Preliminary steps toward Medical English materials development:
Student skills preferences

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Abstract
The dilemma of choosing a textbook for second language learners that provides course content appropriate to both student interests and language level is an ongoing one. Is there a course book that provides it all? Or would a source book, a bank with more than enough lessons, tasks, ideas, skill components, etc., be a more useful ongoing resource? For teachers considering developing materials for a specific population, to what extent can they identify their students' needs? This paper presents preliminary results of a survey administered to Japanese medical and pharmaceutical university students. In an effort to establish a clearer picture of learners with specific needs, it reports on students' preferred focus for language skills, preferred course content of general English or medical English and classroom groupings. [Part 2 of this needs analysis will be presented at a later date. It will report on students' perceptions of the degree of usefulness of language functions and their feedback regarding both general English and medical English topics.]

1. Introduction
The past twenty years has seen an abundance of English language teaching (ELT) materials offered in publishing catalogs incorporating specialized skill areas and catering for learners ranging from children to adults. For national and international conference goers, publishers' booths display and promote a wide variety of well-presented and interesting materials. Book fairs, related workshops and commercial presentations by well-informed publishing company representatives illustrate in-depth and useful ways of using the materials. Yet despite this vast availability of materials they do not always provide for the specific needs and kinds of tasks a teacher is looking for. The general belief of many teachers that 'there is no perfect textbook' often rings true. In lieu of this, Dubin (1995) reports a growing trend to pay closer attention to learners' specific needs, resulting in the growth of English for special purposes (ESP). For materials developers, this has resulted in a challenge to identify and define such needs, and for classroom teachers, despite the wide recognition that classroom experience is an important pre-requisite for writing materials, it is suggested "...they lack access to a well-developed body of knowledge about materials writing" (Dubin, 1995, p15).
The number of books on materials development, including those for ESP, is considerably less than in other ELT related fields. Perhaps this is one reason teachers are reluctant or less inclined to develop their own environment-specific materials. As further deterrents, Sheldon (1988) refers to the restrictive elements of teachers' arduous timetables plus the labor-intensive nature of developing classroom materials and alludes to the fact that some students are skeptical of teacher-made materials, preferring authentic commercial texts. In line with this, the view that expertise required of materials writers is ‘different’ from that required of classroom teachers, is one which may intimidate or put off fledgling writers (see Allwright, 1982 for further discussion). Additionally, teachers spend considerable time carrying out systematic evaluations of materials currently in use in ESL/EFL fields in order to find the best fit for their particular group of learners. It is often not until choices have been made, money spent, and the materials tried out, that teachers discover a fit, or lack of one. These kinds of discouraging situations and perspectives result in teachers selecting texts and supplementary materials that often only approximate the real needs of their students. By conducting a needs analysis, the present study seeks to learn more about the real language needs of a group of learners, specifically medical and pharmaceutical students in a Japanese university.

2. Literature review

Needs Analysis

“In general terms, needs analysis (also called needs assessment) refers to the activities involved in gathering information that will serve as the basis for developing a curriculum that will meet the learning needs of a particular group of students” (Brown, 1995, p. 35). It could be argued that in this sense, all learners have special and specific needs and thus materials writers generally write for ESP audiences. Identifying language-related needs provide a rationale for stating goals and objectives; ones which are tailored to the specific needs of a particular group of learners (Feez, 1998). Thus, needs assessment is an integral part of systematic curriculum building and since language teachers and educators need to be increasingly more informed about their curriculum, learners and teaching approaches, survey research as part of a needs analysis which can be both quantitative and qualitative in nature, is both important and timely (Brown, 2001).

Teachers as materials developers

In cases where a teacher does not have responsibility for selecting materials, he or she can still apply creativity in using those (Graves, 2000). But for teachers who do have responsibility they also have a choice of taking that creativity a step further and developing their own original materials. Block (1991) argues in favor of a high payoff for ‘do-it-yourself’ materials development, listing ‘contextualization’, ‘timeliness’ and ‘personal touch’ as reasons teachers should replace commercial texts with their own materials, at least for part of their curriculum. Contextualization refers to using activities that use real examples or have real-life relevance or significance to the students concerned. Timeliness refers to using texts and information that are current and not out-dated. In Block’s experience, personal touch shows “students appreciate teachers who prepare their classes, and materials (that) give clear and tangible evidence of preparation (Block, 1991, p. 214). In his book on materials development in language teaching, editor Brian Tomlinson argues that “materials developers
should take account of what researchers have told us about language acquisition ... that they should pay more attention to what teachers and learners believe about the best ways to learn a language and also what they want from the material they use” (Tomlinson, 1998, p.22). Although a number of evaluation of courses and materials have attempted to obtain learners’ feedback, in general post-course, there is less systematic research published on what learners in fact want or prefer their learning materials to do. This paper attempts to fill this research gap by obtaining learner feedback related to these issues.

