



ISSN:1306-3111

e-Journal of New World Sciences Academy
2011, Volume: 6, Number: 3, Article Number: 4C0115

SOCIAL SCIENCES

Received: February 2011

Accepted: June 2011

Series : 4C

ISSN : 1308-7444

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CHALLENGES OF DISSERTATION WRITING IN FOREIGN LANGUAGE

ABSTRACT

Throughout the world, an increasing number of graduate students pursue advanced degrees in English medium universities or departments where English is a foreign language and are required to write doctoral dissertations in the foreign language. However, previous studies focus on international students studying at a university in an English-speaking country and ignore their counterparts in foreign language contexts. Thus, it is important to examine the challenges faced during dissertation writing in English as a foreign language. To meet this significant need, the study uses qualitative means of data collection through conducting face-to-face semi-structured interviews with engineering graduate students at an English-medium university in Turkey. The challenges revealed are grouped under three main categories as not being able to express ideas, lack of writing practice/experience, and having a weak English background. The results of the study have significant implications for English language pedagogy and language policy initiatives in higher education, for agents within the academic community, for academic writing teachers, and for English for Academic Purposes scholars.

Keywords: Foreign Language Writing, Higher Education, Graduate Students, Dissertation Writing, Challenges

YABANCI DİLDE TEZ YAZMANIN ZORLUKLARI

ÖZET

Dünya genelinde İngilizcenin yabancı dil olduğu ülkelerde İngilizce eğitim veren üniversiteler ve bölümlerde lisansüstü derece almak için öğrenim gören öğrencilerin sayısı giderek artmaktadır ve bu öğrenciler tezlerini yabancı dilde yazmak zorundadırlar. Buna rağmen, önceki çalışmalar İngilizce konuşulan ülkelerdeki üniversitelerde öğrenim gören uluslar arası öğrenciler üzerine yoğunlaşmış ve yabancı dil ortamındaki öğrencileri göz ardı etmiştir. Bu nedenle, İngilizce yabancı dilinde tez yazarken karşılaşılan zorlukları incelemek önemlidir. Bu önemli amaca ulaşmak için, bu çalışmada nitel veri toplama yöntemi kullanılmış ve Türkiye’de İngilizce eğitim veren bir üniversitedeki lisansüstü öğrenim gören mühendislik öğrencileri ile yüz-yüze yarı-yapılandırılmış görüşmeler yapılmıştır. Bulunan zorluklar üç ana kategori altında gruplandırılmıştır. Bunlar fikirleri ifade edememe, yazma pratiği/deneyimi eksikliği ve zayıf bir İngilizce alt yapısına sahip olmadır. Bu çalışmanın sonuçları İngiliz dili pedagojisi ve yüksek öğretimde dil politikası yapılandırmaları, akademik ortamdaki aktörler, akademik yazma öğretmenleri ve Akademik amaçlar için İngilizce alanındaki bilim insanları için önemli sonuçlar sunmaktadır.

Anahtar Kelimeler: Yabancı Dilde Yazma, Yüksek Öğrenim, Lisansüstü Öğrenciler, Tez Yazma, Zorluklar

1. INTRODUCTION (GİRİŞ)

Especially during the past two decades, we have witnessed an increasing interest in advanced academic writing which led to a body of work on various focused areas within the subject-matter. There are studies that reveal the difficulties international students at undergraduate and/or graduate levels have while writing papers required for content classes (e.g., Angelova & Riazantseva, 1999; Spack, 1997). There is also research that presents the process of acquiring disciplinary discourse by international students for whom English is the FL (e.g., Belcher, 1994; Woodward-Kron, 2008; Riazi, 1997). Moreover, there are those which trace the course of scholarly publication (e.g., Cho, 2009; Flowerdew, 1999a; Li, 2006) and the struggles of multilingual scholars to publish in English to get recognized in their fields (e.g., Curry & Lillis, 2004; Flowerdew, 1999b). Analysis of the structures of different sections of research articles (e.g., Holmes, 1997; Öztürk, 2007; Samraj, 2005) and doctoral dissertations (e.g., Hyland, 2004; Kwan, 2006) constitute another body of work within the subject-matter.

Most of the research done on the dissertation writing (DW) level of advanced academic writing focuses either on the structural analysis of dissertation sections across disciplines, or on tracing the course of DW, or thesis/dissertation supervision. In addition, international students studying at a university in an English-speaking country-which is mostly the US- comprise the participants in almost all the inquiry carried out at this level. Although multilingual scholars have been the center of attention for research as their struggle to publish in English on the international level has stimulated great interest, foreign language (FL) users of English who write their dissertations in English in FL contexts have never attracted attention. Clearly, it is only assumed that these graduate students in FL contexts go through the same process of academic socialization and face the same challenges during DW process as their counterparts who study in English-speaking countries.

