English for Academic Purposes at Swedish universities: Teachers' objectives and practices

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Abstract

In a parallel-language environment the use of textbooks in English in courses otherwise in the local language is naturalized and not widely discussed or questioned. The aim of this study was to elicit the attitudes and syllabus infrastructure that underlie the practice. A large-scale survey was carried out and answers were obtained from over 20% of teachers at Swedish universities. Results confirmed that a majority regarded English as important during and/or after university studies and showed that they considered the use of English-language textbooks as providing a useful opportunity for incidental language learning. In strong contrast to the situation in a content and language integrated learning environment, only a small minority of courses were reported to have any specified learning outcome related to English. Open answers showed awareness of the benefits and risks of parallel-language practices, but no interest in making aims explicit. In our view, there is no contradiction between incidental learning and explicit aims, and course aims which remain implicit make rational planning and constructive alignment more difficult. They also inhibit discussion of appropriate methodology.

Keywords: incidental language acquisition, parallel-language environment, higher education, English for academic purposes.

Resumen

Inglés con fines académicos en las universidades suecas: objetivos y prácticas de los profesores

En un entorno de lengua paralela la utilización de libros de texto en inglés en

cursos en los que predomina la lengua local constituye algo natural, que en general no se cuestiona o discute. El objetivo del presente artículo es conocer las actitudes y la infraestructura relativa a los temarios de los cursos que subyace a la práctica docente. Se realizó una encuesta a gran escala y se obtuvieron respuestas de un 20% de profesores adscritos a universidades suecas. Los resultados confirmaron que una mayoría entendía que la lengua inglesa era importante durante y/o después de los estudios universitarios y demostraron que el uso de libros de texto en lengua inglesa ofrecía una gran oportunidad para fomentar el aprendizaje accidental de dicha lengua. Como contrapunto a lo que ocurre en una situación de aprendizaje integrado de contenidos y lengua, sólo una pequeña minoría de cursos manifestó haber definido algún resultado esperado referido al aprendizaje del inglés. Las respuestas de tipo abierto demostraron la existencia de una conciencia respecto de los beneficios y riesgos que conlleva la actividad en una lengua paralela, así como falta de interés en manifestar los objetivos de forma explícita. A nuestro juicio, no existe contradicción alguna entre plantear objetivos explícitos y un aprendizaje accidental, y los objetivos de un curso que se mantienen implícitos complican las tareas de planificación de contenidos y la construcción del conocimiento, además de impedir las deliberaciones sobre la metodología que resulta más adecuada.

Palabras clave: adquisición accidental de lenguas, entorno de una lengua paralela, educación superior, inglés con fines académicos.

Introduction

This special issue of *Ibérica* is devoted to a specific area of language learning – English for Academic Purposes (EAP) – in a specific context, the parallel-language environment. This environment lends itself particularly well to incidental learning, the "unintentional or unplanned learning that results from other activities" (Kerka, 2000: 3). The effectiveness of incidental language acquisition in vocabulary development has been demonstrated by numerous studies (Elley, 1989; Pigada & Schmitt, 2006; Webb, 2008), while a smaller body of work has investigated incidental learning of other language features, such as grammatical forms (Lee, 2002; Rossomondo, 2007).

The term "parallel-language environment" has been used to describe higher educational settings in which a local language is used in tandem with English. Although the form in which the two languages coexist may vary, the situation in many universities today must be distinguished from two other settings. One is the content and language integrated learning (CLIL) courses offered in many universities expressly to promote language-learning aims. The other

is the elite university of previous generations in which students were expected to be able to read in several languages. Its successor, the parallel-language university, provides a potentially fertile ground for incidental language acquisition, in that exposure to the second language (L2) arises during authentic communicative events which are likely to promote a relatively high degree of motivation and attention in learners.

The Swedish university, the context in which the present study is set, is very much a parallel-language environment, with Swedish and English both strongly present. The two codes coexist in two distinct relationships. In one, a growing number of courses and degree programs are taught entirely through the medium of English. The decision to offer courses in English is motivated by the desire to attract international students, as well as a belief that local students benefit from studying in English. In its other form, a high proportion of courses which have Swedish as the official language of instruction nonetheless incorporate elements of English (Berg, Hult & King, 2001). Teachers may assign textbooks in English, either for want of choice (because Swedish equivalents are lacking, or perceived to be inferior) or in order to expose students to English (Pecorari et al., 2011); lectures may be in English when the teacher is a visiting or newly appointed lecturer from abroad; and some forms of assessment, notably the undergraduate or postgraduate thesis, are sometimes written in English, both for the sake of the experience for the candidate, and (in the case of theses) to make the work available to a wider readership.

