

## Writing across the Curriculum: Specificity vs. Transferability

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### **Abstract**

Academic institutions often experience a disconnect between language/writing instruction and content area instruction, with content experts claiming it is not their role to teach writing, and writing instructors suffering from the disadvantage of having limited content knowledge in a particular academic area. This disconnect can lead to student difficulty in generalizing or transferring their learning to content area courses and vice versa. In the case of teaching English in a non-English speaking country, this quandary is increased even more, as specialists in the disciplines sometimes suffer from poor general English skills. To understand this question, I have tried to research how an English teacher and a subject specialist evaluate and correct the mistakes in their students' writing. It is concluded that it is valuable for students to know about common rhetorical moves; however, instructors need to have some subject-general knowledge to effectively teach English academic writing in that subject.

*Key words:* ESP, ESL

### **I. Introduction**

Critical thinking is an important outcome in higher education. While research reveals several teaching strategies to facilitate the development of critical thinking, most share a common element; the active engagement of the students in the course content (Lederer, 2007).

Many researchers hold one of two theories about teaching: either teaching is perceived primarily as transcending disciplinary boundaries and, thus, is governed by a generic set of principles; or it is viewed primarily as linked to the content of a discipline and, therefore, is guided by the practical wisdom of “expert” teachers within each field (Lenze, 1996). With the gradual increase of English for Specific Purposes (ESP) courses, especially in Asian universities, to what extent writing specialists from outside a discipline should defer to the expertise of inside practitioners, particularly in disciplines such as science and engineering where insider/outsider framings of writing seem most divergent, has become thus a contentious issue.

### **II. Research Procedure**

To understand how a teacher with no background in science and a subject specialist approach correcting an ESL (English as a Second Language) student's writing, three teachers of Academic English at the University of Electro-Communications in Chofu, Tokyo, Japan, were asked to correct the same piece of text. The text was an abstract produced by a graduate student of the Engineering faculty of that university, and was related to the research he carried out for his undergraduate 4<sup>th</sup> year thesis. The subject specialist with a strong command of the English language is hereafter referred to as SS, while the two English-language specialists are referred to as ES1 and ES2. ES2 had an undergraduate degree in a science subject, although he later majored in English education.

The main types of error identified were the following:

- Article and preposition usage
- Spelling
- Punctuation
- More appropriate word (not a serious grammatical error)
- Word order
- Incorrect word

- Space needed
- Subject-verb agreement
- Tense
- Word/Sentence is technically incorrect: this requires specialist knowledge.

### III. Results

The number of words in the text was 380. It was found that all three teachers found almost the same number of grammatical errors; i.e., article/preposition usage, spelling, punctuation, tense, subject-verb agreement, and word order. However, in the corrections of SS, a more appropriate word, which did not in itself constitute a grammatical error, was substituted in 12 cases. In the corrections of both ES1 and ES2, this was not evident. For ES1, for 2 words, confusion was expressed in a comment the need for rechecking was declared. For ES2, the number for such cases was 4. It was also found that both ES1 and ES2 spent approximately 20 minutes each for their corrections, while SS spent approximately 7 minutes.

As an example of the type of error identification provided by the three teachers, I hereby present and discuss one sentence of the text. In the original text, a sentence written in conclusion was: “these results lead us to know the hesitation of <sup>4</sup>He films in the area of low temperature.”

SS corrected the sentence as follows: “This result leads us to understand the frictional behavior of <sup>4</sup>He films at low temperature.” We find the following changes, which have been detailed in Table 1.