Overygeneralizations which are driven by previous research that focus on international graduate students studying at a university in an English-speaking country do not adequately reflect the needs; they equally do not provide solutions for the struggles of FL users studying in FL contexts. Thus, the ultimate goal of this study is to discover the challenges faced by these graduate students during DW in the FL (English) and to examine the interrelations and academic socialization processes reported by the graduate students themselves.

2. RESEARCH SIGNIFICANCE (ÇALIŞMANIN ÖNEMİ)

The body of scholarship on advanced academic writing includes a wide range of studies which can be divided into six most relevant categories. The first category focuses on academic writing in content courses (e.g., Angelova & Riazantseva, 1999; Spack, 1997) and explores the difficulties encountered during the process. The second category consists of the studies which examine the nature of writing by international scholars and nonnative graduate students with the purpose for publication in academic journals and their struggle (e.g., Cho, 2009; Gosden, 1996; Li, 2006). The third category of research analyzes the structures of different sections of research articles (e.g., Holmes, 1997; Öztürk, 2007; Samraj, 2002, 2005; Williams, 1999) such as introduction or discussion. There are also a considerable number of studies which examine the structure and parts of doctoral dissertations (e.g., Hasrati & Street, 2009; Hyland, 2004; Kwan, 2006; Thompson, 2005). Moreover, a great number of studies examine the course of acquiring disciplinary literacy (e.g., Belcher, 1994;

Braine, 2002; Casanave, 2002; Ferenz, 2005; Riazi, 1997; Tardy, 2005) and sheds light on the course of practice. Academic writing literature also includes studies that present the process and challenges of writing a dissertation in the second/foreign language (e.g., Bitchener & Basturkmen, 2006; Dong, 1998).

However, for the purpose of this study only the relevant literature is reviewed in detail below.

In her grounded theory study, Braxley (2005) conducted interviews with five Asian graduate students studying at a US university to reveal the problems of academic writing in English as a second language and to determine how these students cope to master the academic genre. Braxley states that the first difficulty those international students faced is their lack of familiarity with the conventions of academic writing as they were trained to write informative and expressive texts in college in their home countries. In addition, some of the participants who were taught how to write academically in their home countries reported differences between what they were taught and what was expected from them here at a US university.

In his qualitative study where he investigates the acquisition of domain-specific literacy, Riazi (1997) collected data from four Iranian doctoral students studying at Canadian universities. The study uncovered that the participants perceived the assigned tasks somewhat differently than their professors because of the newness of the task and that they did not carry the exact same goals as their professors who set them forth in course outlines. Rather, they were attentive to acquiring new domain-specific knowledge and field-related terminology and enjoyed getting feedback from professors.

Casanave and Hubbard(1992) surveyed 85 supervisors across 28 departments at Stanford University and explored the writing assignments and requirements of first-year doctoral students. It is reported that "NNS [non-native speaker] students have more problems with surface-level features of writing" (Casanave & Hubbard, 1992: 42) such as grammatical accuracy and appropriateness and vocabulary appropriateness than at the paragraph level. They also underline that "importance of writing in the lives of doctoral students increases over time" (Casanave & Hubbard, 1992: 44). However, they do not primarily focus on the dissertation writing process.

In her study, Dong (1998) presented findings regarding two different formats of DW (traditional vs. article format), the effect of social networks and utilizing resources on DW, the role cultural and linguistic differences play on DW, and the impact of advisor supervision. It is suggested that non-native graduate students need help with how to cite resources, organize paragraphs, develop ideas, draw conclusions, avoid plagiarism, create social networks and utilize resources, and develop understanding of discipline-, genre- and audience-specific knowledge.

All the participants in cited studies are international students who study in an English-speaking country. Clearly, a study which takes FL users of English who write their dissertations in English in a FL context is needed as the outcomes of such a study might be unique.

3. METHODOLOGY (METODOLOJİ)

3.1. Data Sources (Veri Kaynakları)

Data for this study comes from interviews conducted with eleven graduate engineering students who were enrolled in a prominent English-medium state university in Turkey and was collected over a five-month period between September 2009 and January 2010. The interviews were semi-structured and conducted in Turkish as the

participants preferred to use their native language (NL). All the interviews were recorded after the consent was given by the participant and transcribed, coded, and translated into English.

3.2. Participants (Katılımcılar)

Participants of this study are the doctoral students who are Turkish studying at Turkish state universities, enrolled in an engineering graduate program, at the stage of DW, and required to write their dissertations in English, a FL in this context. The students who matched the above-mentioned criteria to participate in this study were contacted via mail or e-mail, informed about the study and asked to take part in it. Thus, the selection of the participants was made according to their willingness to cooperate and participate.

