English, and this is necessary. At the same time, they acquire good Swedish terminology, which is a precondition for being able to communicate in the subject in

¹ This national dictionary is updated annually by a group where the Language committee is represented.

Swedish. KTH should, therefore, endeavour to ensure that there are both Swedish and English components in courses at different levels. In research education, there must be components in both languages to an extent that allows the goal to be fulfilled."

The field where the parallel language use is most visible is of course terminology. As could be seen from the questionnaires, parallel terminology is missing in about 60 percent of the courses, and in many students' opinion parallel terminology is very important to learn and practise. During the autumn 2013, the Language Committee therefore organized a lunch seminar, where an expert from the Swedish Centre for Terminology talked about the importance of parallel terminology, and a workshop where teachers were invited to discuss how Swedish and English terminology could be taught and practised in the courses.

The workshop drew the interest from about 20 teachers and researchers. A lot of ideas were exchanged on how to work with the students' parallel use of Swedish and English terminology. For example, many of the participants thought that terminology should be part of the examination in some of the courses, that it should be specified in the learning outcomes and grading criteria. That would make the students more aware of the central position of terminology in engineering.

Another obvious tool, which is already in use in several courses, is a parallel word list of important terms. Some teachers do not make up their own word lists but refer to Wikipedia, where for example good Swedish and English mathematical terminology may be found. By editing Wikipedia entries and add Swedish terminology, the teacher can also ensure that the impact is greater than a separate word list for the single course.

In one of our algebra courses, the course book is a compilation of a course book in English and exercises in Swedish. The language of lectures and seminars is Swedish. One possible problem in a course like this, however, is that students do not realize that one term in Swedish and one term in English denote the same phenomenon. It is of course the teachers' responsibility to ensure that this does not happen.

The experiences drawn from the workshop is currently put together and will be presented at the website of the Language committee.

4.5. The Centre for Academic Writing (CAW)

One obvious effect of the language policy is the Centre for Academic Writing (CAW). One of the paragraphs in the policy says:

"To reach the language goal above, a language support activity is needed. Resources should be set aside for a language workshop which provides assistance with reports and oral presentations, for example."

"The language workshop" is today called the Centre for Academic Writing (CAW), where we provide individual help to students who are writing reports and essays, from short lab reports to master's theses. Students can book 45 minute appointments through the CAW web page; they send the text they are working with beforehand so the tutor can read it and prepare the session. This is of course not unique to KTH; on the contrary, our CAW has just been working for two and a half years, whereas writing centres have been a natural part of American and European universities for centuries. As international experience shows, it takes some years to make such a

centre an established and natural part of the university community, and we feel that students and faculty are much more aware of the CAW now than one or two years ago.

4.6. Informative website

The language committee of course has its own website, where we inform about our work and activities. The website, which exists in parallel in Swedish and English, currently includes the following:

- general information about the committee, its work, manifesto and members,
- a calendar with our activities,
- information about the language policy with a link to the policy,
- information about the Swedish Language Act,
- summaries of our language questionnaires,
- links to a great number of language resources and tools,
- FAQ, where the Language committee answers common language related questions from the KTH staff.

The website also has some discussion pages where language discussions may be held.

4.7. Automatic translation system

According to the KTH regulations, every course should have a syllabus in both Swedish and English, no matter the course language. One problem has for a long time been that there is little or no consistency in the English versions of the syllabi of different courses. Where the same term is used in Swedish there might be half a dozen English terms. This is naturally quite confusing for the students. To enhance the quality and consistency of the course syllabi, the language committee and the KTH administrative systems group have launched a cooperation between KTH and Convertus, an automatic translation system.

In brief, the system works in the following way:

- 1. The course administrator (or equivalent) writes the course syllabus in Swedish.
- 2. The syllabus is sent to the translation system.
- 3. The translation system returns an English version of the text.
- 4. The Swedish and English texts are sent to an examiner for proofreading and alterations.
- 5. The examiner approves of the translation and passes it on to the administrative system.
- 6. The Swedish and English syllabi are launched on the course web.

