

**Taking a Closer Look at an ESP Needs-Analysis:
An Analysis and Critique of a Survey-based Research Article**

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Bosher and Smalkoski (2002), in their article “From Needs Analysis to Curriculum Development” found in *ESP Journal*, present a treatise on just that, a needs-analysis utilizing several methods of data collection, interviews, observations, and surveys, and the resulting course that grew out of the needs analysis. It is this two-fold purpose and theoretical framework that divide the article into its two major sections. In my analysis, I will focus mainly on the first major section as it utilizes survey methodology in data collection, while also exploring the research article’s overall “communicative purpose” within its “parent discourse community” (Swales, 1990, p. 58). In this capacity, I will examine both the articles’ macrostructure, i.e. the organization and major moves, as well as its microstructure and lexico-grammatical features, i.e. verb tense, word frequency, and readability. I will conclude with a critical analysis of the article as a whole with a focus on its survey use and methodology.

Macrostructure Analysis

The article (Bosher & Smalkoski, 2002) is twenty pages long, references 43 other publications and conferences, and includes one appendix, a survey of student’s needs in health-care communication. Overall, the authors used fourteen headings in their organization of the paper including the introduction, conclusion, and references. The headings are:

- | | |
|--------------------------------|---------------------------|
| 1. Introduction | 4. Findings |
| 2. Needs analysis | 5. Course design |
| 3. Interviews and observations | 6. Students in the course |

- | | |
|-------------------------------------|--|
| 7. Description of the course | 11. Evaluation of the course |
| 8. Course content | 12. Implications for the course design |
| 9. Course materials and methodology | 13. Conclusions |
| 10. Assessment of students | 14. References |

The first four headings make up the first major section of the paper, the needs-analysis.

The second major section, the course created from the needs-analysis, consists of the rationale behind the creation of the course, background information about the participants (students in this case), a description of the course, its content, and methods, assessment and evaluation material, as well as implications and conclusion. Of some interest, while research was certainly conducted, results presented, and implications made, the article also takes action according to those implications, assesses the actions made, and makes further implications. It is for this reason that the article does not fit the standard IMRD organizational pattern and is indicative of what I will call an action research article.

Microstructure Analysis

Beginning with the introduction, Swales (1990, 2004) describes three possible moves that usually occur within the introductions to research articles. Specifically, he said that introductions should (a) *establish a territory*, (b) *establish a niche within that territory*, and (c) *occupy that niche* (2004). Boshier and Smalkoski's (2002) introduction is no exception. In order to establish a territory, the article claims centrality by beginning with a broad concern facing nursing programs across the US, the recent increase in the number of culturally-diverse, non-native speakers of English. This broad stroke is focused by addressing a similar situation within the immediate area of the authors' research, and narrows even further by focusing on the exact school where the authors developed their

curriculum. In establishing a niche, the introduction then raises a question: How can faculty, who are concerned about the difficulty many of these ESL students are having, help their students succeed in their programs? Replying to this question, the authors proceed to occupy their established niche by outlining the purpose of their research, to conduct a needs-analysis in order to create a new ESP course in health-care communication, and by announcing their principle findings, that the students greatest difficulty lies in “communicating with clients and colleagues in the clinical setting” (Bosher & Smalkoski, 2002, p. 59).

As for the lexico-grammatical features of the article, I ran the it through an online word frequency calculator as well as conducted several online readability tests (Character and word counter, 2011; Simpson, 2010). After running the text of the article through the chosen word frequency calculator (Character and word counter, 2011), I filtered out the common lexical items that added no value to the analysis, i.e. the word ‘the’ appeared 375 times, yet was removed from the list as were all articles, prepositions, and pronouns, and only included the remaining words that appeared more than 30 times. The results are as follows:

176 STUDENT	67 HEALTH-CARE	41 COMMUNICATION
83 COURSE	65 ENGLISH / ESL	38 NEEDS
70 CLIENT	62 NURSING	32 CULTURE

As shown, *student* appears the most frequently by far with 176 mentions. This high frequency may show that the authors focused greatly on the students, first in the needs analysis and second in the course design process. Also interesting was the high frequency of the words *client, health-care, and nursing*. As this article is one-part needs analysis and

one-part course design, it should not be overlooked that the course being designed is an ESP course, the *special purpose* being the training of health-care professionals. Rightly, *English, communication, needs, and culture* also make the list. Coming from 18 different countries in Eastern Europe and Asia, the students, were of immigrant status, and purportedly had a great need for English communication skills within a western socio-cultural context (Bosher & Smalkoski, 2002).

I also ran the text through several readability tests (Simpson, 2010). The names of each instrument and their results are in table 1. The mean grade level for all the tests was 12.08, which means that the article can easily be read by high school seniors and above.