The factors leading to the presence of English in Swedish universities are thus in part practical (for instance, permitting international students to study in the country) and in part aspirational (as when English-language degree courses are marketed as a way of learning course content and language skills at the same time). However, regardless of the proximate cause(s) which lead to it, there is a widespread belief that incorporating elements of English into the curriculum has the serendipitous effect of promoting incidental language learning. At the same time, this belief rests on a number of tacit and largely untested ideas.

One of these is that, since English is a prerequisite for all university studies in Swedish, students' and teachers' skills are sufficient to the task of teaching and studying in English. However, in a study of university physics courses, Airey (2009) identified some limitations on subject learning through the medium of English, and in a similar context in Danish, large proportions of

teachers identified problems with the effectiveness of English-language instruction. For example, nearly three quarters agreed with the statement that "far from all university teachers are able to teach in English" and almost as many agreed with the statement that "students learn most when they're taught in their first language" (Jensen et al., 2009).

Another seldom discussed idea is the objectives of exposure to English, in terms of what specific outcomes it is hoped that such exposure will yield. This means that a pedagogical choice is being made without consideration of its opportunity costs. The decision to hold a lecture in English for the sake of incidental English learning benefits means sacrificing exposure to Swedish disciplinary discourse in that hour.

The conscious awareness of, and planning for, learning outcomes is a hallmark of quality in higher education curriculum design, and one which has been emphasized in Swedish universities in connection with the Bologna process. Teaching and learning activities and forms of assessment are ideally developed in close relation to learning objectives (in Sweden the relationship is formalized in a document called the "course plan"). This idea has been termed "constructive alignment" by Biggs (1996: 361), who notes that this precept is so fundamental that

> something like an alignment model is assumed in any discussions about good teaching (…) Good teachers are expected to be clear about what they want students to learn and what students should have to do in order to demonstrate that they have learned at the appropriate level.

There is, therefore, an apparent antithetical tension between constructive alignment, which states that learning outcomes should be carefully planned for, and incidental, or unplanned, learning. However, the research literature on incidental learning (Hulstijn & Laufer, 2001, among others) makes it clear that this tension is more apparent than real. While incidental learning does not plan the specific forms to be learned through activities such as extensive reading, it is not entirely serendipitous. Target-language exposure in a formal educational setting is the result of deliberate choices about the sources of exposure and sorts of interaction with it.

The purpose of this study is therefore to investigate teachers' perspectives of the parallel-language environment. Specifically, this investigation set out to do the following:

1. document the extent to which the incidental acquisition of English is seen by teachers as an objective of the parallel-language environment;
2. document the specific language learning outcomes which teachers perceive as potentially beneficial for their students, regardless of whether they are articulated in course documentation; and
3. more generally to elicit teachers' evaluations and perspectives in relation to English in the parallel-language environment.

Methods

Investigating these questions entailed gathering input from teachers within this parallel-language context. In the spring of 2010 an invitation to participate in a survey was e-mailed to tertiary teachers in Sweden. The invitation included links to an online questionnaire available in both Swedish and English[1]. The use of two languages was to ensure that the questionnaire would be accessible to teachers who do not speak Swedish, or do not feel comfortable doing so. Approximately 10% of respondents chose to respond in English.

The instrument consisted of nine substantive questions probing the three areas identified above, as well as background questions asking about respondents' subject areas and the institutions at which they taught. The responses to the open questions reported below have been translated into English if they were originally written in Swedish. In those written in English, minor non-standard lexico-grammatical features which did not affect meaning have been standardized.

An effort was made to contact all university teachers in Sweden, using several strategies, depending on the arrangements at each university for obtaining staff e-mail addresses. When lists of addresses appeared on university web pages, e-mails were sent to teachers individually. In the absence of such lists, the invitation was sent to heads of faculties or departments, or some other central administrator, with a request that it be forwarded to teaching staff. At the authors' institutions, existing group lists were used to contact teachers.

As a result of the mixture of approaches used to solicit responses, it is not known precisely how many teachers were contacted, but according to an estimate by the university teacher's union, there are approximately 16,500

individuals employed at Swedish universities in a teaching capacity (Lööv, 2010). Answers were received from 3,526 individuals, approximately 21% percent of university teachers in Sweden.

The survey did not ask teachers to specify the level at which they taught, but since there are more undergraduate than students, it seems likely that many of the responses will have been given exclusively or primarily with reference to undergraduate education.

Results

This section describes the findings of the survey as they relate to our three primary aims: 1) investigating the extent to which English is an explicit (as opposed to tacit) learning objective; 2) documenting the language learning outcomes which are believed to be needed; and 3) describing the aspects of English use in higher education which were most salient in teachers' open responses. Finally, this section concludes with a discussion of the responses from specific discipline areas.