The vocabulary of the system is based on—in that order—the system memory, the KTH dictionary and the manual alterations which are made by the editor. Hence, an editor alteration will be saved in the system memory and will be used by default the next time the same Swedish clause appears in a syllabus. Therefore, to ensure consistency, the number of editors is limited to a few people at each KTH school, making the total number of examiners approximately 20–30 people.

5. CONCLUSIONS AND FUTURE WORK

A language policy is an important document for a university, but only the document itself is not of any value. Firstly, it has to be well rooted in the organisation - before the policy is finalised, every member of the staff and every student who have any interest in language issues, has to get the opportunity to read it and influence it. Secondly, the policy has to be realised in the ordinary business of the university. At KTH, we have found that a useful method of doing this is to establish a Language committee. The committee should be composed of both faculty and students, in order to get an all-round picture of each matter. Each member should be interested in language issues and support the language policy.

Such a committee can accomplish a lot. An important task for a Language committee is to inform the staff and students about the existence and contents of the language policy. From our questionnaires, we have seen that the interest in language issues is big, among both teachers and students. A questionnaire is a good way of raising the consciousness on language policy issues, of finding out how language is used in different situations at the university, and of collecting opinions from teachers and students. The KTH Language committee has used the results of the questionnaires to guide the direction of the committee's work, to for example make an effort to improve the teaching and learning of subject specific terminology.

A problem area often mentioned in the open answers to the questionnaires is the problems related to the teaching in English done by Swedish teachers and the teaching in Swedish done by non-Swedish teachers. In the close future, the Language committee will invite external experts to give a seminar on the problems introduced by changing language of instruction from Swedish to English in courses in the master's programs (Airey, 2009; Björkman, 2008; Lim Falk, 2008) and advice on how to overcome the problems (Thøgersen, Josephson, Londén, & Salö, 2013). The committee will then invite interested teachers to a workshop on how to teach well in English.

Another need at KTH, obvious from the teacher questionnaire, is a professional translator between Swedish and English. Therefore, the committee has investigated what the work description of such a position could include, and where it could be placed in the organisation. What remains is to persuade KTH to finance such a position.

The collected experiences from KTH are that, in order to realise a language policy, establishing a language committee is a good choice.

REFERENCES

- Airey, J. (2009). Science, language, and literacy: case studies of learning in Swedish university physics (Doctoral dissertation, Uppsala University).
- Björkman, B. (2008). English as the lingua franca of engineering: The morphosyntax of academic speech events. *Nordic Journal of English Studies*, 7(3), 103-122.
- Bolton, K., & Kuteeva, M. (2012). English as an academic language at a Swedish university: parallel language use and the 'threat' of English. *Journal of Multilingual and Multicultural Development*, 33(5), 429-447.
- Boyd, S. (2011). Do National Languages Need Support and Protection in Legislation? The Case of Swedish as the 'Principal Language' of Sweden. *Uniformity and Diversity in Language Policy: Global Perspectives*, 22.
- Hult, F. M. (2005). A case of prestige and status planning: Swedish and English in Sweden. *Current Issues in Language Planning*, *6*(1), 73-79.
- Jansson, E. (2008). Language strategies at Nordic universities (in Swedish). *Scientific English of Swedish quality?* Swedish National Agency for Higher Education and the Language Council (edited volume).

Language Plan for the Faculty of Science and Technology, Uppsala University, 2006.

Language Policy for the Faculty of Engineering LTH, Lund University, 2009.

Language Policy for the University of Gothenburg, 2006.

Language Principles for Helsinki University, 2007.

Lim Falk, M. (2008). Swedish in English-language school environments. Subject-related language use in two high school classes (Doctoral dissertation, Stockholm University).

Thøgersen, J., Josephson, O., Londén, M., & Salö, L. (2013). *English as language of instruction at Nordic universities - how to do?* (In Danish). Nätverket för parallellspråkliga mål på Nordens internationaliserade universitet.