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## SEED : Sweden's English Educational Database for tertiary education: Creating a platform for sharing and collaboration

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In this report we describe an attempt to build up an inter-university network among active teachers and students throughout Sweden, its failures and successes, and the general lessons that can be learnt from the experience.

**Background**. Scholarly networking has always been necessary to scholars, but it is only in the last twenty years that truly rapid synchronic and asynchronic networking has become feasible for the academic community, and only in the last decade for students, and perhaps only in the last five that it has begun to be seen as a natural extension of one's studies. It is against this background that the SEED project was first conceived.

**Student networking**. The literature on networking in language teaching is largely concerned with students networking with one another, and an enormous amount of expertise has accumulated over the last twenty years on how networks for cooperative learning can be created for students (for example Kern et al 2008, Kol and Schkolnik 2008, Shin 2006, Fitze 2006, Nguyen and Kellogg 2005, Chun 1994, Riel and Levin 1990). Kern et al 2008 point out that the affordances of electronic networks coincide with the ideology of social constructivism and the belief that learning is facilitated by co-operation and interaction. But success is not guaranteed by simply creating a network, particularly if cutbacks in classroom resources are simultaneously being implemented. And regardless of the resource levels available, student motivation and interaction need to be taken into account. As early as 1990 Riel and Levin talked of 'electronic ghost towns' - networks that had 'fallen silent' because their social organization was not appropriately planned. Student networks can also fail to achieve their goals because of cultural incompatibility among their members (Freedman and Liu 1996). A key issue has been shown to be 'shared purpose' (Tolmie and Boyle 2000), i.e. student participants in an activity must have a common view of the purpose of that activity. However, even if there is a shared purpose, such a network will not thrive unless it can 'readily' be used to achieve that purpose. Increased mobility, hand-held devices, wireless coverage - all these technical advances still require attention to the human dimension of why we are networking and how much effort it requires of us.

**Teacher and researcher networking**. Much less is available in the literature on the creation of networks for co-operation among teachers, and most of what is available deals with novices in training. In practice, most teachers remain isolated and do not make use of potential networking tools. Levin, Kim, and Riel (1990, cited in Stephens and Hartman 2004) suggest some criteria for network success: "(a) a group of people

who work together or share interest in a task, but who find it difficult to meet in the same location and/or at the same time; (b) a well-specified task to be accomplished by this group; (c) ease of access to a reliable computer network; (d) a sense of responsibility to the group and/or task; and (e) strong leadership and final evaluation of the group task." Stephens and Hartman describe two failed networks of trainee mathematics teachers and conclude that one suffered from a lack of common purpose, expecting interaction to arise from simple co-presence. The other, in which tasks were imposed by a coordinator, resulted in one-to-one communication between participants and coordinator and no genuine networking. Stephens and Hartman conclude that the failure was due to a preference for face-to-face interaction (based on the availability of local colleagues) and lack of time (which we would interpret as low priority).

On the other hand, there is reason to believe that networks among practicing teachers and researchers need less favourable conditions than those for students or trainees. The TESL-L network (Tillyer 1995) and the LINGUIST list (http://www.linguistlist.org/) have evoked a high level of participation and become valuable and accepted resources, without obvious immediate common purpose, feedback, or sense of responsibility among members (note the parallel to modern blogging). Notably, they are markedly easy of access, not demanding and with a worldwide membership which had no chance of creating face-to-face meetings; they also enjoyed the bulletin-board advantage of having been established at a time when there were few alternatives for those wishing to break out of isolation. Their global nature and sporadic membership also appears to have mitigated against the creation of local subnetworks in these areas. The Swedish situation before SEED was launched is summarised in Jandér 2005, and seemed to point to a favourable situation for the construction of a network.

Matters such as participant commitment are issues which all proponents of a new network must face, but cannot always manipulate. Particularly in the case of established teachers addressed by colleagues, imposition of a common task is not an option and efforts must be devoted to evoking shared purpose, which is a long-term project. Moreover, if the network is to be *between* universities, the problem of common purpose will be compounded by distance and perceived potential competition.