One subject area – languages – was something of a special case, in that for those who teach English, exposure to English is an important objective, but not an incidental or implicit one; at the same time, teachers of other language subjects are presumably much less likely than those in any other subject area to prioritize English. Both of these interpretations are supported by responses to the open question:

(1) Since I work with future English teachers, it's self-evident that skills in the language are central.

(2) My subject area is Swedish language ([I] can justify why English isn't a course objective).

(3) English is entirely irrelevant, not to say harmful, for my subject. I teach Italian and it is that language which should be central and should be practiced.

For this reason, in the next two subsections, which deal with learning objectives in English, responses from teachers within language subjects have been excluded.

Incidental English

Respondents were first asked about the positive effect of courses which expose students to English, with answers on a five-point Likert scale ranging from "very beneficial" to "not at all beneficial". There was strong support for the usefulness of English, with 56% answering "very beneficial" and 78% giving one of the two most positive answers. (The motivations of the minority who answered that English was *not* important are taken up below.)

The next question asked what proportion of each respondent's courses were planned in such a way as to bring about exposure to English, with answers ranging on a five-point Likert scale from "all or most" to "none". Fifty percent answered "all or most" and 69% gave one of the first two answers. There is, therefore, a group of teachers who believe that exposure to English is beneficial, but do not usually plan for it. This suggests an apparent disparity between what teachers think their courses could accomplish, and what they actually try to accomplish.

The third question asked what proportion of each teacher's courses had exposure to English as a formal learning objective, as stated in the official "course plan" which all Swedish universities are required to ratify and publish about each of their courses. Here only 13% answered "all or most", with 20% selecting one of the first two answers, and 58% answering "none". The impression of a disparity is thus even greater: 56% of respondents believe that incidental exposure to English is highly beneficial to their students, but somewhat fewer, 50%, take steps to provide it in all or most of their teaching, and only 13% have formalized it as an official learning objective in all or most of their classes. Thus, as Figure 1 shows, English is not only an implicit objective for most courses outside of the language subjects, it is a tacit one.[2] Teachers who address their students' perceived needs for exposure to English do so largely informally, outside of the framework of explicitly stated course learning objectives.

This situation implies no criticism of the individual teachers who answered this questionnaire, as there are many factors which prevent a perfect symmetry between aspirations and classroom practices. Teachers do not exercise complete autonomy over course design, but are constrained by administrative decisions. A teacher who would like to assign an English-language textbook to provide incidental exposure to English may not be allowed to do so, while a teacher who is skeptical about English may be obliged to. Teachers may also feel that constraints such as a limited number

of classroom hours require them to sacrifice potentially beneficial objectives, like exposure to English, in favor of still more important ones. However, if asymmetries between objectives and practice are never entirely avoidable, these responses nonetheless point to a lack of constructive alignment in many courses, and as earlier noted, alignment is believed to be a feature which promotes quality in the delivery of education.

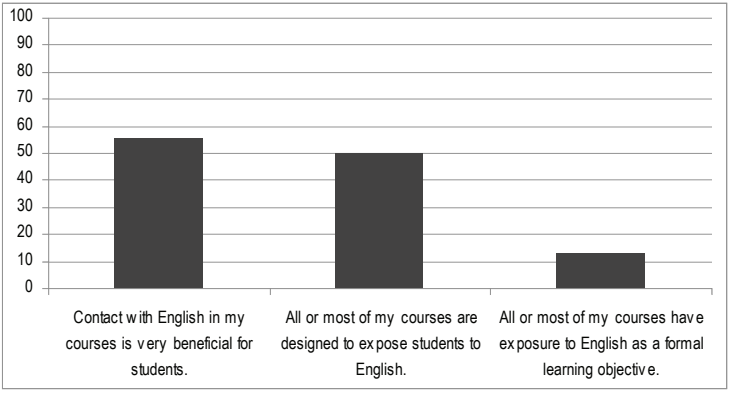

Figure 1. Perceived value of and inclusion of incidental English.

Language-learning objectives

The second group of questions asked teachers what sorts of knowledge and skills in English would be useful to their students in the workplace. Five areas were addressed: 1) subject-specific terminology; 2) general English vocabulary; 3) reading professional texts; 4) writing professional texts; 5) speaking and listening skills in contexts such as meetings and conferences. The importance of the five areas could be ranked on a four-point Likert scale ranging from "very important" to "not at all important", with "I don't know" also available.

