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Résumé de l'article

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Connecting OER With Mandatory Textbooks in an EFL Classroom: A Language Theory–Based Material Adoption

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Abstract

Systemic functional linguistics (SFL) theory focuses on developing language learners' meta-linguistic understanding of the interrelation among linguistic form (grammar/vocabulary), meaning, and context. Guided by SFL when using a mandatory textbook and open educational resources, this study investigates how exposure to this blended teaching and learning context may impact English-as-a-foreign-language (EFL) learners' adjustment to materials used in their learning, as well as their learning practices. By drawing on the written documents of four students written, and on interviews conducted with these students over an academic semester in an EFL writing course, this qualitative study, through content analysis and discourse analysis, shows that the SFL theory-based material adoption did a good job of supporting EFL students in their internalization of language knowledge from both open educational resources and traditional textbooks, while also enabling students to use materials flexibly instead of passively following along with the content in the mandatory textbook. The flexibility of the students participating in the study was particularly reflected by their ability to construct principled knowledge informed by SFL and to independently apply such knowledge to effectively navigate literacy practices (e.g., critical construction and deconstruction of discourses).

Keywords: material adoption, mandatory textbook, OER, systemic functional linguistics, language teaching

Introduction

In many language classrooms, student learning is primarily reliant on the way in which the teacher delivers textbook[i] content (Tomlinson, 2003). Such reliance is particularly salient in English-as-a-foreign-language (EFL) contexts, where limited language-learning opportunities are found outside the classroom or where there exists traditional cultural worship of the authority of textbooks (Kwak, 2017; Wang & Farmer, 2008; You, 2004). However, in the current, globalized English context, to effectively participate in diverse communicative contexts EFL learners are expected to have knowledge of English that is sophisticated enough to assist them in constructing and/or deconstructing diverse modes of discourses in multiple dimensions: not only grammar and vocabulary, but also how grammar and vocabulary are used to realize the meaningful content of discourses (Macken-Horarik, 2012; Paltridge, 2001; Yasuda, 2015). This means that textbooks used in the classroom should deliver effective information that can help students understand how to create and unpack content. But a perfect textbook that could achieve this task does not exist; thus, the agency of teachers in balancing and synthesizing materials[ii] (i.e., both textbooks and supplementary resources) is crucial. As Donato and McCormic (1994) claim, the value of materials is ultimately dependent on how a teacher mediates those materials; without this mediation, the content of materials will always be statically embedded.

Fortunately, in this Web 2.0 world, the widely-available open-educational resources (OER), such as free research articles, Web-based practices, and reading materials, provide an optimal avenue for teachers to reflect upon pedagogical issues in their classroom and to collect supplementary materials, even in contexts where teacher education is constrained (Blyth, 2014; Hilton, 2016; Mushayikwa & Lubben, 2009). While these materials are rich in Web content and provide diverse perspectives on language teaching and learning, teachers still need to carefully curate and organize them (Kwak, 2017). In particular, given the linguistic challenges prominent in most EFL classrooms, in which students have difficulty in making appropriate linguistic choices in achieving meanings, the use of mandatory textbooks and OER has to be supported by an effective language theory that can prepare students for meeting the expectations of international English language communities (Ariza & Hancock, 2003; Zhang, 2017). However, due to cultures that emphasize the use of mandatory textbooks, the use of OER in many EFL contexts (e.g., China) is still in its infancy, and few empirical studies, let alone theory-based action research, have emerged (Kwak, 2017; Wang & Farmer, 2013). Therefore, in EFL contexts, there is an imperative need for focusing on the triadic interaction among the mandatory textbook, OER, and a language theory; at the same time, it is also important to investigate how EFL students can adjust to such a blended learning environment and be effectively supported in managing their academic discourse (Gibbons, 2006; Paltridge, 2001).

Literature Review

Textbook or OER Use in a Language-Teaching Context

Research in relation to language learning materials has been limited to analyses of their content (Römer, 2004; see also Mukundan & Ahour, 2010). Little attention has been focused on the relation between the agency of EFL teachers and the way they use materials (Blyth, 2014; Menkabu & Harwood, 2014). For example, Kwak's (2017) ethnographic study in a Korean university showed that the use of OER supported the language learning of EFL students and also assisted teachers teaching in the classroom. Similarly, Allen's (2008) case study of 12 foreign language teaching assistants using teaching materials in a U.S. college showed that these teachers used different teaching practices, which points to the importance of a teacher's role in relation to the materials used (e.g., teachers whose first language is not the language they teach relied more on external materials). Echoing Allen, Menkabu and Harwood (2014) used interviews and observations to investigate the use medical English teachers make of teaching materials in a classroom at a Saudi Arabian university, and concluded that the way in which each teacher adapted materials differed because of various factors (e.g., teacher knowledge, time constraints, and their own conceptualization of language learning and teaching). In sum, the few studies that looked at textbook use in language-teaching contexts highlighted the teacher's role by describing the interaction among teachers, students, and materials.