**Why network?** The situation of university English (and other language) departments in a country like Sweden would seem to call for construction of national networks for co-operation and sharing. There are many small departments of English spread over a large geographical area, often with a handful of staff or even fewer, who normally have difficulty in meeting more than annually. They have shared purposes of developing effective teaching of language proficiency and linguistic and literary skills. They are mostly so small that resources for course development, for evolution of a local profile, and above all for research are extremely limited (there are often only one or two doctoral students at any given institution). Expertise in content and pedagogy at any individual site is quite limited. Such a situation cries out for collaboration and pooling human resources, and seems propitious for an electronic networking approach, because departments are only to a limited extent in competition with one another for students or resources (even if resources depend largely on student numbers, students are not particularly mobile). Looking ahead, if such a

solution could be implemented for English, it would be reasonable to apply it in the other languages, whose departments are even smaller.

**The SEED project**. In this context we devised a project to facilitate networking and sharing, and succeeded in securing pedagogically-oriented funding from the Swedish Agency for Networks and Cooperation in Higher Education (NSHU, Nätverket för Samarbete inom Högra Utbildningen). The project group is comprised of six coordinators from five universities: Stockholm University, the Royal Institute of Technology (KTH), Mid Sweden University, Malmö University, and Blekinge Institute of Technology.

Our ambition has been to create a platform for professional and learning cooperation. This platform is intended to a) facilitate the exchange of teaching and learning materials and research resources, and b) encourage the exchange of ideas and experiences through networking and collaboration among both teachers and students. For this purpose, the site consists of two major components: an open-access repository of learning objects and a platform for discussion and exchange. Further, it is available to all university participants – students, teachers and researchers alike. In order to ensure national participation in the project we have sought to recruit SEED contacts at each university, persons with whom we communicate and through whom we seek to promote the SEED vision.

The repository. The content in the repository is essentially dictated by our users, since it is they who contribute, but as project leaders we have also actively worked on contributing content which we deem to be useful to teachers, researchers and students. Teacher resources include teaching materials such as PowerPoint presentations, compendia, study guides and different types of exercises on various topics. These materials have all been produced by active teachers in various subject domains such as grammar, language history, general linguistics, literary studies and cultural studies. In addition to material actually produced in the various departments in Sweden, there are numerous links to teaching resources produced by others internationally, resources which have been tried and approved by active teachers operating inside the Swedish education system. Examples include links to on-line text corpora and corpora of sound files of different dialects, on-line grammars, resources for academic writing, various specific software which can be used in teaching language (Highlight is one such example; it detects typically academic words in a text and highlights them for students), as well as links to Web 2 software such as Second Life, including instructions on how these tools can be used in teaching. Another important teacher resource in the SEED repository includes links and documents related to administrative aspects. Here we have included documents dealing with grading criteria, course plans and course development, as well as models for in-house vocational training for future school teachers ('verksamhetsförlagd utbuildning' or VFU), to mention only a few.

For researchers, the main resources include links to different networks, conferences and journals on various topics. Supervision of Masters and PhD students is also of relevance: SEED includes a growing list of descriptions of the various English PhD projects that are underway in departments in Sweden. Research resources also include various software tools and various small and large corpora.

For students we have hitherto primarily focused on resources related to BA and MA projects. Here we have tried to provide collected documentation on writing resources such as essay writing compendia and referencing guidelines, as well as links to undergraduate essays produced at different universities. Undergraduates also have access to the abovementioned small and large corpora, as they can furnish starting points for numerous corpus-based essay projects.

The collaborative fora. In addition to the repository, the second main aim of SEED has been to provide a collaborative space for joint projects and exchange of ideas at various levels, from first-term students to teachers and researchers. Because of initial technical hitches (see below) and the need to simplify access to such collaborative initiatives, we opted for open-access solutions located outside the university systems for this purpose. The first collaborative project we conducted under SEED was at the Master's level, where we set up a Google group with open access. Students from various English departments throughout Sweden were encouraged to use the group to brainstorm on their choices of essay topics, posting initial ideas and obtaining advice and feedback from other students and lecturers/researchers who were involved in the collaboration. All in all some thirty students actively participated in this learning cycle. Questions included advice on where to find material for specific topics (translations of the Ouran, transculturalism, studying fluency for example), advice on where to find key references or on their choice of topic etc. The collaborations bore fruit when teachers worked SEED into the course set-up, by including brainstorming in SEED as an obligatory part of the essay writing process, for example.