The responses to the two vocabulary questions showed strong support for word knowledge. Both general vocabulary and subject-specific terminology were identified as important by 83% of respondents. When only the "very important" answers were considered, though, a clear prioritizing of terminology could be seen, with 54% calling it "very important", as opposed to 39% for general vocabulary. A belief in the importance of terminology was apparent in the answers to the open question as well, where it was

frequently mentioned, sometimes in such a way as to equate knowing terminology with knowing the subject, or knowing English:

> (4) I teach courses in clinical medicine. These courses are taught in Swedish but fundamentally have medical terminology as an important component. This terminology is international, and is the same in English and Swedish.
>
> (5) It's important that students become bilingual in my subject. They need to know both Swedish and English terminology.

Although this study was not designed to investigate why teachers valued certain sorts of language learning, the priority accorded terminology may relate to the special status of technical terms. The process of adult second-language acquisition ordinarily involves mapping new forms (words) on concepts for which the learner already possesses a label in the first language (L1). However, students learning subject-specific terminology are learning new concepts, and at the same time new labels for them. In the parallel-language environment, this may happen in the L1 and the L2 simultaneously. The respondents' emphasis on the importance of terminology may reflect their awareness that development of a terminological lexicon must to some extent reflect the development of subject knowledge.

The next pair of questions asked about the ability to read and write professional texts. Receptive skills were placed significantly ahead of productive ones, with 63% saying that reading was very important, compared to 33% for writing. The same pattern appeared when the two most positive responses were considered; reading was said to be important by 89%, but writing only by 65%. Here too the open answers provide some explanation. Reading was frequently mentioned in conjunction with access to research findings in the field:

> (6) English has a certain role since the greater part of the scientific literature is in English (…) students ought to be able to access research in the future to keep themselves updated in their work as specialist nurses.

This comment reflects a wider tendency to mention academic and research writing rather than other sorts of writing. The dominant role of English in research means that writing skills are important for students who will stay in academia, but presumably a greater number of today's students will need to read the literature base than will actually contribute to it. This may explain why this respondent assigned writing skills secondary importance:

(7) To be able to be involved in all the research which is done in the area, English has to be functional, first and foremost to read and understand, in second place to be able to write articles and publish outside of Sweden's borders.

A final question asked about oral/aural skills, which were ranked between reading and writing, with 43% saying they were very important and 76% giving one of the two top answers.

It is worth reiterating that the five questions asking about specific aspects of language learning were independent of each other; that is, respondents were not asked to rank-order them, but were free to assign them equal importance. The fact that they were ranked differently suggests that respondents have an impression of how English will be used in students' later workplaces. These impressions are discussed in the final section.

The role of English

One open question asked generally for comments on the role of English, and sought to identify issues which the respondents themselves perceived as salient. Nearly half (49%) answered it, suggesting that many saw the topic of the questionnaire as important. Four broad themes arose frequently in these answers. The first is that English is both important and inevitable. The necessary presence of English in these teachers' courses was attributed to the fact that many textbooks and other teaching materials are available in English, and to the fact that international students have a strong presence at Swedish universities, with a number of degree programs designed and run in English specifically to attract them. As one teacher wrote, "I teach primarily at the master's level, where English is the only possible choice". Some teachers also felt that the nature of communication in their subject made English a necessity, for example because "terminology [in my field] is almost exclusively in English". For others, the sheer pervasiveness of English made it impossible to avoid: "since my subject is computer science, this question is largely a non-question. Everything we read is in English, and everything we write".

A second theme was that knowledge of English was beneficial in a number of different ways. English was said to be important for students who pursued further studies, since to "have a successful academic career, students have to follow the literature. Highest impact journals are all in English". Even more frequently named was the non-academic workplace; exposure to

English was said to make students attractive to employers, and to provide them with necessary professional skills. English "is a precondition for students' future careers and something employers expect". Knowledge of English grants access to updated professional information, since "most of what is written is in English, both in research and in industry". It also permits international contacts: "A good command of English is essential today for any level of employment or research that exposes an individual to the global community".

Another benefit associated with English was its value as what is called a lingua franca (Mauranen & Ranta, 2009), opening up opportunities for international cooperation and contact:

> (8) English simply is the language of research in my area. This makes for easy communication, wide distribution of results, and an international orientation of the field (including international mobility of researchers). It is entirely beneficial.

Not all teachers assigned English the same importance; some felt it to be less important in certain fields or vocational roles:

> (9) The role of English is greatly exaggerated. As far as the humanities go, it is significantly more important to be able to express yourself in your first language and to be able to argue persuasively.
>
> (10) Especially important for [students] who will continue to do research (…) those who go directly to the workplace – a large proportion of our students – may not have exactly the same need of English.

However, these teachers were part of a minority, and were greatly outnumbered by those identifying strong benefits associated with English.

The third theme was that English is problematic. Although a very few teachers stated the opposite ("Students have no problems with learning in English"), many more identified specific problems, such as inhibiting important learning of disciplinary Swedish:

> (11) It's something of a disadvantage for Swedish students to have lectures in English. With all the textbooks in English, there can easily be gaps in their knowledge of Swedish terminology.

