

THE UNIVERSITY of EDINBURGH

Edinburgh Research Explorer

English Textbooks in Parallel-Language Tertiary Education

Citation for published version:

Pecorari, D, Shaw, P, Irvine, A & Malmstrom, H 2011, 'English Textbooks in Parallel-Language Tertiary Education', *TESOL Quarterly*, vol. 45, no. 2, pp. 313-333. https://doi.org/10.5054/tq.2011.247709

Digital Object Identifier (DOI):

10.5054/tg.2011.247709

Link: Link to publication record in Edinburgh Research Explorer

Document Version: Publisher's PDF, also known as Version of record

Published In: TESOL Quarterly

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



English Textbooks in Parallel-Language Tertiary Education

DIANE PECORARI

Mälardalen University Västerås, Sweden

PHILIP SHAW

Stockholm University Stockholm, Sweden

HANS MALMSTRÖM

Royal Institute of Technology Stockholm, Sweden

AILEEN IRVINE

Edinburgh University Edinburgh, Scotland

> Tertiary education in many countries is increasingly bilingual, with English used in parallel with the national language, particularly as a reading language. This article describes the results of a survey of student attitudes toward, and reading practices regarding, English language textbooks. Over 1,000 students at three Swedish universities responded to a questionnaire asking about their experiences with English textbooks. Textbooks written in English were generally unpopular, and the perception was widespread that they placed a greater burden on students. However, respondents were divided about whether their reading behavior and their learning outcomes were affected by having a textbook in English, and about whether English texts were desirable. The findings of this study have implications for teaching practices in contexts in which students are asked to read, or are being prepared to read, in a second language. Implications for the English as a foreign language or English as a second language classroom are discussed. doi: 10.5054/tq.2011.247709

T he problems and opportunities associated with English as a medium of learning, and particularly reading, in tertiary education are familiar TESOL terrain. They affect students who travel to Englishspeaking countries as international students, and, as English establishes itself as an academic lingua franca worldwide, students outside the English-speaking world are also increasingly likely to be confronted with English at some point during their university studies (Graddol, 2006). The growing presence of English in the expanding circle (Kachru, 1985) is felt in at least two ways. First, an increasing number of courses are taught in English, rather than the local language (Ammon, 2001; Wächter & Maiworm, 2008). The use of English as a language of instruction is intended both to recruit international students and to make it more attractive to and valuable for local students by affording them the opportunity to improve their skills in English. There is also a perceived prestige value in English-medium courses. For example, in 2009 Copenhagen University launched a number of English language master's programs called, collectively, Copenhagen Masters of Excellence, the goal of which is "to be able to attract good Danish and international students, who together can shape a world-class international academic milieu" (Copenhagen University, n.d.; translation ours).

Another source of English influence is in the growth of parallel language contexts, that is, educational contexts in which the primary language of instruction is the local language, but some materials are in English.¹ In many countries (including Sweden, where our study is situated), the textbook is increasingly in English, even in courses which are otherwise taught in the local language. Although the use of English language textbooks appears to be more common at higher levels of study, within scientific and technical fields, and in countries where the local language is spoken by smaller numbers, it has been attested across the world and across the academic curriculum (Airey, 2009; Gunnarsson, 2001; Kaewpet, 2009; Murray & Dingwall, 2001; Ward, 2001, 2009).

Traditionally, English language instructional material has been used in situations where no appropriate literature was available in the students' first language (L1), essentially because the potential market for such literature was too small, due to impoverished students or an esoteric subject. This situation led to the development of resources for English for academic purposes (EAP; Bates & Dudley-Evans, 1976; Moore, 1979) to support students who were studying in their home countries and in their L1, but forced by circumstances to use English language textbooks. The situation is now somewhat different, in that English textbooks are sometimes chosen not only for want of a better alternative but also because teachers identify some positive value in them.

The current popularity of English language instructional material in developed countries is due to at least two factors. The first relates to the nature of the textbooks themselves, and specifically the fact that the production values of textbooks published for the United Kingdom or United States markets are often higher than those of locally published

¹The term *parallel-language context* has been used in varying ways, and sometimes denotes a more balanced use of two languages than in our context, as for example when the same course is offered simultaneously in two languages.

materials. Textbooks published in the English-speaking world compete for a slice of a very large market, making it remunerative to invest in producing books that are interestingly written, carefully edited for content and readability, regularly updated, and attractively designed and that have pleasing visual features such as full-color illustrations. From the teacher's perspective, English language textbooks are attractive because they often come with a range of ancillary materials such as workbooks, ready-toadminister tests, lecture slides, and dedicated Web sites. Publishers in other countries often cannot provide comparable resources. Sweden, for example, with a population of under 10 million, offers too small a market for tertiary textbooks to repay such efforts. In a recent article on textbook writing in the Swedish academic trade magazine, one textbook author who characterized his book as having a "somewhat legendary" status in its field said that it had sold between 20,000 and 25,000 copies over the course of 35 years (Wikström, 2008a, p. 5), whereas another reported that the financial incentive to revise his book for a new edition inadequately compensated the time involved in doing so (Wikström, 2008b). As a result, the resources are not available to make Swedish textbooks as attractive as their English language competitors.