However, to be linguistically and culturally appropriate (in written or spoken discourse), language users have to simultaneously demonstrate appropriate links among grammar, vocabulary, and contextually-appropriate meaning, which calls for a theory-based intervention that addresses interactions among teachers, students, and materials (Kwak, 2017; Paltridge, 2001; Schleppegrell, 2001; Zhang, 2017). In addition, given the availability of OER, it is surprising that few studies have focused on how teachers use OER to enhance their language teaching in EFL contexts (Blyth, 2014). Therefore, it is crucial to add to the literature on material use by highlighting how a theory-based use of materials impacts the adjustment of EFL learners to a blended learning environment, as well as their language learning practices (Menkabu & Harwood, 2014; Paltridge, 2001).

A Systemic Functional Linguistic Perspective on Material Adoption in Language Classrooms

By providing students with explicit knowledge about the triadic relationship among vocabulary/grammar, meaning, and context, a systemic functional linguistics (SFL)-based curriculum for material use emphasizes the development in students of regulatory skills in constructing or deconstructing English discourse (Bawarshi & Reiff, 2010; Halliday, 1994; Harman, 2013; Paltridge, 2001). Its emphasis aligns well with the language classroom's need to effectively use materials as learning and teaching resources.
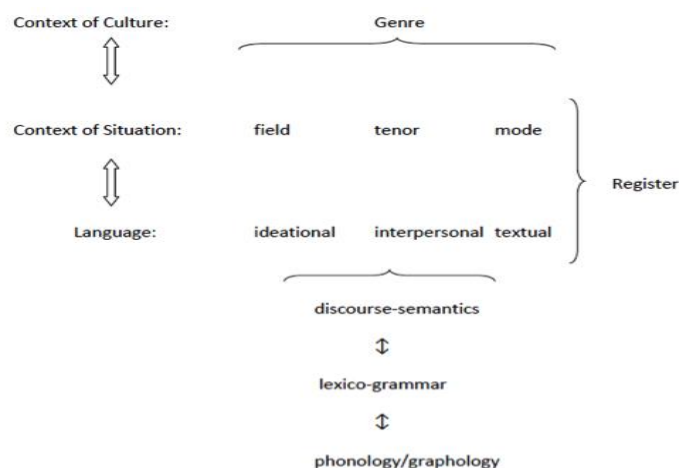
Figure 1. Context, meaning, and linguistic realization. Adapted from *Genre: An introduction to history, theory, research, and pedagogy* (p.33), by A. S. Bawarshi & M. J. Reiff, 2010, West Lafayette, IN: Parlor Press. Copyright 2010 by Parlor Press.

As shown in Figure 1, SFL explicitly provides a multi-layered explanation of language, unveiling the myth of authentic language use. To be more specific, learners, while constructing or deconstructing discourse, have to know the three register variables: (1) what the discourse is about (*field*), (2) who the discourse is positioned with (*tenor*), and (3) how the discourse is conveyed (*mode*). Connecting with the three variables, SFL further explains the emergence of the three meanings (i.e., the content) of discourse:

1. *ideational meaning*, as a semantic realization of field, concerns the language users' representation of the main gist of language activities and the logical relationships among them;

2. *interpersonal meaning*, as a semantic realization of tenor, concerns the manner of interaction among discourse participants or their evaluative stance toward the subject of the discourse; and

3. *textual meaning*, as a semantic realization of mode, concerns the way of organizing information in a coherent way.

With even more micro-layers, SFL also provides linguistic categories at the level of lexico-grammar (vocabulary/grammar) to more explicitly show how the three meanings are constructed or deconstructed. These key categories help highlight particular language features in realizing ideational meaning. For instance, with the assistance of the category *participant*, non-human nouns or nominalized nouns are identified as achieving part of the ideational meaning in an academic context, while pronouns do the same in spoken discourse. Similarly, in relation to interpersonal meaning, the lexico-grammatical categories *mood* (the order of subject and predicate) and *appraisal resources* (the category that deals with evaluative stance) have also been identified as demonstrating features of

interpersonal meaning in our communication. For example, *declarative mood* (the order of subject followed by predicate) predominantly occurs in academic writing. *Attitude* (words that indicate a language user's attitude), *graduation* (words denoting or connoting the different semantic degree, such as an intensifier), and *engagement* (words denoting or connoting the source or certainty of information, such as a citation or different reporting verbs) have also been differently distributed in written English and spoken English (e.g., more engagement resources used in written English than spoken English). For textual meaning, categories include *cohesive devices* (e.g., conjunction words, lexical repetition) and *theme patterns* (e.g., the repetition of the first element in a sentence that carries ideational meaning). Take the following sentences as an example of these categories:

> Learning a foreign language can help us know a foreign word. In addition, it can also help us know a different culture.