3.3. Data Analysis Procedures (Veri Analiz İşlemleri)

All the interviews were transcribed in their entirety and then annotated and categorized. Transcripts were read several times over and over again to cluster challenges and strategies under common headings. The process resembles a spiral model as suggested by Creswell (2007). Then, the data was underlined, highlighted, annotated, cross-checked, and categorized according to those clusters. Each category and subcategory was given a code. Cross-case analysis of multiple cases is used to better understand the commonalities and differences between the cases and to reveal the underlying truth inclusively.

In order to ensure credibility of the findings of this study, member-checking technique was applied when appropriate (Ely, 1991).

4. FINDINGS AND DISCUSSION (BULGULAR VE TARTIŞMA)

The interviews yielded to a detailed picture of challenges the doctoral students face during DW in English. These challenges were classified into three main categories as not being able to express ideas (not being able to find the appropriate words; using the same words, phrases over and over again; not being able to move between ideas/problem of transition; thinking in Turkish not English; being forced to write simple, short sentences), lack of writing practice/experience (having difficulty in writing long passages; using technical language; not having written a masters thesis, an article or a report before), and having weak English background (having insufficient preparatory language school education; having taken no academic writing courses; not having the habit of reading; being influenced by written sources/fear of plagiarism).

4.1. Not being able to Express Ideas (Fikirlerin ifade Edememe)

The most common challenge expressed by the interview participants include not being able to express whatever they want to tell as a scientific researcher. They conduct experiments, take notes, and come up with original results but when it comes to expressing appropriately what they have been doing, they struggle:

"Actually the sentences we form are like that, you know somethings, it is your study, your experiment but you cannot transfer it in English to others. But if it was in Turkish maybe we would be able to more easily connect.. with sentences, connections.. like we can say I did this, I did that and explain it very easily... it is very hard to express in English what you have been doing"

It is such a struggle for a researcher not to be able to express his original work and share it with other scholars in their field

because of language barrier. Most of the participants agree with what has been shared above as they have almost the same experiences in writing in the FL and added details to this main challenge they have been experiencing. Almost all of them agree that finding the appropriate word is a challenge and causes waste of time as it takes a long time to come up with the right word. Sometimes a synonym is used but used in a wrong way and needed correction:

"But it is also very important I mean you should certainly have heard that somewhere before because there are a lot of synonyms, it could be wrong, it could be used in a ridiculous way. ... To use a different word, I can use an absurd one differently"

Improper use of a synonym may cause imperfect transmission of the message to be conveyed. What is a more serious problem for these graduate students is to sound as 'not so professional.' They are aware of the fact that they are required to use the language of their respective fields. That is why it is crucial to select the right word to include in an academic text such as a doctoral dissertation:

"I mean you can form a sentence but there are established things among those who work in that area, if you express it with those [words] it becomes quite different of course. ... I mean let me give you an example, someone said something like.. 'I work on shear walls'. He says the ones who write 'shear walls' do not know the field, he says it should be said 'structure walls'. ... if you use 'shear wall' it shows that you are not a [professional] but if you look deep down in the terminology it is called 'structure wall'"

This struggle was also expressed by many of the interview participants who agree that it is significant to sound professional in your text as expected in your scientific field. What is indicated by these students is that the discourse and scientific speech community shares an established way of presenting ideas or shared subjective knowledge (Brutt-Griffler, 2002). Students not only need to learn the general English but field specific knowledge and presentation through academic socialization. For them, it is crucially important to find and use the correct word while writing their dissertations. As Riazi (1999) noted that words used in academic texts are not ordinary ones which can be easily found in dictionaries. It is crucially important to express a scientific idea by using the correct professional terms. Thus, as acknowledged by many of the doctoral students, it is quite important to be immersed in extensive reading and writing in their disciplines to be able to do so.

Another challenge documented by the doctoral students when they talk about not being able to express their ideas is using the same words or phrases all the time due to their limited vocabulary:

"... when I form a sentence and of course the doctoral dissertation is a very long text so you should not express [ideas] by using the same expressions. You say the same thing in introduction maybe, maybe you say it a hundred times there. You should not say it in same sentences. ... it was the biggest problem"

Having to write a long text such as a doctoral dissertation challenges Turkish doctoral students in that they usually face with repeating themselves by using the same words, phrases or expressions throughout the text. They struggle to find different ways of expressing similar ideas as mentioned above. Casanave and Hubbard (1992) assert in their study that "much of the key vocabulary in ST [science and technology] fields is technical and technical vocabulary is more 'universal' in English" (Casanave & Hubbard, 1992: 42) and thus "ST faculty perceived vocabulary use to be much less of a

problem" (p. 43). However, the findings of this study prove the opposite. The doctoral students ranked "having less rich vocabulary and expressions" as the most problematic linguistic challenge during the interviews.