Others were concerned with the fate of the Swedish language itself, and the threat of domain loss. One respondent echoed a number of other comments in writing:

> (12) Most textbooks of good quality are in English. In spite of this it is naturally Swedish which is the most important language, since we're situated in Sweden and must not risk losing language domains within our scientific area because of an excessively strong movement towards English.

English was also said to lower the quality of classroom discourse and/or learning, because teachers' or – more often – students' language skills are inadequate, or simply because it is less efficient to communicate in a second language than in one's first:

Many students have difficulty reading English texts.

> (13) I believe that many of the country's teachers have deficient knowledge of English, because of which I believe that students who don't have English as a first language miss a great deal in classes.

> (14) English is very important. But it's also important to be able to express yourself in Swedish in education because you can be much more nuanced in your first language.

These comments support findings from similar settings. In a Dutch study, students reported finding their lecturers' English inadequate to an extent that gave "cause for concern" (Klaassen, 2001: 169). In Sweden, students reported irritation after listening to quite typical English lingua franca (that is to say, non-native) speech (Björkman, 2010). In a Danish study, university teachers were asked to assess their own English skills, and only a very small proportion (from 0 to 2.1%, depending on the language skill in question) categorized their skills as "insufficient". However, larger proportions of the surveyed teachers identified problems with their own use of English in the classroom. For example, 25% agreed wholly or partly that they sometimes could not find the words they needed, and the same proportion said that it was more difficult to get students involved, when teaching in English (Jensen, Stenius Stæhr & Thøgersen, 2009).

English in the classroom was also characterized as unpopular with students, a view which is supported to some extent by the findings of an earlier study. Pecorari et al. (2011) investigated students' perceptions of English-language

textbooks in Swedish universities, and found that while the majority, like their teachers, identified pros and cons of the presence of English at university, they were deeply unpopular with a smaller group, some of whom simply refused to interact with textbooks if they were in English.

These last two themes – that English is beneficial and that it is problematic – may appear to be contradictory. However, for many respondents the two views are compatible, because English is very much a double-edged sword, or a necessary evil. As one teacher wrote,

> (15) If we are to internationalize on our courses (…), they must be given in English. The advantage is that students can practice English and make contact with students from other countries. A disadvantage to English is that communication can be worse depending on the teachers' and students' language skills. But what's the alternative?

Given that this open-ended question was posed in general terms, it is noteworthy that most of those who answered it chose to comment on these perceived advantages and disadvantages. Relatively fewer commented on the fourth theme, how English enters their classroom. Among the small number who addressed how, even fewer called for explicit instruction in English:

> (16) [English] is very important for them to be able to function well as engineers in a global world. On the other hand, I think that they get practice but aren't tested enough/have too low demands placed upon them, in relation to the importance of [language] knowledge.

A larger number of respondents appeared, like this one, to place their faith in the effectiveness of incidental language acquisition: "It's nothing you need to think about as a lecturer. So much material is in English that students learn enough". Indeed, many appeared to believe that incidental learning objectives are naturally unstated ones:

> (17) For me, English is self-evident. You can't get along without it (…). Therefore I've never felt a need to make communication in English an objective for a course.
>
> (18) I think that learning subject terminology and so on in a course, both in Swedish and in English, is so natural that it doesn't need to be written up as a learning objective in "content courses".

These teachers apparently felt English was such an obvious objective, it was illogical to formalize it. It is possible that English has gradually come to permeate university teaching and research practice in Sweden so much that it is completely natural and difficult to see distinctly.

Disciplinary differences

Respondents were asked to identify their subject area from a closed list of options. Table 1 shows the distribution of respondents across subject areas. The largest group – 29% – came from the social sciences, while the smallest, at 2%, came from law. Because academic subjects vary in the extent to which they are internationalized, future workplace conditions of graduates, and so forth, discipline was thought to be a possible factor in respondents' orientations toward English. In fact, significant[3] disciplinary differences were found for all of the closed-answer questions. In the figures below, the language subjects have been eliminated for the reasons noted above, as has the category "other".

	Number	Percentage of the total group of respondents
Engineering	533	15
Humanities (not language)	292	8
Languages	240	7
Health Sciences	350	10
Law	68	2
Natural Sciences	716	20
Social Sciences	1010	29
Other	317	9
Total	3526	100

Table 1. Respondents by academic discipline.