Table 1

Instrument	Grade-level equivalency score
Flesch-Kincaid Grade Level	10.5
Gunning Fog Score	13.2
Coleman Liau Index	12.9
Automated Readability Index	11.7

In looking at the text statistics (Simpson, 2010), I found that there are 439 sentences, 8906 words, 20.29 average words per sentence, and 1.54 average syllables per word.

Methodology Analysis

In discussing the procedure used in their needs-analysis, the authors list five instruments that they used to collect data: (1) interviews with six faculty members, (2) interviews with five first-year students, (3) a survey (see Appendix A) given to students requesting information about their perceived difficulties in the course, (4) four performance test observations, and (5) observations of four clinicals. For the purpose of this article analysis, I will focus on the student survey.

Found in the appendix of Boshier and Smalkoski's (2002) article, the survey (see Appendix A) consists of 23 likert-scale questions and asks, "How much would you like to practice the following communication skills in this course?" (Boshier & Smalkoski, 2002). In answer to that question and referring to the 23 items, students can choose one of four numbered categories: (1) very much, (2) somewhat, (3) a little, and (4) not at all. According to Brown (2001), "likert-scale questions are typically used to investigate how respondents feel about a series of statements" (p. 40). In this case, the statements are a list of 23 functions of communication in the nursing field, e.g., introducing oneself, showing empathy with a patient, responding to an angry patient or colleague, using humor, etc. It should be noted that the 23 statements are not original but rather taken from three other sources, who are named but not included in Boshier and Smalkoski's (2002) references.

Other than not properly citing the sources of the likert-scale questions, there are other problems with the survey. First, Brown (2001) lists likert-scale questions under the category of closed-response questions and in that capacity lists their advantages, i.e., uniformity, easiness to answer, analyze, and interpret, etc. With those advantages, however, come some disadvantages, i.e., narrower range of possible answers and no exploratory capacity. In order to overcome these disadvantages, the researchers included three empty lines after the 23 listed statements, titled *other*, with the instructions for students to *fill-in* the blanks. While this allows the survey to be more exploratory in nature (Brown, 2001), it is still limiting in how the students may answer.

The next problem with the survey deals with its four numbered responses. While Brown (2001) says that having an even-number of options is a good way to "force respondents to express a definite opinion" and avoid "sitting on the fence" (p. 41), he also

says that “there are times when a fence-sitting option may be desirable” (p. 42). In the case of this survey, specifically referring to the large amount of Likert-scale questions, Brown is right on the second point, and I too can see the benefit of having what he later calls a *no opinion* option in the middle of the scale. If not only to weed out some of the unnecessary questions, this option may also be less intimidating to students when asked to fill it out.

Third, while there is nothing inherently wrong with using a likert-scale survey, the lack of other types of questions on the survey could lead to gaps in data. I feel that if other types of questions were used, for example, more open-response questions, a better picture of the students’ situation may have been drawn. This may be evidence that the survey lacks dependability in that it doesn’t overlap methods nor does it provide cross-validating information in regards to the students subjective needs (Brown, 2002).

General Critique

Generally speaking, in regard to the survey and the other methods of data collection, the first and most glaring problem with the article is its lack of data and transparency, in other words, its lack of confirmability. According to Brown (2001), “confirmability involves full revelation or at least the availability of the data upon which all interpretations are based” (p.227). While the course born out of the needs-analysis is well documented, the article glosses over any actual data gathered. For example, while I was happy to see that the authors included the student survey in the appendix, the transparency of how the authors got from survey to findings and then to course implications is non-existent. Take for instance how the authors handled the presentation of the results. Perhaps the shortest sub-section of the paper, the results section directly presents the findings of the needs-

analysis. Resulting from the survey, the interviews, and the observations, ten numbered-findings regarding the difficulties faced by ESL nursing students are listed with no explanation. In attempting to solve this problem with the paper, I went as far as to email the main author of the paper directly (see Appendix B). I have yet to receive a response. One attempt at making an excuse for this problem somehow fell short. In their section, *Implications for the course design process*, the authors state that while needs-analysis are crucial to ESP course design, they “do not necessarily inform the course design process in any kind of systematic, objective way” (Bosher & Smalkoski, 2002)—this, in light of the fact that Brown (1995) has written extensively on needs-analysis and the systematic approaches to curriculum development, specifically on the connections between needs-analysis and course design.

Another issue lies in the organization of the article itself. Because it does not follow the standard IMRD pattern found in most research articles, it seems that the authors ran into problems trying to present their results. That said, the actual findings of the author’s research/needs analysis can be found interspersed under the headings, *Interviews and observations, Findings, Students in the course, Course materials and methodology, and Assessment of the students*. This perhaps illustrates the difficulty that action researchers face in publishing their work. As this is a problem that I also face in my own research, this article has been very instructive in regards to its organization.