A second reason for the use of English language textbooks has to do with incidental language learning. Many teachers believe that students who come into contact with the English of their subject area during their university studies will be well served when they reach the workplace. As one academic said in response to a survey of the status of English at Swiss universities, "I think it is important for students to be very familiar with scientific English. For graduate students it is a must. If possible, also undergraduate students should get exposed to the English technical terms" (Dürmüller, 2001, p. 403). A similar study carried out in Austria found that one university had moved to teaching one of its subjects entirely in English, for the reason that its graduates generally went on to an English-speaking workplace (de Cillia & Schweiger, 2001). At the first author's institution, two lecturers authored a textbook in English specifically so that their students would have the experience of at least one English language textbook during the course of their education (M. S. Kjellin, personal communication, 2 January 2010). Although such anecdotal evidence suggests that university teachers assign English language textbooks at least in part to bring their students into contact with professional English, this remains a tacit goal and is rarely included explicitly among the formally documented learning objectives for courses (Pecorari, Shaw, & Malmström, in press). Such informal inclusion of language goals in content courses is much more widespread than deliberate content and language integrated learning (Wilkinson & Zegers, 2007).

Teachers, therefore, choose to assign textbooks in English in preference to alternatives in the students' L1, either because they

believe the superior properties of the book will enhance content learning or because they deem the exposure to reading in English will result in incidental language learning. In order for these benefits to be maximized, it is necessary to know what the actual effects of such a choice are, and there is reason to be skeptical about the positive gains in both of these areas. In relation to the potential language-learning objectives, it must be noted that the language of textbooks is not typical of other academic discourse in a given field (Hyland, 1999; Myers, 1992). Textbooks are not particularly good models either for the assessment writing that undergraduates need to produce or for the research writing that some of them may go on to produce as postgraduates, even though they may teach the register of the discipline.

Content learning may be inhibited rather than enhanced by the extra workload associated with textbooks in a foreign language, because they demand proficiencies which the students do not possess. Ward concluded from his study of Thai university students that their textbook was "just too difficult" (2001, p. 150). Ward's finding is not surprising, because there is considerable evidence that L1 reading ability and second language (L2) proficiency complement each other during L2 reading and that low L2 proficiency can result in limited reading comprehension, even when the individual in question has good L1 reading skills (e.g., Asfaha, Beckman, Kurvers, & Kroon, 2009; Mohammed & Swales, 1984; Yamashita, 2002; see Bernhardt, 2005, for a review of earlier research). Even when students have advanced skills in English, as well as good L1 literacy, the reading process is slower and more laborious, perhaps as much as 25% slower than for comparable English L1 speakers (Fraser, 2007; McMillion & Shaw, 2009; Raymond & Parks, 2002; Segalowitz, Poulsen, & Komoda, 1991; Shaw & McMillion, 2008).

However, very little is known about the impact of the choice to use foreign-language textbooks in contexts where the focus is mainly on content learning. There is little research on the impact of a switch to such textbooks on students' reading behavior. Even with native-language textbooks, research on student reading practices has confirmed what many teachers have pessimistically suspected to be the case: Students do not read their textbooks as assiduously as they are in principle required to do. Specifically, a small proportion of students do little or no reading, whereas a large proportion read the textbook only selectively (Brost & Bradley, 2006; Burchfield & Sappington, 2000; Pecorari, Shaw, Irvine, & Malmström, 2010). However, behavior is not only affected by individual differences. There are differences across disciplines (Taillefer, 2005b) and national background (Newman, Trenchs-Parera, & Pujol, 2003; Taillefer, 2005a) in teachers' and students' practices with regard to assigned reading. Thus, although university teachers can never safely make the assumption that most of a class has done the assigned reading, in situations where the students come from different national and disciplinary cultures (including the EAP classroom, as well as courses across the curriculum taught for an international audience), such assumptions are still more tenuous.

Academic reading behavior in a familiar language is thus very variable, and responses to being faced for the first time with required reading in a foreign language are likely to be even more so. Some students may evade reading (Ward, 2001) and switch attention to other learning resources; others may choose to devote the extra time required to the task. Neither language nor content learning will be improved if the switch results in reduced reading. It is therefore impossible to assess whether lecturers' voluntary adoption of L2 reading can achieve their aims, until we know more about their impact on student reading behavior.

A number of questions thus surround students' reading behavior in parallel language contexts. For EAP instruction to meet its objective of equipping students with the linguistic and metalinguistic knowledge and skills needed for success in their current or future studies in English, more needs to be known about how students use English language textbooks, what problems and benefits they encounter in reading in an L2, and what can be done to help them achieve success. This article addresses these questions by presenting the results of a study of students' perceptions of, and use of, English textbooks in an English L2 environment.

METHODS

The findings presented here are based on a survey of students at three Swedish universities. A total of 1,226 students filled out a questionnaire which asked about their attitudes toward and practices regarding textbook reading in general, and in English in particular. The questionnaire (available from the first author) was distributed to students during a lecture or seminar and, although responding to the questionnaire was voluntary, the completion rate was very high and no lower than 90% in any class. The classes surveyed came from a range of subjects in engineering, the natural sciences, the social sciences, the humanities, health care, and law (see Table 1).

The three universities at which the survey was conducted have rather different profiles. One is a large and established institution in a cosmopolitan setting; another is a prestigious technical university; and the third is relatively new and serves a primarily local student body. Taken together, the three present a representative cross-section of Swedish higher education.