A second collaborative experiment using Google groups entailed the setting up of an international collaboration forum. The main idea here is to provide a space for educators who wish to come into contact with other English teachers in various parts of the world for cross-cultural telecollaborative experiments. So far we have presented SEED at NU2008 and at two international IT-oriented conferences (EuroCall, Hungary 2008, and ALA, Hong Kong 2008, see development narrative below). At both of these conferences various educators expressed interest in this type of activity and it is hoped that the SEED-international group on Google will provide a hub for such activity – a place for Swedish educators to find international counterparts for various collaborative activities ranging from virtual and real student exchanges to joint research applications.

After two years of work on the SEED project, despite a fair number of setbacks, our main positive results so far are the establishing of a functioning network and a fund of experience, rather than extensive use of the network. It is nevertheless clear that the actual *concept* of a multi-university resource and discussion centre is still in an early stage, even if SEED itself is reaching the end of its establishment period, and that there is indeed a future for electronically-based cooperation.

**Development of the project**. Our original application for funds was submitted in 2004 (to *Rådet för högre utbildning*, the Swedish Council for the Renewal of Higher Education), but the relevant authorities were reorganized resulting in the formation of our actual granting institution NSHU. This meant that we did not know we had funds until September 2006, the same month in which we were asked to start. Since we ourselves were scattered over the whole country, we began by implementing our own mini-network, with regular virtual meetings (twice a month at least). We started

discussions with the Stockholm University Library about the technicalities of setting up a repository but a few months into our grant period, in early 2007, were dismayed to find that a key librarian had found employment elsewhere and we no longer had a partner for the construction of the database. At that point, the Stockholm University IT-Media unit agreed to act as our technical partner for what can only be characterized as a nominal fee, a point which was to have repercussions as the project developed. While waiting for the IT unit to create an appropriate niche on Stockholm University's site, we took up contacts with all the English departments in Sweden to inform them of the project and to recruit a contact person in each. An easilyaccessible SEED homepage was launched via Mid-Sweden University's site, with general information and instructions about how to find and enter SEED. In addition, a preliminary version of the SEED site was set up on Malmö University's web board while we waited for the Stockholm University facility to become generally available.

**By April 2007** we were able to display this preview version at the biennial meeting of English Departments at Swedish universities (Tällberg 2007), where we received the enthusiastic support normally afforded networking initiatives when presented in face-face meetings (Stephens and Hartman 2004), together with promises to make use of the site. At this point, despite the delay in getting the SU website off the ground, we felt the project was on track. However, we had already noticed access problems with the Malmö preview site, and these had made some of our 'sales pitches' to colleagues at other universities less than convincing. At the same time, discussion with users was causing us to shift our goal from a purely library-style archive to something including possibilities for discussion.

**During summer 2007**, when the Stockholm University IT Media unit demonstrated their version of the *DSpace* repository developed by MIT and Hewlett-Packard, it became obvious that access, entry of new items, and searching within the database were extremely difficult even for the SEED group with owners' privileges. Our plan had indeed called for such a library-style repository of learning objects, but it had already become clear that such a repository, no matter what its shape, would not fulfil the need for a collaborative, interactive VLE (virtual learning environment) for students and teachers. By that time Stockholm University had officially launched *Mondo*, its version of Sakai, an open-source initiative currently backed by several hundred universities the world over (http://sakaiproject.org/portal). It became increasingly obvious that if SEED was to be truly interactive, DSpace would not serve, and the Mondo VLE was far more promising.

**In the latter half of 2007** members of the SEED group were able to visit many English departments in Sweden and demonstrate the version of SEED which we had re-established in the Mondo environment, but these demonstrations continued to be dogged by both unpredictable difficulties in access and performance and the structurally difficult procedures necessary to acquire a guest identity to enter Mondo.

**External valuation.** In November 2007 our external evaluator Tim Caudery (Aarhus University, Denmark) consequently highlighted these access difficulties, pointing out that it is difficult to launch any comprehensive system that will get users involved without payback, and that encouraging use is a long-term process. He referred to Tillyer 1995, who reports on the long and demanding process of getting a network

started, even when it is technically extremely simple and easy of access. His primary comments were:

- 1. Registering is (too) difficult. Lack of real commitment to project will stop novice users, even if they would clearly benefit from it. SEED needs an open area without login problems.
- 2. Getting people involved in using a site of this kind takes a lot of fleshpressing. Convincing others will take time.
- 3. As more and more people join, a serious classification and cross-reference problem will appear in (the relatively loosely-structured) Mondo.