Figure 2 shows the percentage of respondents from the subject areas indicated that chose the responses indicated to questions 1, 2 and 3. As noted above, respondents as a whole showed strong support for the benefits of English, and as Figure 2 shows, this was true when results were considered by discipline, with relatively small variation across fields. The proportion saying that English was very beneficial ranged from 53% for engineering to 63% for health care. A second pattern reported above was that somewhat fewer actually incorporated exposure to English in their courses, and fewer still had it as a formal objective, and here greater disciplinary variation was seen. In law the overall trend was strongly present;

57% thought English was very beneficial, but only 22% included it in their courses, and 12% said it was a formal learning objective. Health care and the humanities also adhered to this basic pattern. However, in the social sciences the gap between those seeing English as beneficial and those including it in courses was small, and in engineering and the natural sciences slightly more teachers included English in their courses than said it was beneficial.

This variation may be due at least in part to the factors respondents said make English inevitable, apart from its desirability, including the presence of English textbooks and international students. Both of these elements are likely to be more strongly present in some subjects than others. The natural sciences and technical areas deal in natural and mathematical laws which hold true regardless of national boundaries. They are also areas in which knowledge develops rapidly, making the rapid transfer of knowledge of paramount importance. Practitioners of both law and health care, on the other hand, are required to be licensed in the countries in which they practice, and must draw on strong oral communication skills in the workplace. These factors would seem to make English textbooks more practical in some cases and less so in others, and similarly the presence of international students more or less valuable.

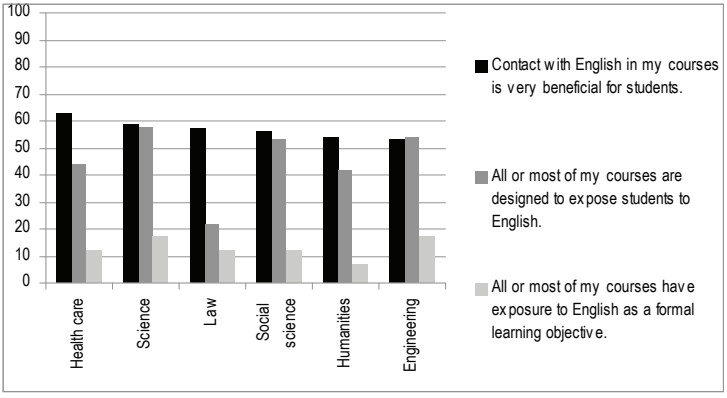

Figure 2. English presence by discipline.

Some disciplinary differences were also found with respect to the kinds of knowledge and skills perceived to be useful. In Figure 3, the bottom of each column shows the proportion of respondents in each discipline saying that

knowledge of subject-specific terminology in English was very important for their students. The top portion of each column shows the proportion giving that response with regard to general vocabulary. As Figure 3 shows, the general tendency to place greater importance on subject-specific terminology than on general English vocabulary was found in all fields, although to a differing extent; in law terminology was said to be important by 36% of respondents versus 34% for general vocabulary, while in the sciences the figures were 71% versus 45%. In addition, while there was strong support for both kinds of word learning (in no field did fewer than 60% say it was "very important" or "important"), the respondents in the sciences and engineering showed greater support for word learning, followed closely by the humanities and then social sciences. This too may be shaped by the extent to which teachers imagine their future students will use English productively in their professional lives.

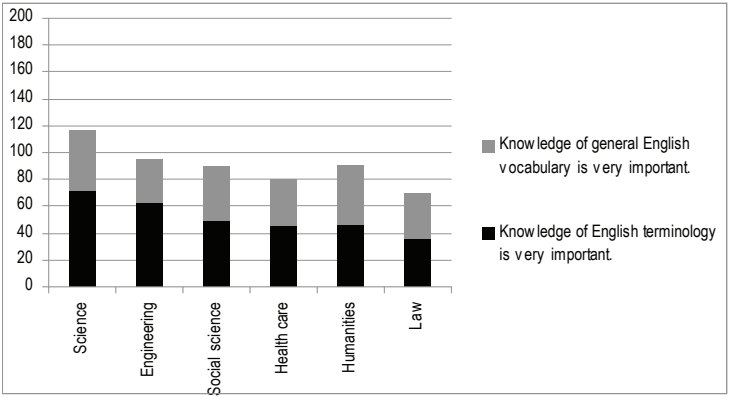

Figure 3. Importance of terminology and general vocabulary by discipline.[4]

Finally, the relative emphasis placed on reading over speaking/listening, followed by writing skills, held true within each discipline, although the strength of these differential preferences varied. Figure 4 shows, for each discipline area, the proportion saying that each of the three skills that were asked about were very important for their students. As Figure 4 shows, the field of health care was second only to the natural sciences in saying that reading skills were very important; however, the gap between the importance placed on reading and that accorded the other skills was greater in health care than in the sciences or any other field. Once again, it seems likely that

the future anticipated workplace needs of graduates may explain these responses. One participant commented: "As a nurse you don't need to know English in your daily work, except if you have a patient who only speaks English. In training, though, you need to be able to assimilate knowledge from reports". In nursing, then, English can be a one-way channel of communication, a means of learning from, but not necessarily contributing to, professional discourse. However, "English is the language of science and engineering", and "a lingua franca within engineering and is absolutely necessary. Many large employers have English as a company language". In fields in which English is a tool for the range of activities which occur in daily professional life, a broader range of communication skills are important.