The classes surveyed had either Swedish or English as the formal language of instruction, and classroom teaching was conducted in that language in virtually all cases (a small proportion of students were studying French, German, or Spanish, and most classroom interaction took place in those languages). The courses taught in English were designed to attract international (i.e., non-Swedish) students, but local students were also enrolled, and the courses taught in Swedish included some students who were first- or second-generation immigrants to Sweden and had an additional L1. The classrooms surveyed were thus linguistically mixed. For the purposes of this study, the responses of 49 students who had English as their sole L1, or who did not identify their L1, were disregarded. In addition, approximately 15% of respondents said that they had never had an English language textbook during their university studies, and their answers were also excluded. The findings presented below are therefore based on 1,033 responses. Of these, 77% came from individuals who had Swedish as their only L1 and 8% from individuals who had Swedish as an L1 along with another language. The remaining 15% had another L1 (this last group included a small number of respondents-fewer than 0.1% of the total-who listed English as an L1 along with others, such as Yoruba or Igbo, and presumably came from a diglossic background in which English was the language of some or all of their formal education). For some questions the number of responses is lower than 1,033, where a subset of answers was not relevant. For example, for the question set asking about perceptions of a specific textbook, the small number of respondents who had a textbook in a language other than English or Swedish were excluded.

Two versions of the questionnaire, one in Swedish and one in English, were used, based on the language of instruction in the class being surveyed. Several questions asked students to compare the experience of having textbooks in English as opposed to their L1. In the Swedish version these questions asked for a comparison between English and Swedish, while the English version had the wording "your first language."

Subject area	Number of respondents	Percentage
Engineering	241	23
Humanities	126	12
Law	23	2
Natural sciences	162	16
Social sciences	387	37
Health care	94	9
Total	1,033	100.0

TABLE 1Respondents by Subject Area

The questionnaires covered three areas: experience of textbook use at the university under investigation; textbook use in the course in which the questionnaire was administered; and experience of and attitudes toward textbooks in English. The responses to the questionnaires were keyed into Excel files and analyzed using SPSS; the main statistical test used was chi square, testing whether the configuration of responses on one question was significantly different from that on another. *P*-values lower than 0.01 were taken as indicating significant difference.

RESULTS

The questionnaire was designed to provide a direct measure of student attitudes and self-reported behavior with regard to English textbooks. In addition, the responses about the specific textbook in use in each course which was surveyed allow us to compare the attitudes of the respondents who had a textbook in English (58%) with those who had Swedish textbooks, thus affording an indirect measure of attitudes. This section gives the responses for three areas: attitudes toward English language textbooks, reading behavior, and perceived learning outcomes, and then concludes with a description of the characteristics of the students who preferred to have, and preferred not to have, English language textbooks.

Attitudes Toward English Textbooks

Asked whether reading in English took more effort than reading in Swedish (or other L1), 74% of respondents said that it did, a theme that was echoed in the responses to an open-ended question, where negative comments about English textbooks outnumbered positive comments by more than four to one. These comments were typical of the responses:

It takes a lot more time to work your way into a text that isn't in your first language.²

I think it's a lot easier to take in the content of a book that's written in Swedish.

It makes things tougher when books are in English.

In a course like this, where the lectures take up my time and the book is thick and in English, it's not always easy to manage to read everything.

Asked whether they would choose English textbooks if the choice were theirs, 44% of respondents said that they would not. Thirteen percent

²Here and below, comments have been translated from the original Swedish, unless otherwise indicated.

said that they *would* choose English textbooks, and 14% said it made no difference, while 28% said that it depended on the course. Although the largest group of responses was therefore negative, more than half expressed some approval, if qualified, for English books.

Students were also asked to agree or disagree with statements attributing various characteristics to the book, and for three characteristics the pattern of responses was significantly different³ between students who had English textbooks and those who had Swedish. Not surprisingly, the proportion of respondents who reported that their textbook was easy to read was larger among those who had a Swedish textbook than among those who had one in English. However, the English textbooks were more frequently considered to have good illustrations, figures, etc., and to be visually attractive (see Figure 1). This suggests that one of the reasons teachers adopt English textbooks, because they are more polished, is recognized by students as well.

The responses to the open question confirmed this picture. One of the few comments which were positive toward English books named the visual aspect:

Books are often better written in English, I think. Better illustrations and so on.

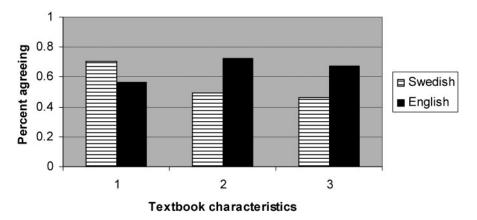


FIGURE 1. Textbook characteristics by language (1 = textbook is easy to read, 2 = textbook has good illustrations, 3= textbook gives a pleasing visual impression).

 $^{^{3}}$ Here and throughout, results described as significant have in fact been shown by chi square to be significantly different at p < 0.01.

However, the readability of English books was criticized. Interestingly, these criticisms were couched not only in terms of the added difficulty of reading in an L2, as noted earlier, but were also based on what appear to be issues in contrastive rhetoric:

Books should be pedagogical regardless of language. Books in English are generally worse in this respect.

Books written by English speakers tend to be full of babble.