Another commonly expressed challenge faced by Turkish engineering doctoral students while expressing their ideas during writing their dissertations is not being able to move between ideas, that is making transitions:

"... When I write reports in Turkish I do not have such a problem because I can immediately think of a sentence about that. ... but I have problems in English. ... For example, I can jump to another idea while talking about something else. I should connect it there but I cannot find ... such a sentence structure"

Making transitions between ideas is quite a problem for these doctoral students as most of them express similar concerns during interviews. As mentioned by this participant, the doctoral students struggle to make moves between ideas and do not know where and how to make transitions especially when they write longer sections of their dissertation such as discussion.

The effect of NL over the FL, in this case Turkish over English, was mentioned several times by the participants. Although they get years of FL education, they acknowledge that they cannot help but think and generate ideas in Turkish while they are supposed to produce a highly intellectual text in English:

"the biggest problem stems from thinking in Turkish and then writing in English. ... We think in Turkish automatically. Even we read articles in English, even we understand what we read, when we write we think in Turkish inside our heads and try to write that in English. I mean the biggest problem for me is the result and discussion parts. Having the others understand everything [I meant]"

The participants agree that they do not have any problems while reading in English but it is really hard for them to write in the FL because of the higher-mental processes that happen naturally in the NL in their minds. Not having the ability of creating ideas and presenting them in the FL causes these students to rely on the NL. They cannot help but think in the NL and then try to transfer those ideas into the FL. This approach may ease the problems of composing in the FL; however, it turns out to be a major factor when the text is reviewed. While relying on the NL resources, the students cannot avoid making structural and meaning-based mistakes as "what is considered logical in one culture *may not* be in another" (Casanave, 2004: 27, emphasis mine). The students initially may not be aware of the fact that writing conventions of their NL may contradict with those of the FL logically.

"of course no matter you get instruction in English here our general life goes on in Turkish, I mean we only use English when we read scientific publications or in classes. So when we start writing, of course at the beginning we think in Turkish and then write in English no matter what. So ... there happens mistakes.. we cannot generally write at the level that is desired"

When they struggle to express their ideas in English in their dissertations, these doctoral students feel forced to write simple and short sentences so that they can avoid ambiguity. One doctoral student shares her concern saying:

"we write very basic [sentences] I mean I cannot [write] complicated or I mean if I speak for myself, I cannot go beyond using 'it was concluded that, it is shown that'.. I use very simple phrases. To be honest, I cannot write an appealing text.

I wish I could write a more pleasing text but I do not want to risk the narration"

Most of the students interviewed acknowledged that they avoid writing long and complicated sentences and prefer having a simple writing style in their narratives so that they do not end up having a problematic text full of mistakes. Written samples provided by the doctoral students show how they prefer to write in short and simple sentences to avoid making mistakes. Rather than trying to sound sophisticated and more professional, they are reported to prefer not to risk transferring the meaning to be conveyed correctly. On the other hand, some other doctoral students stated that they dared and tried to write complex sentences but warned by their professors as they were not successful in expressing their ideas in a clear way:

"I used to write long sentences in English. .. My advisor always opposed to that because it was.. like what I meant to say is understood only by me. ... If it was in Turkish, I would not have such a problem. Here it is more like basic sentences.. like this happened, that happened. .. To be honest, I do not like it this way. .. I see that people abroad can write sentences, very complex beautiful sentences because it is their NL ... When you write, you cannot do it"

Some of the doctoral students like the one quoted above struggled to express their ideas in English in complex but appealing sentences as done by other international scholars in their fields but failed to do so as their expressions were ambiguous and far from being clear. Thus, they could not risk their work and end up writing simple but clear sentences while producing their dissertations.

4.2. Lack of Writing Practice/Experience (Yazma Deneyiminin Eksikliği)

The doctoral students interviewed complained a lot about having little experience in writing in the FL which is documented as the second major challenge. Almost all of them stated that it stems from studying at a technical program where they are not required to produce long texts during their education. From the beginning of their higher education as engineering students, they have been mostly required to write very short texts as an answer to, for example, a mathematical problem given by a professor or to write short reports of lab experiments. They have never been asked to write longer passages until they come to the stage of writing the dissertation.