Table I

*Corrections of SS*

Original text	Corrected text	Type of error correction
This results lead	This result leads	Subject-verb agreement
know	understand	More appropriate word
hesitation	frictional behavior	Word is technically incorrect
in the area of low temperature	at low temperature	Prepositional usage; more appropriate phrase

In contrast, we find that ES1 corrects the same sentence as: “This result leads us to find the hesitation of <sup>4</sup>He films in an area of low temperature.” In this case, “know” has been changed to “find”, an example of using a more appropriate word, and “the” has been changed to “an”, an example of an article usage correction. However, the fundamental word “hesitation”, which is not a technical word in that it is not used in science and engineering, has not been changed. In the case of ES2, the corrected sentence is: “This result helps us understand the hesitation of <sup>4</sup>He films in the area of low temperature.” Here, “This results lead” has been changed to “This result helps”, thus providing correct subject-verb agreement, as well as the usage of a more appropriate word. “Know” has also been changed to “understand” (similar to SS). The word “hesitation” was not changed; however, in a comment, ES2 queried whether the correct word should be “friction” in place of “hesitation”. We also find that SS changed the phrase “in the area of low temperature” to “at low temperature”, while ES1 and ES2 left this phrase unchanged. While this is a grammatically correct phrase, to a subject specialist, the phrase is strange, as “area” almost always refers to a particular subject, e.g., in “the area of low-temperature physics”. While the recognition in the case of grammatical errors was almost identical between the three subjects, we find that the technical word, in this case “friction”, was not easily identified as incorrect by the English-language specialists. Unfortunately, the retainment of the word “hesitation” in this sentence makes the whole sentence absurd in every sense.

However, apart from editing of the language, ES1 commented that there seemed to be an abruptness in the text, especially between the introduction and research motivation sections. The transition from one stage to another in the abstract was not smooth, and this was pointed out specifically.

#### **IV. Discussion**

In many colleges and universities, academic English writing for science and technology students is taught by people who have only a slight understanding of the content involved. The insight this research has produced forces the question of whether English faculty are qualified to teach the language of academic writing in other disciplines. People who have never written lab reports cannot appreciate the way fully enculturated writers communicate with one another, let alone coach students to attempt such writing.

However, writing is not a simple matter of expressing ideas in grammatically correct sentences. Rather, writing is a form of critical thinking that must be adapted to different disciplines and genres (Walk, 2007). A general composition sequence can inform students about the task that lies before them and prepare them to assimilate new genres (ideally with the help of explicit instruction from faculty in the disciplines).

Conventions of structure control the flow of the argument. Conventions of reference establish standard ways of addressing the work of other scholars. Finally, conventions of language guide phrasing at the sentence level: they reflect characteristic choices of syntax and diction. Students should learn how to observe disciplinary patterns in the different ways academic writing is structured.

It is thus suggested that in the process of introducing students to disciplinary genres, the roles of English department faculty and faculty in the disciplines are distinct but complementary. English faculty can prepare the ground for acquisition of disciplinary style — which typically takes place gradually throughout the period of undergraduate and graduate study. Explicit teaching of writing by faculty within the disciplines can further ease the task undergraduates face as they move toward mastery.

#### **V. Conclusion**

A focus on the acquisition of disciplinary style is desirable at the undergraduate level because of its pedagogical role in fostering students' enculturation into their chosen fields. Truly mastering a disciplinary style means mastering the reasoning and the conventions of the relevant discourse community. As completion of the undergraduate major is typically the first stage in mastery of the discipline, it makes sense to incorporate explicit attention to writing at that level.

However, it can be contended that at the graduate level, any form of teaching scientific discourse requires some background knowledge of the subject matter. At the minimum, an undergraduate degree of the broad category related to the wider discipline is essential.

#### **Acknowledgements**

The author wishes to thank Paul McKenna and Robert Moreau of the University of Electro-Communications for their help.

#### **References**

- Walk, K. (2007). *Teaching with Writing: A Guide for Faculty and Graduate Students*. The Trustees of Princeton University.
- Lederer, J. M. (2007). Disposition toward critical thinking among occupational therapy students. *American Journal of Occupational Therapy*, 61(5), 519-526.
- Lenze, L. F. (1996). *Discipline-Specific Faculty Development*. NEA Higher Education Research Center Update, 2(3), n3.