Textbook Language and Reading Behavior

Students were asked whether having an assigned textbook in English influenced the amount of time they spent reading it. In light of the comments such as those reported earlier indicating that respondents felt reading in English was more demanding, it would be reasonable to assume that students would spend more time reading textbooks in English, compared with textbooks in their L1. For about half of the respondents (55%), this was the case. Thirteen percent said that when a textbook was in English, they spent less time reading it. Because this is the same proportion of students who said that they would prefer to have English textbooks, one explanation may be that there is a minority of students who find reading in English easier than reading in their L1 (other explanations are offered below). However, 25% said that the textbook language made no difference to the amount of time they spent reading it. Given findings that even advanced L2 English users read more slowly in English than L1 English speakers (McMillion & Shaw, 2009; Shaw & McMillion, 2008), the implication is that a quarter of these students get through less of the assigned reading when their textbooks are in English. Student comments confirmed that English textbooks both required extra time and resulted in lower achievement:

Everything takes longer when the book is in English.

I put in more time but read less in English, and I understand less than if the book had been in Swedish.

However, there was also a suggestion that, for some students, the effect of English language textbooks might be a dampening one, causing them to spend less time on what was perceived as a futile effort:

I don't succeed, and I don't manage to study as much when I read a textbook in English.

We had one textbook in Swedish, and that was the only course where I actually read the book.

Textbook Language and Learning Outcomes

Students were asked about how they perceived that English textbooks influenced two aspects of their learning outcomes: how much of the content they understood, and how they learned words and terms in their fields. Only a small proportion of respondents (5%) said that they understood more when the textbook was in English, as opposed to their L1. It is worth noting that this is considerably lower than the proportion (13%) who said they preferred English language textbooks. In other words, at least 8% of the respondents, a significant minority, appear to believe that having textbooks in English confers benefits which outweigh some loss in the uptake of content.

However, the majority (55%) said that they understood less when the textbook was in English, and comments reveal how very frustrating some students find this state of affairs:

I'm happier to read in Swedish so that I know what I'm learning, and so that I don't miss anything important.

It's bad to have English textbooks. It's hard and it makes me feel bad, and I read and miss important facts.

I would never have passed financial management if the textbooks had been in English.

Some books are written in DIFFICULT English, for example, one of the books in this course. Then I don't understand the content, I get IRRITATED, SAD and OBVIOUSLY LEARN LESS DESPITE the fact that the subject is interesting. A WASTE of resources and of my time . . . BAD PEDAGOGY! [emphasis in original]

Thirty-five percent said that the textbook language made no difference to how much they understood, and this raises an important question about the relationship between work invested and learning outcomes. Because approximately three quarters of respondents said that reading in English demanded greater efforts on their part, the group, consisting of about one third of respondents, who said the textbook language does not impact their learning outcomes, must be assumed to consist primarily of individuals who regulate their studies based on outcomes, rather than time or effort expended. In other words, rather than reading for a given amount of time per week, with more in the way of results when the book is in the L1, and less when the book is in English, they read (according to their own reports) for the amount of time necessary to reach a level of understanding of the book content that they consider to be satisfactory.

As noted earlier, a considerable body of research has consistently found that it is, quite predictably, slower to read in an L2 than in an L1. The impact on reading comprehension, as opposed to speed, is less clear, though, and studies of advanced L2 learners show only small negative effects on reading comprehension when the same individual's performance is compared in the L1 and the L2 (Fraser, 2007) or between groups reading in their L1 and groups reading in their L2 (Shaw & McMillion, 2008). This suggests that at this level the primary cost of reading in an L2 is time, but not comprehension. This outcome may be partly explained by the interplay between L1 literacy and L2 language proficiency. Given reasonably strong language skills in the L2, good L1 literacy can scaffold the reading process and yield good results. In the absence of good L1 reading skills or a sufficiently high degree of proficiency in the L2, the outcomes of L2 reading will not be as satisfactory.

In this light it may perhaps be surprising that more than one-half of the students surveyed said that comprehension was negatively affected by reading in an L2. It should be noted that these are self-reported perceptions and not a measure of actual comprehension. However, if the perceptions are accurate, then there are two possible (mutually compatible) explanations. One is that the respondents were unwilling or unable to invest the additional time which would be required to master the course content in English; the other is that the students arrived at university with inadequate L1 literacy, or English literacy, or both.

Content learning is one of the desired outcomes of textbook reading; another is language learning. When asked about the impact that having an English textbook had on their learning of words and terminology related to the subject matter, 41% said it meant that they learned them in both English and Swedish, and 31% said they learned them best in English, whereas only 19% said they learned them best in Swedish (or other L1). This response reveals several interesting points. First, the most reasonable conclusion to draw about the 19% who say that they learn words and terms best in their L1, in spite of having an English textbook, is that they have relatively little exposure to the textbook and are instead learning from the lectures, lecture notes, handouts, etc. Second, it is noteworthy that nearly three quarters believe that incidental vocabulary learning does indeed result from exposure to English textbooks. This offers an explanation for the fact that a sizable minority of respondents said they would choose an English textbook, despite it requiring greater effort and more time to read and that it may negatively affect the learning of content. In fact, the relatively few answers to the open question which were wholly positive about English touched primarily upon this point:

By having textbooks in English I can maintain my knowledge of English. It's good to have teaching in both Swedish and English because that way you get more access to internationally useful knowledge (terminology and so forth). International terminology is useful, if not necessary for learning. Much of the terminology in chemistry is in English because there aren't

appropriate Swedish expressions . . . so it makes things simpler if one is familiar with written English.

A number of other comments were ambivalent about English, but mentioned exposure to the language as a positive factor mitigating the drawbacks associated with English books:

It's more demanding to have English textbooks but at the same time one learns both the content and the English language, which is positive after all, but more difficult.

It's easier to have books in Swedish but very good for me to read in English.