"In most of the courses' format ... generally there are not writing big reports or stuff like that. ... Either we write programs or solve mathematical problems by hand. That's it. We write a result about that and the results we write take maximum a paragraph. ... Of course there is a huge difference between writing five or six sentences and writing pages"

Not having much experience of writing in the FL challenges these doctoral students and causes frustration as they think they waste time while trying to figure out how to express what they want to say in their dissertations. This doctoral student adds:

"I mean for example if you ask why social sciences students are better [in writing] because their courses are based on writing.. we do not need writing ... I mean our work is like computers, programs, mathematical associations.. ... I sit down now when I write my dissertation, I spend nearly two hours to write a paragraph. ... To write a single sentence, I fill the top of my desk with books and internet sources, I look at five or six sources for sentences. Then I think and try to write a sentence by myself."

Most of the participants agree that their counterparts at other departments, especially in social sciences, are at an advantage as they are frequently asked to write long passages in the form of assignments or reports. Thus, they have the chance of improving their writing in the foreign language. However, as the engineering doctoral students do not generally need writing throughout their education, they lack experience and struggle more when they sit down and start writing their dissertations.

Angelova and Riazantseva (1999) assert in their study that natural sciences or business communities demand less writing from their students in contrast to humanities and when they do these writings are in well-defined genres. In addition, the international students studying at those departments are also required to take academic writing courses; thus, they are at an advantage when they move to their specific programs as less is expected from them in second/FL writing. However, this study disclosed that little requirement of writing in the second/FL in graduate courses may seem to be an advantage but it causes great challenges when these students come to the stage of DW with too little experience.

Having limited practice in writing in the FL causes specific challenges like having difficulty in composing long passages as mentioned above. Another challenge documented is using technical language all the time due to the nature of education they receive at their programs.

"now.. when we completed preparatory school education and took the proficiency tests, there were no difference between an assistant from social sciences and us regarding English [skills]. And every year they had to add something on top of their [knowledge] because even in their exams, in the exams of the courses they took, they have always been directed to writing and reading. But it is very different for us. We are not given tests in the courses we take. You are given mathematical functions. ... I know from the people who are very close to me that they are much better than me both in speaking and writing. ... In a degree that you cannot compare"

It is seen that the nature of education at engineering doctoral programs puts the students at a disadvantage as they cannot practice writing in the FL. Dealing with experiments and writing short paragraphs using mostly the technical language of their field is all they get as practice before they are required to write their dissertations. Of course the transition challenges them as one of the doctoral students says:

"What we read is based on formulas... When we write, we do not care about grammar much. ... I certainly believe that they [social science students] write better than us. Because for them it is something like continuing, taking what they have been doing to a next level. But for us it is more like moving to.. I mean when you do not even care about grammar, you have to now. That is very difficult for us"

Tardy (2005) states that "as students move through the academic ranks of education, they progress gradually from tasks of 'knowledge-telling', in which they write to prove their understanding of existing knowledge, to more complex tasks of 'knowledge-transforming', in which they actively construct new knowledge" (Tardy, 2005: 325); however, this study shows that writing practices for most of the engineering doctoral students is not gradual. It is documented that these students are able to demonstrate their understanding of shared knowledge in their respective fields but they are not fully capable of constructing new knowledge through writing in the FL. What is more is that these

students are not even required or offered to take an academic writing course during their education which would prepare them for the knowledge transformation stage.

It seems that during their education, these students are required to solve problems and deal with mathematical operations. The meaning is conveyed through formulas. Thus, the end result of the operation or formula is considered the most important not the correct use of language or style. Their grammatical errors are totally ignored when they make mistakes in the FL. However, when they come to the stage of writing their dissertations, they have to pay special attention to the grammar and correct use of language. It is when they struggle a lot because they lack the experience as reported.

Although mentioned only by a few doctoral students interviewed, another struggle stemming from lack of practice in writing in the FL is worth documenting as not having written any long reports, articles, or a master's thesis:

"I mean I do not have an experience of writing a thesis before [laughs] I have such a disadvantage too"

Englert et al. (2006) states, as suggested by sociocultural theory of learning, that students should not practice writing in solitary situations but be encouraged to "acquire writing knowledge through discursive interactions with others" (Englert et al., 2006: 211) so that they can appropriate, internalize, and transform knowledge, discourse, and practices. Through such kind of practice, initiated and supported by the teacher, students learn the conventions and standards of the discourse communities better. Experience of such a process like preparing a paper for publication would involve interaction and cooperation between the students and professors and/or among peers so that the students can learn better the academic writing conventions of their scientific community. The lack of such experience causes great challenges as documented in this study.

4.3. Having weak English Background (İngilizce Altyapısının Zayıf Olması)

Having a weak English background is reported as the third major problem the engineering doctoral students face during DW. In connection to this major struggle, the participants documented detailed challenges.

Even though the language school of the university where the participants are studying is well-known and considered as one of the best in the country, the doctoral students interviewed believe that it does not meet the needs of a graduate student.