In response to 1 we opened a Google site while we continued to pressure the IT people for more accessible and user-friendly procedures for SEED users outside Stockholm University. In response to 2, we decided to begin by convincing our own institutions and resolving to spend the time it would take, once access problems have been solved. In response to 3, the answer is that the DSpace option, despite its technical difficulty, will at some point become a viable additional option, although not until the discussion site is experiencing considerable use.

In the first half of 2008 we continued to accumulate material on the Mondo SU site, and to battle through successive layers of difficulty with passwords and access blocks. We launched a Google-based SEED discussion site for BA-level essay writers, which was fairly successful, with 48 members and some 15 active student users, as well as many lurkers. (It was frustrating that many essay-writers looked in on the site without contributing.) Interaction was mostly staff-student (as in Stephens and Hartman's second network). Motivation for colleagues other than the SEED group to post material was further reduced by the unexpected announcement by the Stockholm University Vice-Chancellor that all teacher-developed material at SU was to be regarded as the intellectual property of the university. During this period SEED started to host some wider functions, such as the discussion surrounding the development of an official Swedish-English online word list for educational terms (a project by HSV, the Swedish National Agency for Higher Education).

**In June 2008** we were able to make SEED the core of a potential nexus for cooperation around the subject of English in Sweden, involving numerous formal bodies: SWESSE (the Swedish Society for the Study of English), NJES (the Nordic Journal of English Studies), and the biennial English Professors' Meeting. We have joined forces with the English Departments' Annual Forum in preparing for a face-toface meeting in Malmö in April 2009, where we intend to relaunch the project, this time as a fully functional exchange based on a Mondo site with a decent guest login system. We also submitted an application to the Nordic funding body Nordplus for continued funding on a Scandinavian/Baltic-wide basis.

**The final period** of our funding, July 2008 - November 2008, was characterized by further improvements in password arrangements and international exposure at the conferences of the Association for Language Awareness in Hong Kong and EuroCALL in Budapest. At these conferences, there was good deal of interest in the project and it was evident from discussion that what we were attempting was by no

means common practice. Few, if any, of the hitherto attempted programmes for cooperation have as yet reached many university teachers, let alone students. What seemed to be the most successful parallel programme we heard of at these conferences was one for French teachers, extremely well-funded by the EU and run in a strongly top-down manner by one university. The model seems to have problems everywhere it is attempted.

If we now examine the various problems encountered by the SEED project, they primarily fall into four categories: technical, motivational, legal and conceptual.

**Technical problems** rarely are at the core of pedagogical projects, but frequently have the potential to stall or destroy IT-based ideas (Levin et al's 'ease of access to a reliable computer network'), and this nearly proved the case for SEED. The initial application to NSHU had a miniscule component for software development, instead relying on being able to adopt existing software to produce an internationally-standardized archive database. DSpace is actually designed for this purpose, while Mondo was in part designed to provide a forum for discussions and informal exchange. Theoretically, they should have been sufficient for our dual purposes, and might have proved so if we had been operating solely within the confines of an individual university.

DSpace in particular proved difficult to access and recalcitrant to operate in, and backed up by almost no technical support at crucial junctures. These difficulties, together with legal problems, led us to concentrate on Mondo, which SU was able to run in full-scale mode by the end of SEED's first year. While not ideal, Mondo has proved to have most of the capabilities for sustaining discussions and exchanges, and does not require separate server resources for SEED. The use of commercial software from e.g. Google was also not without its difficulties, as noted below.

**Conceptual problems**: The crucial problem turned out to be both technical and conceptual in nature: by its very nature SEED is intended to serve as a national platform, but all existing university technology presupposes university-based log-ins: we function as an archipelago of independent islands with no functioning ferry service! No national Swedish log-in or inter-university log-in exchange system exists yet (one projected solution, called Shibboleth, remains only a sketch), and there exists no central Swedish authority with the power to create or facilitate such a log-in system. Our attempts to create functioning, easily-remembered guest logins did not bear fruit until Sept. 08—as the project was ending.