It should be stressed again that these are self-reported perceptions; the final section of this article takes up how realistic these perceptions may be.

Who Likes English Textbooks?

The questionnaire item asking whether students would choose to have textbooks in English, as opposed to Swedish (or other L1), offered four alternative answers: (1) yes, (2) no, (3) it makes no difference, and (4) it depends on the course. As noted earlier, the largest group of respondents (44%) answered no, the next largest group (28%) said it depended on the course, 13% favored English texts, and 14% said it made no difference. Given the fact that English textbooks are increasingly selected for undergraduates in many countries, it is important to understand what lies behind the preference or dispreference for them. Comparison with other questionnaire responses suggests that there are four explanations.

First, demographics appeared to be behind some of the pro-English responses. Only 52% had Swedish as their sole L1 (compared to 80% of respondents overall). Approximately the same proportions had both Swedish and one or more additional languages as L1 (11% in the group who preferred English textbooks, compared to 10% overall), and 37% did not have Swedish (or English) as L1, though that group made up only 10% of the students surveyed as a whole. This latter group would, presumably, tend to have stronger skills in their L1 than in an L2, however strong, so it is likely that what they valued was not the use of English per se, but the fact that an English language textbook meant that their classmates were also working through the medium of an L2. It may also be thought that those international students who have decided

to come to Sweden to pursue a course of study in English may feel quite confident, for whatever reason, about their abilities to study in English.

Differences were also noted across academic disciplines. As Table 2 illustrates, in four of the five subject areas the largest group of respondents preferred not to have textbooks in English. The sole exception to this was the humanities, where over one third said that it depended on the course. There were, however, significant differences in the frequency with which this negative answer was given. Although nearly 70% of health care students would not choose to have English textbooks, in three subject areas—engineering, the humanities, and natural science—40% or fewer gave this answer. Because the other three options involve some sort of acceptance of English language texts—if qualified—this means that, in some subject areas, the majority finds some use of English books desirable, whereas in other areas the majority does not.

A third factor which appears to lie behind the preferences expressed for textbook language is the students' analysis of the costs and benefits. As was seen earlier, the respondents identified several disadvantages of textbooks in English, namely, that they must invest more effort, and in particular more time, in reading them and that the outcome in terms of mastery of the content is often worse. They did, however, see advantages in having incidental exposure to English. The students who would prefer English books were significantly more likely to see advantages, and to minimize the disadvantages, whereas those who said they would not were more likely to identify costs and less likely to identify benefits in having English textbooks. Fourteen percent of the pro-English group said that an English language book meant that they spent more time reading, as opposed to 67% of those who did not want English books. Those who favored English books were less likely to say that having an English book resulted in their understanding less (27% compared to 85%), and less likely to say that it required greater effort (50% as opposed to 94%), but were more likely to say that it resulted in English vocabulary gains (94%

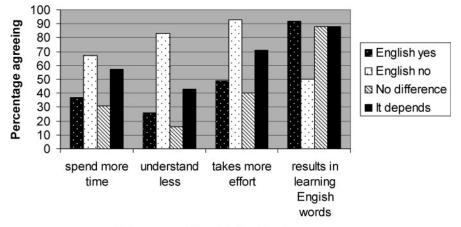
Subject area	Percentage in this area who would choose English books	Percentage in this area who would not choose English books	Percentage in this area who have no prefer- ence	Percentage in this area saying it depends on the course
Engineering	17	35	21	26
Humanities	18	23	25	34
Natural sciences	14	40	14	32
Social sciences	12	53	9	25
Health care	1	67	7	25

 TABLE 2

 Preference for Textbook Language by Discipline

versus 58%). As Figure 2 shows, those who said the textbook language made no difference tended to align with those who preferred English books; a similar tendency can be seen for those who said it depended on the course.

Although it is not within the scope of this study to provide an explanation for these differences, there is some basis for speculation. Elsewhere (Pecorari et al., 2010) we have reported that students differ in terms of their degree of commitment to the textbook. Specifically, some students believe that reading the textbook is part of their task, whereas others conceive of their task as acquiring the necessary knowledge to pass the course in the most efficient way possible (echoing the finding by Newman et al. [2003, p. 57] that some students adopt "a minimumsufficient-effort tactic"). This latter group tends to view lectures as primary in their education, and lecture notes as a useful support, and sees reading as an optional extra, if a course is especially hard or if a lecture has been missed, or not particularly helpful. It appears from our findings that the students who were more favorable to English language textbooks also had a higher degree of commitment to textbook reading in general. The students who preferred English textbooks, along with those who said textbook language made no difference, and to a lesser extent those who believe that the ideal textbook language depends on the course, share the characteristics of committed readers. They were more likely (although the differences were not always significant) to say that reading the textbook improved their chances of passing a course and that the book is an important source of knowledge in their courses. Although respondents overall rated lecture notes and attendance in



Outcomes of English textbooks

FIGURE 2. Perceived outcomes of English textbooks.

class as more helpful than textbooks, this preference for attendance—or dispreference for the textbook—was much more pronounced among those who did not want to have English books. Among the latter group, 34% strongly agreed with the statement that textbooks are an important source of learning in their courses, and 60% strongly agreed with the statement that attending lectures was an important source of learning, whereas for the pro-English group those values were 46% and 48%, respectively).