"We only had a one-year preparatory education here. Then we moved on to the programs. I mean because of that this one-year preparation is not adequate for our academic writing [needs]"

Another doctoral student says:

"Of course no one can easily do it but we only had one-year academic.. English preparation and then [told] to move on to the programs. It is wrong to tell us move on to your academic education because we are not at the same level with the undergraduate students when it comes to this. ... they should have given us different [English] instruction after that one-year [preparatory language education]"

It is clear that the preparatory language education that is given to the graduate students is not satisfactory for them as it does not meet their advanced academic needs in their programs. They are certainly in need of some advanced training in the FL that they can use during their graduate education such as an advanced academic

writing course which would focus on how to write reports, research papers, and dissertations.

As revealed, almost none of the doctoral students received any academic writing courses during their education. It is clear that this gap in their education causes a great challenge for these doctoral students:

"If they expect [scientific] research from us in the future, if they expect us to attend conferences, they should have given a.. a course [on writing]. And they should have given it not for one semester. It should be continuous."

Most of the participants share the same opinion and state that an academic writing course is crucial for their education. In addition to the core courses they are required to take and one-year FL instruction, they are willing to take an academic writing course in the FL:

"but for example a doctoral student seriously should take writing courses for a few semesters. ... I believe a thorough mandatory writing course should be given to all doctoral students"

Previous studies in the literature (see Angelova & Riazantseva, 1999) claim that "most international science students are required to take composition courses specifically aimed toward improving their writing skills" (Angelova & Riazantseva, 1999: 493). However, this study revealed that in FL contexts language proficiency test scores, like TOEFL scores, might be adequate for the admission to the graduate programs and the students are neither required to take advanced academic writing or composition courses nor are being offered such courses. As an outcome of such a gap in the graduate programs, the doctoral students struggle a lot when they are required to write in the FL. The research presented in this study underscored the pressing need for a course to prepare students in academic writing.

Not having the habit of reading a lot is shown as another aspect of having a weak background in English. Almost all of the participants interviewed stated that they do not do any reading except the scholarly publications related directly to their own research interest. Moreover, they also admit that they do not have much time to spare for reading as they are usually very busy with lab experiments:

"I think reading is the core. Because you internalize [somethings] by reading after a while. I mean when you see something, you know how to express it. Of course I am not very successful at doing that because of doing experiments."

These doctoral students know well that reading is the key to their struggles in writing in the FL. However, they have to admit the fact that they need to spend so much time in the lab doing experiments and postpone reading as much as they can. When the time comes to write up their dissertations, then they have to spare more time and effort to read and improve their writing.

Although the problem of plagiarism is well-documented in the literature (Abasi, Akbari, & Graves, 2006; Abasi & Graves, 2008; Currie, 1998; Liu, 2005; Pennycook, 1996; Sowden, 2005), it is interesting that none of the students, even when asked explicitly, mention plagiarism as a concern or challenge during DW except one student:

"Another disadvantage I have maybe being influenced a lot by what I read and write the exact same sentence. Then it is what we call plagiarism. Being influenced is really bad. That might be the biggest risk for us now. Because it is taken very seriously on the international level and at this university.. you have to be really careful about that"

From the Bakhtinian perspective, all academic work is dialogic. One scholar's work is a response to the previous research in the field and thus includes the voices of other scholars as well. However, avoiding plagiarism is crucial when one produces an original scientific text such as a dissertation but it must also be really hard in technical departments because of the vast use of terms that limits the writers' choice of vocabulary.

4.4. The Relation between the Variables (Değerler Arasındaki İlişki)

It is obvious from the previous accounts that the engineering doctoral students face a number of linguistic problems during DW in the FL. Some of them assert that it is their inability to express ideas in writing as they lack proper grammatical knowledge and vocabulary stock. Many of them complain about the inefficient English language education they receive throughout their education. As strategies to overcome these challenges, most of the students report that they consult to their advisors.

"I utilized [as a source of help] from my advisor I mean regarding English writing skills, I owe so much to my advisor. I mean he had me sit down with him and you know make the corrections of all the articles. He taught me how to write [step by step] at the beginning"

Advisors are reported as the main source of help for the students as they are the ones who teach the conventions of academic writing to their doctoral students at the stages of preparing publications or writing the dissertation. They are described as very helpful and supportive to whom the doctoral students can turn for help in the FL. It is also noted that the guidance and feedback provided by the advisors during DW is satisfactory for most of the engineering doctoral students as they did not complain or express a need for improving their advising practices. This finding of my study is contradictory with Dong's (1995) as she found out that "students also made suggestions in their survey responses for their advisors to improve their advising practice. These suggestions included more involvement, more freedom and cooperation, and more specific and considerate criticisms" (Dong, 1995: 247). The students in Dong's study included both native and non-native speakers from diverse backgrounds. Thus, the discrepancy between the advisors' and students' perceptions of help provided and feeling of satisfaction on the part of the students regarding the support they got from their advisors can be considered quite natural because of the different cultural values (see Hofstede and Hofstede, 2005) the participants held. However, in my study, both advisors and advisees are from the same cultural background which might suggest that the interaction between the advisors and doctoral students are less problematic and more smooth and productive.