3. Background and rationale for change

The rationale for conducting the present needs analysis is to gather information from learners along with personal observations through teaching experience and informal discussions with students for the purpose of developing materials for a specific group of students. English courses at the University of Toyama, Sugitani Campus, are offered in general English language skills, including English conversation, reading, CALL, and a few Elective courses for academic writing and listening for medical students only. These courses are spread over students majoring in 3 main schools – Medical, Pharmaceutical and Nursing. But for year 3 and 4 medical students it is unclear whether these students would like to, or need to, study general English or whether they might best benefit from a focus more on medical English.

Previously, courses offered over the past 5-6 years to year 3 and 4 medical students, were either in the Fall when they were 3rd years, or the Spring when they were 4th years. These fell under the jurisdiction of the School of Medicine, and not Liberal Arts where all other English courses currently lie. Historically, it was not clear where the responsibility lay for these students. Was it with the School of Medicine or Liberal Arts? Although the responsibility at that time for the medical student’s English classes lay with the School of Medicine, over time this proved difficult to sustain and monitor. Consequently, these classes were turned over to Liberal Arts who in turn hired part-time foreign teachers to teach these classes. Additionally, as part of the Liberal Arts curriculum, visiting speakers such as prominent professors of medical science, and competent speakers of English, were sometimes asked to present talks in English. However, some medical students indicated they didn’t completely understand the underlying rationale for required courses in Liberal Arts classes taught by foreign teachers. Furthermore, the content for these courses was not officially documented, nor was there any form of official evaluation of course content. This situation resulted in general confusion and lack of clarity in both schools regarding the onus of responsibility for the curriculum. Eventually, it was suggested the two departments combine ideas; however, it was considered a more appropriate course of action to have the curriculum remain with Liberal Arts. Previously, in terms of language skills, such courses in English tended to concentrate specifically on reading, writing and grammar skills required to succeed academically. However, it will be seen that for the students in this study their priorities lie elsewhere, thus providing documented rationale for change.

4. Subjects

The target population for this study at the University of Toyama, Sugitani Campus, comprises a mix of male and female Japanese university students in their first, third or fourth year of undergraduate study majoring in medicine and first
year in pharmaceutical studies. All students are registered in required English courses which span fifteen, 90 minute lessons, once a week.

5. Instruments and procedures

Using a triangulated approach, three instruments were used to obtain data:

1) A mini survey was administered in the first class meeting of the 2005 Spring and Fall semesters. The purpose of this short survey was to collect information from students concerning their perceived preferences for language skills focus and improvement, how they felt about course content and preferred classroom groupings. The mini survey also asked for biographical data including student identification number, birth date, hometown, major, e-mail (optional), and the amount of time spent traveling outside Japan. The latter is not relevant to this paper; however, the author believes that biographical data and student histories can provide useful knowledge for teachers when selecting and planning classroom tasks.

2) A needs analysis, in the form of a 3-page questionnaire was administered post-course and retrospectively for the purpose of identifying students' perceptions of the degree of usefulness of language functions as well as obtaining feedback regarding preferences for both general English and medical English topics. The data analysis of this questionnaire is currently in progress and the results will be presented at a later date.

3) Informal discussions and meetings with students, both in and out of the classroom, were also conducted.

Administering the survey

For the purposes of the survey, ‘General English’ was explained to respondents as course content incorporating the four basic skills of listening, speaking, reading and writing with an additional intertwining of grammar and vocabulary applied to everyday English and popular topics as might be presented in general course textbooks. ‘Medical English’ was explained as focusing course content primarily on medical topics with special emphasis on medical vocabulary, and incorporating tasks such as dialogs and role plays in medical or health-related settings along with some readings on medical topics. Only medical 3rd and 4th year students were surveyed for this section as the title for 3rd and 4th year medical courses in English set by the Liberal Arts Department is ‘Medical English’. Medical and Pharmaceutical Year I students were not surveyed as their course was in place entitled ‘English Conversation’ and ‘General English’. Thus, an expectation for teachers of these courses was to focus their curriculum planning on these general descriptions.

6. Research Questions

1. What English language skills do university students want to focus on and improve in compulsory English courses?
2. Do students prefer general English or medical English as the focus for course content?
3. What are students preferred groupings in an English classroom?
4. What language tasks and topics do students consider useful for a compulsory medical English course curriculum?
5. What are medical and pharmaceutical students perceived language needs and preferences for a compulsory English curriculum?
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6. Are there differences or similarities between medical and pharmaceutical students with regard to 1) core language skills, and 2) English for specific purposes (ESP)?

7. How can results of student preferences best be applied to future materials development?

Note: Research questions 4, 5, 6 & 7 will be addressed in Part II of this paper.