Two speculative explanations for these differences can be put forward. The first relates to reading ability. Literacy skills in the Swedish L1 have been shown to influence reading in the English L2 (Shaw & McMillion, 2008). It seems possible that those students who express a (conditional) preference for English language textbooks are motivated not only by the potential cost–benefit relationship but also by the knowledge that they will interact with the textbook and that both the costs and benefits are real and not merely potential. Those who express an active dispreference for English textbooks, on the other hand, seem to be those who already have an especially strong preference for learning from attendance at class, and from lecture notes, rather than from textbook reading.

A possibly related factor is the degree of communicative competence required to manage learning in two codes instead of just one. Although this was not an area that the questionnaire set out to explore, it was raised in some of the responses to open questions, such as the one which read as follows:

It's difficult if you have the textbook in English and then the exam in Swedish.

Some of these responses also suggested that students were working with their English language textbooks in an extremely labor-intensive way:

It takes extra time to translate the book, terminology for the lecture, than if the reading is in Swedish.

If [the book] is in Swedish it feels like it goes faster . . . avoid translating.

If these students are to be taken at their word, and really are obliged to go through a process of translation in order to understand English textbooks, then it suggests that either their proficiency in English did not support reading strategies independent of the L1 or that their resources for discovering efficient reading strategies were limited.

DISCUSSION

The findings reported here have demonstrated that the increasingly common use of English textbooks meets with mixed responses from undergraduates. A small group of students finds the use of English textbooks beneficial and largely unproblematic, and a larger group feels that there is a potentially useful trade-off involved. However, a third group does not believe that the benefits outweigh the costs and indeed commented in emotional language on the strain that reading in an L2 placed upon them. In this section we discuss implications of this situation for higher education in those contexts similar to ours, where English is an increasing presence in a fundamentally non-Englishspeaking university system.

The first and most obvious implication of these findings is that the use of English language textbooks is not an unalloyed positive. There is a common assumption in Sweden and some other northern European countries that, because a certain level of English is an eligibility requirement for university study, all university students should be able to take the use of English in their stride. As discussed earlier, success in L2 reading depends both on a sufficient level of L1 literacy and a sufficient level of L2 proficiency, and the university admissions process is designed in principle to ensure both. Swedish students obtain admission to university either through a score on a national, standardized admissions exam, which includes an L1 reading comprehension test, or through showing equivalent skills by other means, such as secondary school grades. English is a compulsory subject in Swedish primary and secondary schools, and although some incoming university students will have studied English longer and with better results than others, all have in principle shown a degree of proficiency in English which is deemed by their universities to be sufficient for university study. International students have more varied profiles and routes of access to university admissions, but they too must fulfill a set of requirements designed to ensure (among other things) that both their L1 literacy and their English proficiency are equal to the task of studying at university level, and through the medium of English. There is thus a widespread assumption that students who have been admitted to a Swedish university ought, as a matter of course, to be able to cope with English as at least a partial medium of instruction. In some ways this is analogous to the assumption that is sometimes made in English inner-circle countries that international students, by virtue of having a specified score on the Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) exam, are equipped to undertake university study on a reasonably level playing field.

Yet it is clear that some international students are not able to manage studies in an English-speaking environment (see, for example, Currie, 1998, who documented an ESL student relying on plagiaristic writing techniques to stay afloat in her academic work). It is equally clear from the present study that many students do not believe themselves capable of achieving a full measure of academic success when the textbook is in English. There is a cleft between the competences students are presumed to have and those which they themselves believe they have, and it is the students themselves who are at risk of falling into the resulting gap.

The problem that this situation poses is one which can be resolved either at the administrative level or in the classroom. An administrative solution would entail bringing admissions criteria into closer alignment with the real demands that are placed on students. It should be noted, however, that, in the context in which the present study was situated, this possibility is at odds with the economic reality that filling seats in the classroom generates revenues. More stringent admissions criteria would lead to greater numbers of empty seats and less financial stability for the universities concerned. This also parallels the situation for universities in the English inner circle, which have financial incentives to admit international students and find that the disadvantages associated with admitting underprepared students are less immediately perceptible than the economic advantages.

In the classroom, teachers can be more aware of the consequences of adopting English textbooks (such as the fact that most students will spend more time reading, with a concomitant effect on their availability to perform other learning tasks, and that some students will choose not to spend more time reading, and as a result will learn less of the content of the textbook) before making the decision to do so. We would like to suggest that a university's duty of care toward its students includes a responsibility to address this issue head-on and not to ignore the discrepancy between assumptions about student competences and the reality.

One place where this can happen is in the EAP classroom. The objective of EAP teaching is to support students in their present and future academic work through the medium of English, and it is clear from our findings that many students perceive that support is indeed needed. This can usefully take a number of forms. For some students the source of difficulty may simply be their proficiency in English, and in this respect any instruction in English will be useful. For others the stumbling block appears to be reading and literacy practices. The students who commented that English books are "full of babble" or otherwise rhetorically unsatisfactory may have been generalizing from experiences with poorly written textbooks, but it seems at least equally likely that they were reacting to an unfamiliar rhetorical style. Similarly, the students who said that English textbooks required them to undertake translations may be adding an unnecessary step to the

reading process. Both groups may be able to benefit from instruction helping them learn useful navigational skills, such as identifying the argument in a text and distinguishing it from supporting evidence.

A further objective for which the EAP classroom could aim relates to the positive element that most of our respondents associated with English textbooks: the exposure to English, and in particular to the subjectspecific language of their chosen fields. As noted earlier, there is reason to question whether this potential benefit is fully realized. One obstacle to it arises when students are so intimidated by reading in an L2 that they avoid it and rely on other sources of course content. Teaching aimed at helping them use English textbooks productively will help. Some students, however, are already willing to interact with English textbooks and would benefit from learning strategies which would help them maximize the potential language gains that their use of an English text presents.