The dangers of using commercial, easily-accessible systems were vividly illustrated when we set up the open-access Google group for students writing their BA essays in English, to see the effect of easier access

(http://groups.google.com/group/swedishseed). The Google site almost immediately began to function as intended, but was actually captured, with pornography appearing there, so that regaining ownership of it was quite an arduous task.

Another conceptual issue, one that we were aware of from the start, turned out to be solvable: the need for both a repository and a discussion forum. It soon became clear that they were two very different animals, with different legal, technical and user requirements, so that splitting SEED into two systems became a self-evident solution,

and has been carried out. The Dspace –based repository section will probably remain dormant until heavier and more general use make it a viable storage area for relatively permanent deposition.

**Legal problems** turned up in two forms. First, repositories such as DSpace commit authors to really knowing the status of their material, ensuring that e.g. no copyright is being violated by pictures in one's PowerPoint or compendium. Future publishers may refuse to accept material partially placed on a permanent free site. While such obstacles are usually surmountable, they demand dedication and effort from the contributors.

Second, and more interestingly, as Swedish universities enter a period where competition is touted as a mantra and prospects of recouping investments in the form of teacher time and effort in e.g. developing exercise material become of interest to university management, the question of ownership becomes a loaded one. With the demise of NSHU, there no longer is a national authority capable of speaking for the exchange of ideas that is at the heart of SEED. However, ongoing discussions between universities and unions about the nature of this relationship indicate that a policy decision accepting open-access principles is in the process of being adopted. The importance of such a decision may be seen not least in the fact that at least one potential contributor flatly refused to make available material for SEED, citing fears that because it would be placed on Mondo's university-owned server, it could be in danger of seizure by SU (the author was based at another university). Although an improbable scenario, it nevertheless indicates the reality of concern about ownership issues. In the field of linguistics, for example, copyright issues have for over 15 years blocked the creation of an American National Corpus to match the already-existing British National Corpus.

**Motivational problems** are the final major problem area. Teachers and students will not use a system that is too difficult to access and therefore our efforts to bring non-SU colleagues into SEED have as yet been only sporadically successful. Now that this problem has been overcome, we have to deal with what Levin et al designate as achieving shared interest, a well-specified task, a sense of responsibility, and response and feedback. If everyone used SEED, put useful material on it, and downloaded valuable material from it, everyone would gain. But if there is not much material posted there, there is little point in accessing the repository, and so long as one has not used SEED there is little motivation for taking the time that even a simplified access system requires.

The plausible solution is to make SEED use a requirement for students and necessary for teachers and researchers. The registration site for our annual forum for English departments has been linked into SEED, thereby creating a real need to enter the site, thus creating at least the possibility of discovering what a potentially useful site it may become. At the same time SEED has been made a collective centre for our subject-specific national organs such as SWESSE and the Nordic Journal of English Studies, so that it should become central in disciplinary communication. As future areas of national concern appear, such as how to formulate responses to the pending reform of teacher education programs, these areas can be added to SEED, thus providing an instant national forum for discussion.

**SEED and Literary Studies**. English departments in Sweden have traditionally been divided into Literary and Linguistic sections. From its inception, SEED's focus has been on the latter, not least because literary scholars have long been less enthusiastic about ICT and CALL. This has been mirrored in the staffing of our project, as well; only one literary scholar among us. One reason could be that teachers on the literary side already have access to various resource sites maintained by textbook publishers. Interestingly enough, we have found that literary students are actually somewhat more motivated to use the site than their teachers are. Beyond the mere retrieval of information, SEED can address the need to communicate/interact/discuss with a larger circle of peers. For example, SEED and the discussion forum allow playful brainstorming about authors, themes, motifs and literary characters, help make stories come alive, and offer a forum for creative writing groups.

**Lessons learnt**. Many of the important lessons we have learnt from this project centre around the issue of enabling and stimulating the use of the SEED site. First of all, small technical hurdles can jeopardise the entire project if large-scale a priori commitment by researchers and teachers is lacking. University lecturers and researchers do not have a lot of time, and nor do students. To get students to initially engage, collaboration must be built in as an obligatory part of course activity. In order to continue use beyond the initial requirement, teachers and students must be motivated by real needs. In addition, the question of intellectual ownership and sharing must be addressed head-on, since there are divided opinions in the university world as to the value and benefits of distributed access to teaching and research materials.