The conclusion also proves problematic. The moves found within the conclusion of the article serve three over-arching purposes, (a) to give implications to others, teachers, researchers, etc., who attempt the course design process in the future, (b) to announce the success of their course and tell why, and (c) to once again claim uniqueness and centrality,

repeating the tone and moves of the introduction. According to the opening of the conclusion, “Our course has been successful because it responds to the objective, subjective, and learning needs of ESL students in the . . .nursing program” (Bosher & Smalkoski, 2002, p. 75). While this may be true, given the problems with data collection and lack of transparency, perhaps the authors should have taken advantage of more hedging than they opted for.

While the article is problematic in areas, in others it has its strengths. The article’s main strengths lie in its pedagogical implications, its rich description of the ESP course that was created, and its attempt at filling a known gap in ESP curriculum focusing on immigrant students in the US. From my own research involving needs analysis, curriculum development, and critical pedagogy concerning a similar population, I have seen how challenging it is to (a) gather information on ESL immigrant populations, (b) find culturally and level appropriate material, and (c) mold curriculum around the specific needs of a population (subjective needs) while maintaining a simultaneous focus on the content of the subject that must be taught (objective needs). In my experience, Bosher and Smalkoski (2002) overcome these challenges well. First, they demonstrate to teachers how “familiarity with textbooks and relevant studies in the ESP-specialty field and in the target field itself will help with the selection of appropriate materials and methods” (p. 75). Second, the article also stresses the importance of flexibility in course design and openness to continue the needs-analysis process in order to meet objective and subjective needs throughout a program’s life. I was further impressed by their attention to the critical nature of ESP programs aimed at immigrants and the pedagogical implications it entails. In “recognizing and promoting the importance of cultural diversity in health-care professions,”

by extension, all professions and fields, Boshier and Smalkoski (2002) are taking the “necessary first step in removing any obstacles or constraints on developing programs and initiatives that will help ESL students succeed academically . . . and beyond their respective professions” (Boshier & Smalkoski, 2002).

References

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Appendix A

Directions: Please indicate how much you feel you need to improve each of the following communication skills, by circling the appropriate number, listed to the right of each skill:

(1) = very much (2) = somewhat (3) = a little (4) = not at all

HOW MUCH WOULD YOU LIKE TO PRACTICE THE FOLLOWING COMMUNICATION SKILLS IN THIS COURSE?

1. Introducing myself	1	2	3	4
2. Making small talk	1	2	3	4
3. Reassuring a patient	1	2	3	4
4. Calming a patient	1	2	3	4
5. Responding to patients' feelings	1	2	3	4
6. Using silence with a patient	1	2	3	4
7. Showing empathy with a patient	1	2	3	4
8. Sharing feelings	1	2	3	4
9. Asking questions	1	2	3	4
10. Restating information provided by patient	1	2	3	4
11. Clarifying information provided by patient	1	2	3	4
12. Summarizing information provided by patient	1	2	3	4
13. Being assertive or confident	1	2	3	4
14. Being specific	1	2	3	4
15. Expressing opinions	1	2	3	4
16. Using humor	1	2	3	4
17. Confronting a patient or colleague	1	2	3	4
18. Responding to an angry patient or colleague	1	2	3	4
19. Refusing unreasonable requests	1	2	3	4
20. Requesting support from a colleague	1	2	3	4
21. Pronunciation	1	2	3	4
22. Understanding patients' English	1	2	3	4
23. Understanding nonverbal communication	1	2	3	4
OTHER: (please fill in)				
_____	1	2	3	4
_____	1	2	3	4
_____	1	2	3	4

Appendix B

Matthew Barbee

October 2, 2012 12:52 PM

To: sdbosher@stkate.edu

Request for more information on one your articles



Dr. Bosher,

I hope you are well. My name is Matthew Barbee. I am currently in my second year of graduate school at the University of Hawaii at Manoa in Second Language Studies.

I am specializing in English Language Teaching, with interests in critical pedagogy, curriculum design, and needs analysis and evaluation. Over the past year, my research has included work with a migrant population in Hawaii in need of "life skills" English. As a part of that research, two other researchers and I conducted a multi-method needs analysis, produced a situational/functional syllabus, objectives, and created original materials for the course.

I am writing you to say that we are very interested in your article in the 2002 ESP Journal, *From needs analysis to curriculum development: designing a course in health-care communication for immigrant students in the USA*. In your article, you list several procedures that were used to perform your needs analysis, two of which were a student questionnaire about perceived difficulties and a survey asking students to identify their content needs. While the survey was referenced in Appendix A, I wonder if you would be willing to share the entirety of the data from that survey. I would also be interested in seeing the perception questionnaire as well, if you wouldn't mind sharing it, fully understanding that you would want to maintain student anonymity.

However you can help, by providing us with more information about your study or by giving beginning researchers advice on conducting needs analysis for curriculum development, it would greatly be appreciated.

Thank you very much for your time and in advance for any help you are able to give us.

Sincerely,

Matthew Barbee

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