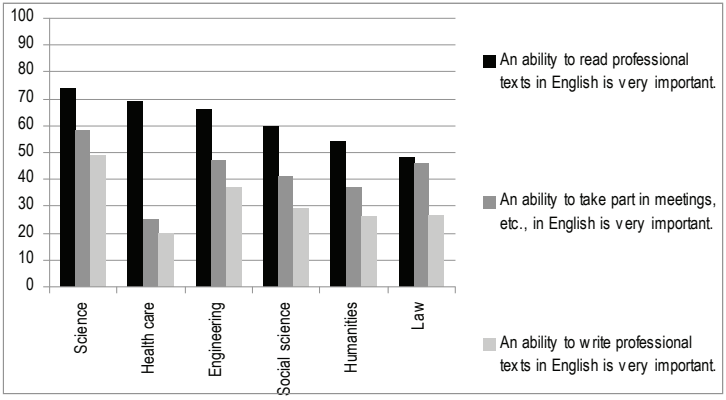

Figure 4. Perceived importance of English skills by discipline.

Discussion

It is clear that a substantial majority of teachers see incidental acquisition of English as an objective of the parallel-language environment. The size of the majority varies across disciplines, but exists in all. Furthermore, many teachers see knowledge of English, and specifically disciplinary English, as a necessary transferable skill for professional employment, and also as a prime study skill.

From the qualitative analysis it can be said that our informants expressed confidence in the importance and inevitability of English in their context, in

the globalized academy, and more generally in its value as a lingua franca worldwide. In the answers to quantitative questions the consistency of their ranking of macroskills is in stark contrast to the extreme variation in the demands of real workplaces. In all disciplines teachers imagine reading as the most important or widely needed skill and writing as the least so, with oral/aural skills of intermediate importance. This would seem to a certain extent to be harmonious with the ways in which English reaches the Swedish university classroom. Although evidence is largely lacking (see, though, Gunnarsson & Öhman, 1997; Melander, 2004), it appears to be the case that reading in English-language textbooks is assigned more often than writing tasks in English. The prevalence of English-language textbooks also seems well matched with the belief that subject-specific terminology will be more beneficial to students than general English vocabulary.

This does not, however, relate particularly well to the results of surveys of workplace language needs, which mainly show how difficult these are to predict in general terms. Chew (2005) showed that working for an international company at a public-contact level requires mainly writing and reading in English; oral interaction was entirely in the local language. By contrast Hellekjær (2007) found the most commonly perceived language problem among Norwegian employees in export companies was precisely lack of conversational skills. A study of Swedish engineers found that more than half write in English on a daily basis but also that the use of English in the workplace varies considerably according to role/position (Apelman, 2010; see also Kreth, 2000; Schneider & Andre, 2005, on engineers' writing in the workplace). A study of two international corporations based in the Nordic region found that the need to use English varied among employees, but was not a function of their rank within their organisation (Louhiala-Salminen, Charles & Kankaanranta, 2005).

There is thus reason to believe that the importance of each skill varies according to a number of factors, and that the respondents' unanimity on the priorities among macro-skills may be an oversimplification, possibly based on extrapolation from their own experience. They may have reasoned along these lines: if they were in the profession, they would need to read to keep up, and to talk to foreigners about their work, but they would be doing no research and so writing would be less important. It is also uncertain whether they interpreted the terms "reading", "writing", etc., as we intended, or indeed consistently. "Writing" may have been interpreted to mean "the same sort of writing tasks I do in English" – that is composing research

articles, but excluding (for example) internal e-mails. If this was their reasoning, it would explain the relative priorities among the skills, but would indicate that their conceptions about workplace language demands are not entirely accurate. If this is true, then teachers who think their courses should prepare for workplace language use could benefit from an awareness of research in the area.

One perception that our informants clearly share with language-learning professionals is the belief in incidental language learning. However the preconditions for incidental learning have to be created deliberately (Laufer & Hulstijn, 2001), and the present study gives little reason to think that teachers in non-language subjects invest scrupulous care in planning exposure to English. In considering this issue, too, we think that input from linguists could help subject teachers raise these questions to an explicit level in an effective way.