A final point worth noting is that the increasing use of English as a lingua franca in Sweden (as in other parts of the world; e.g., Canagarajah, 1993; Phillipson, 2007) is contentious, and not only for practical reasons to do with language proficiency. The role of English in Sweden is debated so often and publicly that domain loss has become a familiar, popularly known concept. By no means are all Swedes negative to the influence of English. Some see it as a positive, opening economic doors for a small and geographically somewhat isolated country. Others accept it as unavoidable. Some, though, perceive it both as a threat and an unfair hardship that English permeates daily life to its present extent. Our study did not investigate directly *why* negative attitudes to English textbooks exist (although it did document some of the causes, those which impact on educational outcomes). However, it is reasonable to think that at least some of the resistance to English textbooks was based on a more general resistance to English. That was the impression given by one respondent, who wrote

Have textbooks in SWEDISH!! Today young people are getting worse and worse at writing. . . . What will happen if all textbooks are in English?!

In this respect the findings of this study apply very specifically to the research context, in which English textbooks are a presence in a higher education sector which still leans heavily toward Swedish. The students we surveyed are part of a growing number of individuals around the world who are in a similar situation, studying at least partly through the medium of English in a country, and at a university, in which English is not the dominant language. They consist of two groups, local students who find that English is a presence in their home countries, and international students who have chosen to travel abroad to study in English, but not to an English inner-circle country. Both these groups

are growing increasingly common, but they have, in common with the more traditional group of international students travelling to the inner circle, the fact that they are negotiating the already challenging literacy tasks that accompany higher education in the even more challenging context of an L2.

By choosing the perceived benefits of English language textbooks and assuming that they are worth the perceived costs, their teachers have made a decision similar to that made by students who choose to take courses abroad rather than in their home country—they assume that the quality of the course and the incidental language-learning benefits outweigh the stress and difficulty involved. But, as EAP teachers know, success in a course abroad is not guaranteed and requires considerable support. Voluntary choice of a foreign-language textbook also needs pedagogic adaptation to enhance the benefits and support systems to mitigate the costs.

ACKNOWLEDGMENT

This research was funded by Grant 2008–5584 from the Swedish Research Council (Vetenskapsrådet).

THE AUTHORS

Diane Pecorari is Associate Professor in the School of Education, Culture, and Communication at Mälardalen University, Västerås, Sweden.

Philip Shaw is Professor in the English Department at Stockholm University, Stockholm, Sweden. He is principal investigator in the English Vocabulary Acquisition project in cooperation with the other co-authors.

Hans Malmström taught in the Language and Communication Unit at the Royal Institute of Technology, Stockholm, Sweden, where he helped conduct the research reported in this article, from 2009–2010. He is now at the Centre for Language and Communication at Chalmers University of Technology in Gothenburg, Sweden.

Aileen Irvine is a Lecturer at the Moray House School of Education, Edinburgh University, Edinburgh, Scotland.

REFERENCES

Airey, J. (2009). Science, language and literacy: Case studies of learning in Swedish university physics (Doctoral dissertation). Uppsala University, Uppsala, Sweden.

Ammon, U. (2001). English as a future language of teaching at German universities? A question of difficult consequences, posed by the decline of German as a language of science. In U. Ammon (Ed.), *The dominance of English as a language of science: Effects on other languages and language communities* (pp. 343–361). Berlin, Germany: Mouton de Gruyter.