Other than the advisors, a few students reported that they get help from their peers. These students are comprised of the ones who work as a part of a team at the lab and carry out an experiment as a part of a group. Working on the same project allows these students to provide help for each other. Especially the senior students are accounted as sources of such help. However, it is not possible to say the same for the other doctoral students who are not part of a research team. These students state that they specialize in very specific areas so that it is impossible for another peer to comment on and provide help on their dissertations. It is also added that the technical language used in the text makes it difficult to get such help from the peers.

"Moreover, everyone has a very different topic. When someone gives me something to read, I get bored to be honest. Similarly, I think that he/she will get bored if I give someone to read [something]. I mean everyone is so busy. That is why we do not request [such things] from each other"

Having no familiarity with and interest in the peer's research topic in addition to the busy schedule these students have to keep up with makes helping each other impractical. They agree that they consult to each other for minor things such as finding an appropriate word but do not ask each other to read and comment on their dissertation chapters.

It is clear from the accounts quoted above that the sociocultural environment plays a significant role in the amount of the help and support a doctoral student receives while he is struggling with the challenges of DW in the FL. The role of the advisors as the main sources of support and feedback is crucial. Peers, on the other hand, can be relied only on if they are team-mates who work on the same project at the lab. Consequently, it can simply be said that the amount of help provided within the sociocultural environment at the department for the doctoral students is significant in determining how these students choose to overcome the challenges they face.

There is also a meaningful relation between the linguistic challenges and previous experiences as reported by the participants. These students assert that courses taken on English, publications and reports written in English before they reach the stage of DW, and the universities where they got their previous degrees play a significant role on the amount of the linguistic problems they face in writing the dissertation in the FL.

Most of the students complain about having a weak background in English. Having insufficient preparatory language school education and having no academic writing courses in the graduate programs are accounted as reasons. One of the doctoral students state:

"I mean a serious writing course should be given for one or two semesters ... I mean we should have had such a professional help"

The student quoted above is in the final stage of the doctoral program whose dissertation is ready to be defended. As a doctoral student who recently experienced the challenges of DW in the FL, he emphasizes the importance of taking an academic writing course which would meet the requirements of the graduate education.

Another important aspect of previous experiences which affects the amount of linguistic difficulties encountered is having publications in English. Very few of the students report that they have not written an article for publication before coming to the stage of DW and believe that it would be such a valuable experience for them and make the process of DW easier. Most of others state that they have such an experience with their advisors which helped them a lot to improve their ability to write in the FL.

"Writing articles and papers teaches academic writing conventions. For this, I believe it is useful. It took me six months to write my first article. But when I started [writing] second one I could finish it in one month as I was more experienced"

The findings of this study revealed that there is such a strong relation between having publications in the FL before coming to the stage of writing the doctoral dissertation and amount and kinds of the challenges faced during this process. The doctoral students who have been through the process of co-authoring an article with their advisors face fewer struggles when they write their dissertations. The

reason behind this can be accounted as the awareness raised during the process about the conventions of discipline-specific writing and appropriate use of technical language.

In addition to the previous experiences of courses taken and publications written in English which play a role in the challenges encountered during DW in English, the universities where the previous degree is received is reported as important.

"I mean my English was of course not adequate when I graduated from X University. Then I went to the preparatory school for one year ... Of course I experienced difficulties at first [because of] starting education in English after having education in Turkish"

It is clear that it is also important where the previous degree is earned to determine why some students struggle more than some others while writing their dissertations in the FL. It is found out that the doctoral students who received English instruction during their undergraduate or master's degree programs are more familiar with the conventions of scholarly writing in the FL and thus experience fewer problems.

5. IMPLICATIONS (YANSIMALAR)

Some of the implications may appear at first as they are only significant or relevant for the case of Turkey; however, they can and should be extended to other FL contexts as their effects are too important to be ignored.