The Future. The project ends officially in November 2008, but this is by no means the end of SEED. The coordinators are committed to devoting time to maintenance of the existing sites and to encouraging future projects to utilise the facilities that we have developed for collaborative efforts nationwide, for both teachers and students. On the technical side, this will be possible for as long as the existing platforms (Mondo, DSpace) continue to flourish. In terms of content development, we predict that SEED will eventually become the human resources pool that we projected from the outset. During the past two years we have, perhaps, tried to do too many things at once, as Tim Caudery also notes in his evaluation report. Other reports from the 2008 Eurocall convention in Hungary indicate that no even vaguely similar European or American effort has yet succeeded in reaching significant numbers of language teachers, but that the concept is still primarily being explored from hubs based at the level of the individual university, rather than from the national level envisaged by SEED. Future successful developments are likely to be of a distributed bottom-up nature, dictated to a large extent by users' needs rather than project coordinators' visions, and SEED is flexible and open enough to provide a channel for such efforts. The biennial meeting of English departments in Sweden will take place in April 2009, just five months after the official end of our project, and national collaboration is one of the key issues that will be discussed. SEED will once more be brought forward as an ideal platform for future efforts. The upcoming national change in teacher education may serve as an emblem of another area where the need for online discussion will arise.

A potential threat to the SEED endeavour is its reliance on general-purpose platforms over which we have no control. If Stockholm university were to drop Mondo, we would find ourselves back where we started two years ago (though hopefully wiser and much better equipped to start over). With the demise of NSHU, there is today no national funding body within Sweden for projects of this kind. At the same time, experience tells us that the only alternate stable solution to the problem is to create an open-source site independent of any specific institution or department, which would require a substantial ongoing grant for staffing, software development and maintenance. In our contacts with colleagues internationally, we have noticed a heightened awareness of the need for developing national and international solutions to cooperation and interaction, and are now looking further afield for funding in international collaboration (with an emphasis on contact support rather than new software), but are committed to maintaining the low-overhead alternative that SEED represents.

What, then, are the strengths of SEED, as we go into what we might call the consolidation phase of the project? Firstly, the NSHU funding has allowed us to create functioning platforms and to build up a network of contacts at all of Sweden's English departments. The repository of materials is slowly growing and will at some point in the future reach a critical mass sufficient to attract more and more new users who will be willing to make their own contributions. The collection of links to all published BA and MA papers in Sweden is an example of the kind of resource that simply does not exist elsewhere. Its popularity among students embarking on term papers is further evidence that when people see its advantages, they will be quick to work with this new medium.

Moreover, an important change is taking place within the academic community itself: a new generation of students is arriving who have cut their adolescent teeth on chat sites, Facebook and many other net-based media, with flexible use of many programs as one of their hallmarks. Their increasing sophistication at interacting electronically is beginning to percolate upwards into the world of their teachers, the younger of whom are also fully used to these patterns of interaction. Technical difficulties will thus presumably play a smaller and smaller role in any future cooperative scenario.

In sum, although the project has encountered some surprising difficulties, and faces a major challenge in the policy position that rejects pedagogical cooperation, SEED has nevertheless become established as the first major attempt at inter-university subject-based cooperation at a national level, and will continue to gather momentum in the years to come. The SEED team is committed to maintaining the current platforms as an ongoing operation, actively searching for partners and funding for future expansion, and developing SEED whenever possible. Moreover, we would like to issue a challenge to other language departments, and indeed to most other university departments -- the technology is now in place, and we believe that the SEED approach is now ready to be straightforwardly cloned and implemented throughout Swedish higher education. The difficulties have been manifold, but the learning and sharing potential is far greater.

The metaphor chosen as the name of our project is a promise to the future: the SEED has sprouted, and will continue to grow. Might we suggest that it soon will be time to introduce a new acronym to usher in a new, wider era of cooperation? As a working

name, one might perhaps consider *SMED*, Sweden's **Multiple** Educational Databases, to emphasise that there truly are multiple possibilities inherent in our concept.

## **Key URLs**

http://dooku.miun.se/mats.deutschmann/seed.htm https://mondo.su.se/portal (subscribe to SEED tab) http://groups.google.com/group/swedishseed

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