- Asfaha, Y. M., Beckmanm, D., Kurvers, J., & Kroon, S. (2009). L2 reading in multilingual Eritrea: The influences of L1 reading and English proficiency. *Journal of Research in Reading*, 34, 351–365. doi:10.1111/j.1467-9817.2009.01399.x.
- Bates, M., & Dudley-Evans, T. (1976). General science: English for science and technology. London, England: Longman.
- Bernhardt, E. (2005). Progress and procrastination in second language reading. Annual Review of Applied Linguistics, 25, 133–150. doi:10.1017/S0267190505000073.
- Brost, B. D., & Bradley, K. A. (2006). Student compliance with assigned reading: A case study. *Journal of Scholarship of Teaching and Learning*, 6, 101–111.
- Burchfield, C. M., & Sappington, J. (2000). Compliance with required reading assignments. *Teaching of Psychology*, 27, 58–60.
- Canagarajah, A. S. (1993). Critical ethnography of a Sri Lankan classroom: Ambiguities in student opposition to reproduction through ESOL author(s). *TESOL Quarterly*, 27, 601–626. doi:10.2307/3587398.
- Copenhagen University. (n.d.). Copenhagen Masters of Excellence. Retrieved from http://kuur.ku.dk/come/
- Currie, P. (1998). Staying out of trouble: Apparent plagiarism and academic survival. Journal of Second Language Writing, 7, 1–18. doi:10.1016/S1060-3743(98)90003-0.
- de Cillia, R., & Schweiger, T. (2001). English as a language of instruction at Austrian universities. In U. Ammon (Ed.), *The dominance of English as a language of science: Effects on other languages and language communities* (pp. 363–387). Berlin, Germany: Mouton de Gruyter.
- Dürmüller, U. (2001). The presence of English at Swiss universities. In U. Ammon (Ed.), *The dominance of English as a language of science: Effects on other languages and language communities* (pp. 389–403). Berlin, Germany: Mouton de Gruyter.
- Fraser, C. A. (2007). Reading rate in L1 Mandarin Chinese and L2 English across five reading tasks. *Modern Language Journal*, 91, 372–394. doi:10.1111/j.1540-4781.2007.00587.x.
- Graddol, D. (2006). English next: Why global English may mean the end of, English as a foreign language'. London, England: British Council. Retrieved from http://www.britishcouncil.org/learning-research-english-next.pdf
- Gunnarsson, B.-L. (2001). Swedish, English, French or German: The language situation at Swedish universities. In U. Ammon (Ed.), *The dominance of English as a language of science: Effects on other languages and language communities* (pp. 287–316). Berlin, Germany: Mouton de Gruyter.
- Hyland, K. (1999). Talking to students: Metadiscourse in introductory coursebooks. English for Specific Purposes, 18, 3–26. doi:10.1016/S0889-4906(97)00025-2.
- Kachru, B. B. (1985). Standards, codification, and sociolinguistic realm: The English language in the outer circle. In R. Quirk & H. Widdowson (Eds.), *English in the* world (pp. 11–30). Cambridge, England: Cambridge University Press.
- Kaewpet, C. (2009). Communication needs of Thai civil engineering students. English for Specific Purposes, 28, 266–278. doi:10.1016/j.esp.2009.05.002.
- McMillion, A., & Shaw, P. (2009). Comprehension and compensatory processing in advanced L2 readers. In C. Brantmeier (Ed.), *Crossing languages and research methods: Analyses of adult foreign language reading* (pp. 123–146). Charlotte, NC: Information Age Publishing.
- Mohammed, M. A. H., & Swales, J. M. (1984). Factors affecting the successful reading of technical instructions. *Reading in a Foreign Language*, 2, 206–217.
- Moore, J. (1979) Reading and thinking in English: Discovering discourse. Oxford, England: Oxford University Press.
- Murray, H., & Dingwall, S. (2001). The dominance of English at European universities: Switzerland and Sweden compared. In U. Ammon (Ed.), *The*

dominance of English as a language of science: Effects on other languages and language communities (pp. 85–112). Berlin, Germany: Mouton de Gruyter.

- Myers, G. A. (1992). Textbooks and the sociology of scientific knowledge. *English for* Specific Purposes, 11, 3–17. doi:10.1016/0889-4906(92)90003-S.
- Newman, M., Trenchs-Parera, M., & Pujol, M. (2003). Core academic literacy principles versus culture-specific practices: A multi-case study of academic achievement, *English for Specific Purposes*, 22, 45–71.
- Pecorari, D., Shaw, P., Irvine, A., & Malmström, H. (2010). The textbook in tertiary education: Undergraduate student practices and attitudes. Manuscript submitted for publication.
- Pecorari, D., Shaw, P., & Malmström, H. (in press). English for academic purposes at Swedish universities: Teachers' objectives and practices. *Ibérica*.
- Phillipson, R. (2007). English in Europe, threat or promise? In M. N. Craith (Ed.), Language, power and identity politics (pp. 65–82). Basingstoke, England: Palgrave Macmillan.
- Raymond, P. M., & Parks, S. (2002). Transitions: Orienting to reading and writing in EAP and MBA contexts. *Canadian Modern Language Review*, 59, 153–180.
- Segalowitz, N., Poulsen, C., & Komoda, M. (1991). Lower level components of reading skill in higher level bilinguals: Implications for reading instruction. AILA *Review*, 8, 15–30.
- Shaw, P., & McMillion, A. (2008). Proficiency effects and compensation in advanced second-language reading. *Nordic Journal of English Studies*, 7, 123–143.
- Taillefer, G. (2005a). Foreign-language reading and study abroad: Cross-cultural and cross-linguistic questions. *The Modern Language Journal*, 89, 503–528. doi:10.1111/ j.1540-4781.2005.00327.x.
- Taillefer, G. (2005b). Reading for academic purposes: The literacy practices of British, French and Spanish law and economics students as background for study abroad. *Journal of Research in Reading*, 28, 435–451. doi:10.1111/j.1467-9817.2005.00283.x.
- Wächter, B., & Maiworm, F. (2008). English-taught programmes in European higher education: The picture in 2007. Bonn, Germany: Lemmens.
- Ward, J. (2001). EST: Evading scientific text. English for Specific Purposes, 20, 141–152. doi:10.1016/S0889-4906(99)00036-8.
- Ward, J. (2009). A basic engineering English word list for less proficient foundation engineering undergraduates. *English for Specific Purposes*, 28, 170–182. doi:10.1016/j.esp.2009.04.001.
- Wikström, L. (2008a). 35 år gamla *Elmaskiner* är fortfarande studentlitteratur [35year-old *Electric machines* is still used as a textbook]. *Universitetsläraren, 17,* 5.
- Wikström, L. (2008b). Det är inte lika roligt som förr att skriva en lärobok [It isn't as much fun to write a textbook as it used to be]. *Universitetsläraren, 17,* 4–5.
- Wilkinson, R., & Zegers, V. (Eds.) (2007). Researching content and language integration in higher education. Maastricht, the Netherlands: Maastricht University Language Centre.
- Yamashita, J. (2002). Mutual compensation between L1 reading ability and L2 language proficiency in L2 reading comprehension. *Journal of Research in Reading*, 25, 81–95. doi:10.1111/1467-9817.00160.