7. Results and Discussion

Table 1: English Skills ($n=175$)

<table>
<thead>
<tr>
<th>Question: Which English language skills do you want to practice and try to improve most?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
</tr>
<tr>
<td>Medical (Years 3 &amp; 4)</td>
</tr>
<tr>
<td>Medical (Year 1)</td>
</tr>
<tr>
<td>Pharmacy (Year 1)</td>
</tr>
<tr>
<td>Combined Totals</td>
</tr>
</tbody>
</table>

*The total number of students who extended their response to refer to specific aspects of speaking was: conversation (36), pronunciation (8), oral reports (2)

Note: Students could check more than one response; hence results incorporate totals that do not correlate with the sample size and have therefore been presented as numbers not percentages.

Table 1 depicts listening and speaking as the most salient language skills focus for all groups. Specifically, 121 students regard listening as the English skill they most want to practice and try to improve. The 2nd most important skill to practice and improve was speaking (114) followed thirdly by vocabulary (35) Grammar ranked lowest, with reading ranked higher than writing. Overall, there are a significant number of students wishing to have more exposure to English and more opportunities in order to practice and improve listening and speaking skills. Since listening is a pre-requisite for speaking, and that for language learning these two language skills go ‘hand in glove’, results suggest that many students are perhaps aware of this combination and therefore selected both.

Table 2: General Course content ($n=83$)

<table>
<thead>
<tr>
<th>Question. In the English classroom, do you want to study:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) General English</td>
</tr>
<tr>
<td>Medical, Year 4</td>
</tr>
<tr>
<td>Medical, Year 3 *</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

* Note: 9 students did not respond to this question
Table 2 clearly shows the majority of students (48.192%) would like a course that offers a combination of general English and medical English with a sizable group (36.144%) wishing to focus primarily on their major (senmon) of medicine. Significantly, 84.337% of all respondents for answers (b) + (c) want some component of medical English. However, the survey did not ask respondents who selected ‘both’ to indicate a percentage of how much they prefer for each category. These preliminary results reflect an important prerequisite for materials writers to consider when designing materials; materials that cater to the needs of learners who want to learn English for a specific purpose (ESP) yet at the same time incorporate useful general English into overall course content design.

Table 3: Classroom grouping (n = 172)

<table>
<thead>
<tr>
<th>Statement: In the English classroom, I prefer to work:</th>
<th>2005 Classes</th>
<th>n =</th>
<th>(a) by myself</th>
<th>(b) with a partner</th>
<th>(c) in small groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical, Year 1 (Spring)</td>
<td>27</td>
<td>5</td>
<td>5</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Medical, Year 1 (Fall)</td>
<td>16</td>
<td>3</td>
<td>2</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Medical, Year 4 (Spring)</td>
<td>50</td>
<td>6</td>
<td>19</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Medical, Year 3 (Fall)</td>
<td>41</td>
<td>12</td>
<td>4</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Pharmacy, Year 1 (Spring)</td>
<td>38</td>
<td>7</td>
<td>3</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>172</td>
<td>33</td>
<td>33</td>
<td>106</td>
<td></td>
</tr>
</tbody>
</table>

Regardless of the difference in year of study (1st versus 3rd), Table 3 shows the percentage of students who prefer to collaborate with each other, either in pairs or small groups (80.813%) significantly outweighs those who prefer individual study (19.186%). Since a large body of research in second language acquisition shows the values and benefits of pair and group work, these results may impact classroom management techniques and choices for teachers. Results may also help influence what materials developers need to take into consideration when designing materials, such as interactive tasks that cater for negotiation of meaning, collaboration, or sharing of ideas and outcomes but at the same time also provide for independent study.

8. Constraints and future steps

When interpreting scores from any short survey we cannot be sure that learners know what they want or think they know. This is known as the ‘ice-cream caveat or analogy’ where just because someone may love chocolate ice-cream it doesn’t necessarily mean it is good for him or her.

Therefore, administering a more substantial questionnaire, talking to students, layering a teacher’s beliefs and knowledge onto a curriculum will improve the likelihood of obtaining a more accurate picture of learner needs and in turn, better inform materials developers.

To this end, ‘Materials Writers’, an interest group within the TESOL organization and its parallel interest group ‘MWSIG’ in the Japan Association of Language Teachers (JALT), are witnessing a growing membership and enthusiasm, with an emphasis on producing rather than consuming.
9. Conclusion

Jolly & Bolitho (1998) consider that "the teacher as materials writer belongs firmly in the (recent) tradition of the teacher as researcher" (p.111). Materials writing can be at its most effective when it is turned to the needs of a particular group of learners. It is insufficient for course planners and teachers to make assumptions as to what they think their learners might want to prepare for various areas of language learning. It is hoped that this initial survey will contribute to a clearer understanding of the language learning needs and preferences of current and future learners in a medical environment and that these needs might then be incorporated into appropriate classroom materials.

References