Another area in which teacher beliefs seem to be aligned with the results of research is their skepticism about the extent to which members of the parallel-language university are well equipped to face the demands of working through the medium of English. Research (see, for example, Shaw & McMillion, this issue; Pecorari et al., 2011) supports the impression that some students are ill equipped to handle the demands of reading textbooks in English. In some cases this appears to result in a situation in which students simply skip reading the textbook and pursue course content through other channels (Ward, 2001; Pecorari et al., 2011). In other cases, students struggle with the reading, but since vocabulary learning is most successful when the ratio of known to unknown words is approximately 9-1 (Nation, 2006), it seems likely that the terminology gains which teachers hope will arise from this situation may not always be realized. Some respondents also expressed concerns about their own (or their colleagues') abilities to teach in English, and the existing evidence (Klaassen, 2001; Jensen et al., 2009; Björkman, 2010) suggests that these concerns are well founded.

Another aspect of the parallel-language environment that caused concern was how great the role of English should be in Swedish universities. Swedish academics, like Swedes generally, are concerned about domain loss and the risks of an enhanced status for English (Josephson, 2004; Fredrickson & Swales, 1994). This is very much an open question, both in the sense that it is ultimately a matter of personal evaluation whether the advantages of

securing a lingua franca do or do not outweigh the potential costs to Swedish, and in the sense that greatly differing views exist about what the costs to Swedish are likely to be. In acknowledging this issue, though, the teachers demonstrated awareness of an important issue.

The issues implicated in teachers' concerns are large ones: are students adequately prepared for study at university? If not, should the solution be greater selectivity about admissions, to increase the preparation of secondary school students, or to lower standards? If exposure to English is an objective, does Swedish need explicit attention to ensure that it is not eclipsed? Such questions are fundamental to the university community and we would like to suggest that in Sweden, as in all countries which have parallel-language environments at university level, they should be the subject of open and broad discussion and debate, rather than received views and tacit acceptance.

The final significant finding seems to offer the key to all the issues raised above. An overwhelming majority of teachers hope their students will acquire some English during their courses, and only a slightly smaller number take steps to ensure such an outcome, but very few courses have it documented as a formal learning objective. This suggests that English learning objectives will not receive the benefits of constructive alignment (Biggs, 1996). Educational administrators might well be concerned with the fact that an element which teachers widely believe to be important in their teaching leads a submerged existence, out of the halo of light shed by formal documentation. We would argue that many of the practices documented here are less than optimal because they are not informed by insights from the pedagogy of language, and that they are not so informed because the language-learning aims of the courses are not explicit. One implication of this is that a closer degree of collaboration between EAP teachers and teachers in other subjects would allow the language-learning expertise of the former to inform the content-learning expertise of the latter.

These findings have implications for classroom teachers, for university administrators, and for the university community as a whole. When teachers in a parallel-language environment incorporate English into the curriculum for the purposes of acquiring incidental learning benefits for their students, they can achieve better results if they actually work with the source of input. For example, in the case of textbooks, teachers might adopt strategies like these:

1. Acknowledge students' belief that English-language textbooks require more effort from them, and explain the reasons that the book has been assigned, and the reasons students should read it.
2. Instruct students in strategies for reading difficult texts, or refer them to learning centers.
3. Incorporate mentions of target English terms in lectures, even when those lectures are in another language. Although this strategy would be relatively simple to implement, it appears to be infrequent (Malmström et al., in preparation).

At the administrative level, those who are charged with supervising and/or helping teachers in writing course descriptions should consider requiring courses that make use of languages other than the local official one to state what language-learning goals, if any, they have. In the university community as a whole, issues of language acquisition should have a somewhat higher profile, so that available information on the language demands of workplaces can be made use of, and the skills acquired in the classroom aligned, where appropriate, with those needed afterwards.

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NOTES

[1] The text of the questionnaires is available at URL: https://spreadsheets.google.com/viewform?formkey=dDJZYTdSS3NxZldfVmplVDlLVGdDcnc6MA (English version) and URL: https://spreadsheets.google.com/viewform?formkey=dHFPR0Jpck1OSW5BTmxjVklUUXRHLWc6MA (Swedish version).

[2] The basic pattern described in this section holds true for all teachers, regardless of the language in which they answered the questionnaire. However, those who answered in English were more strongly enthusiastic about the benefits of English, more likely to include it in their courses, and more likely to have it as an explicit learning objective, than the group as a whole. It seems likely that this difference is due to the fact that the teachers who chose to respond English are more likely to have a first language other than Swedish, to do their teaching in English, and perhaps to teach on degree courses offered in English. As this group made up less than 10% of the total group, and followed the general trend, their answers have not skewed the results for the entire group.

[3] Differences were considered significant when a chi square test resulted in a p value less than or equal to .05.

[4] Percentages refer to those answering "very important" to the two vocabulary questions. Because the answers to two questions are combined in each column, the maximum possible score was 200%.