5.1. Implications for Language Policy Initiatives (Dil Politika Girişimleri İçin Çıkarımlar)

First of all, NL instruction should be improved in quality so that its positive outcomes can be transferred to the developing skills in the FL. Second, the FL education should be gradual and continuous. Uninterrupted instruction better yields to positive outcomes. Third, writing ability of the prospective students should be considered as well before they are accepted to graduate programs in English as sooner or later they will be asked to complete such a huge task like writing the doctoral dissertation in the FL. If it cannot be evaluated through language proficiency tests, the students should be required to submit some writing samples in English or the graduate schools should give a test on writing in the FL before the final admission of the prospective students.

5.2. Implications for Curricula for Advanced Learners (İleri Seviye Öğrenim Müfredatlar İçin Çıkarımlar)

The findings of this study show that most of the participants did not take any academic writing courses and that graduate students are in great need of receiving academic writing classes throughout their education. These classes should be based upon and constructed according to their changing needs. For example, during their first year of the graduate education the students can be taught how to write reports and research papers. As they move towards the end of graduate education, the writing instruction can be directed solely on how to plan, organize, and write a doctoral dissertation.

It is also important to note here that these writing classes should include meaningful practices for the graduate students so that the students do not consider writing as an extra burden on their heavy schedule but as a means of being successful in their programs. The amount of practices should also be ample as these students are reported to lack experience in writing in the FL. Purposeful and sufficient writing practices should be at the center of academic

writing classes. Such a gradual and focused academic writing classes will not only help the graduate students finish their programs and be granted doctoral degrees after completing their doctoral dissertations successfully but also prepare them to publish in the FL on the international level as future scholars.

5.3. Implications for Academic Writing Teachers (Akademik Yazar Öğretmenleri İçin Çıkarımlar)

Most common challenges reported arise from having less rich vocabulary and expressions to produce original narratives especially in discussion, conclusion, and introduction sections. These students reported that using technical language most of the time is not an advantage for them as claimed but rather a disadvantage as they cannot improve their vocabulary in the FL throughout their education and thus fail to generate original texts in their doctoral dissertations. Academic writing teachers should focus on improving their students' vocabulary stock by assigning them reading of materials other than scholarly publications in their respective fields.

Scholarly publications, especially articles, can be utilized by the academic writing teacher to clarify various issues such as organization, presentation of ideas, word choice, sentence structures, and the like so that the graduate students may make use of such written sources more appropriately. Sample doctoral dissertations done in students' respective fields should be brought to the classroom as well. The analysis of such samples should be done soon after the students complete their coursework and start reviewing the relevant literature so that they can outline their own research and write up of the dissertations better.

5.4. Implications for Agents within the Academic Community (Akademik Camiadaki Aktörler İçin Çıkarımlar)

Most of the participants in this study emphasized the importance of having publications before coming to the stage of DW as the process requires much interaction and provides the student with the chance of getting ample amount of feedback and assistance in writing in the FL. Thus, the academic advisors should encourage their graduate students to write papers based on the research they work and prepare them for publication.

The academic advisors are in a key position; for that, they should adopt an apprenticeship approach not only to equip their graduate students with content knowledge of their respective fields but also with skills necessary to survive as scholars on the international level. Thus, they should share their writing experiences in the FL with their students and direct them to sources accordingly.

Another useful guidance for the graduate students might be to give them writing assignments throughout their graduate education. If the professors give meaningful writing assignments for the students such as writing lab reports or short papers of research methods or findings, the students will have a real reason to practice writing in the FL and thus improve their writing skills before they come to the stage of DW.

It is found out that not all engineering graduate students are lucky enough to be a part of a research team. A considerable number of them work alone on their projects and thus lack the chance of discussing issues with peers as indicated by the results of this study. Under such circumstances, professors should encourage graduate students to have meetings to have discussions, to encourage collaboration and interaction, and to aid each other throughout their studies at the graduate level. They might assign group-work projects

and ask each and every one of them to write reports and check each other's work. In this way, the students not only have the chance of creating a collaborative atmosphere at their departments but also of practicing writing in the FL. Technology can also be a useful tool to create such a constructive and social academic atmosphere. Online discussion boards and list-serves can be created by means of which the graduate students can interact with each other, immerse in valuable discussions, and get help from peers and more experienced senior students.

This study opens new directions for future research. The process of writing the doctoral dissertation in the foreign language can be more comprehensively observed and pictured if the study covered a longer term. Such a study will certainly offer more details about the challenges of and the variables that play a part in the process. Second, sessions during which the advisor and advisee go over the written draft of the dissertation together could not be observed in this study. To disclose the details of such sessions and advisor-advisee relationship, such observations should be included. The last but not the least, this study can be duplicated with engineering graduate students who write their doctoral dissertations in English and their advisors in other foreign language contexts to confirm the findings. Will the linguistic challenges stay the same while the sociocultural ones differ for some reason? The results of such a study can be very interesting and open new doors for all the agents of English language teaching.

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