In the two example sentences, the cohesive device *in addition*, and the repetitive themes *learning a foreign language,* and *it,* among others, help connect the two sentences (for other cohesive devices or thematic patterns, see Halliday, 1994). These categories offer students an explicit way of constructing meaning or deconstructing the content of diverse channels of discourse, echoing the expectations of international English communities and indicating the plausibility of applying SFL to a classroom that lacks knowledge of how to effectively use teaching and learning materials.

Although not specifically focused on material use, recent studies show that teachers who implemented SFL-based teaching better supported their students' language performance, especially in the context of English-as-a-second-language (ESL). For instance, in the ESL context, by using SFL as an instructional tool, Gibbons (2006) showed that students gained meta-linguistic knowledge about language use in different contexts (e.g., academic register versus spoken register). For example, students used discipline-specific words (e.g., technical words) in talking about a physical phenomenon. In a more recent study, Symons, Palincsar, and Schleppegrell (2017) demonstrated how SFL-based categories (e.g., participant) helped fourth-grade ESL students overcome their knowledge constraints to effectively interact with their teacher in terms of the ideational meaning of texts. Swami (2008), one of the few studies in the context of EFL, showed that the explicit teaching of SFL-related constructs enabled students to better structure their writing (e.g., students' skills in connecting textual meaning with cohesive devices, and connecting passive voice with interpersonal meaning, were improved). Similarly, Yasuda's (2015) SFL-based reading and writing instruction revealed that the SFL-based constructs enabled EFL students to attend to both meaning and linguistic choices while gaining in-depth knowledge about reading and writing (e.g., students' use of nominalization to achieve objectivity in texts). In sum, these studies illustrated the usefulness of SFL in facilitating language teaching, making it a potential mediating tool for connecting material use to language teaching. Nonetheless, given the compatibility of SFL with language teaching as well as the importance of materials in language-teaching contexts (especially EFL contexts), there is almost no empirical research that harnesses SFL theory in the teaching of EFL through textbooks or OER.

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Given the limited literature on using materials in language-teaching contexts as well as the power of SFL, this study is guided by the following research questions, which link together questions of SFL-based learning, the use of different materials in teaching and learning, and the context of EFL learners:

1. How does SFL-based use of materials impact the adjustment of EFL students to material-based learning; and

2. How does SFL-based use of materials impact the language learning practices of students, if at all?

Methodology

Research Context in China

Similarly to many other EFL teaching contexts, English-language teaching in China requires the use of textbooks approved by its ministry of education (Kwak, 2017; You, 2004). The mandatory books used in Chinese EFL contexts are generally edited by domestic Chinese experts of the English language. For instance, in the mandatory textbook used for written English learning, the basic content includes a reading text with the purpose of fostering reading comprehension in readers. In addition, there are instructions for language practices, which cover the structure of a genre (e.g., argumentation or exposition) and key linguistic features. However, due to a lack of teacher education, teachers generally focus on vocabulary or how to maintain structural accuracy (You, 2004; Zhang, 2017).

As the author of this paper and also as an English writing instructor in a top-rated university in China, I came back from the United States with years of research experience in ESL and EFL contexts. Particularly, given my empirical experiences with SFL, I was determined to transform the style of language learning generally imposed on students, taking it away from its traditional focus on learning vocabulary or how to maintain structural accuracy from one designated textbook. In China, when I received the designated textbook from the university, I found part of the designed book compatible with my beliefs that emphasize teaching language as social semiotics. For example, the textbook emphasizes how to produce written language in an academic register, how to modulate tone, and how to create fluent texts. However, given the limited pages of a textbook, it is to be expected that knowledge about certain areas needs to be extended. For example, though the textbook provides exercises on transforming spoken texts into written texts, teachers need to explain why spoken language and written discourse are different.

I began my writing instruction with the basic structure of academic writing (e.g., the structure of argumentative writing: introduction, pro-argument, counter-argument, and conclusion). To complement the textbook, I also collected as many OER as possible, including sample texts available online, additional exercises available online, and other open-access journal articles that matched the reading level of my students. A snapshot of the curriculum I developed is listed as follows:

Table 1

A Blended Curriculum: Designated Textbook and Sample OER

Students' meta-linguistic knowledge	Designated textbook: Learning content	Explanations of the features of academic language: OER
Language in relation to academic contexts: contextual variables and meaning realization	In the mandatory textbook, there is only one exercise on revising spoken text into written text. No detailed explanations are provided.	OER was sent to students that includes how and why contextual variables differ between spoken text and academic writing. Sample links: https://www.youtube.com/watch?v=5shQbMJLa8k
Ideational meaning in academic contexts and linguistic realization	In the mandatory textbook, there is a section on how nominalization participates in constructing ideational meaning. No detailed explanations are provided.	OER provides information on how the types of verbs are used, as well as logical relationships (logical errors). Sample links: https://www.ntid.rit.edu/sea/processes/relationships/intro https://www.youtube.com/watch?v=RdSB137pFrs https://unilearning.uow.edu.au/academic/3b.html
Interpersonal meaning in academic contexts and linguistic realization	In the mandatory textbook, there is a section on how to use modal verbs to modulate tone. No detailed explanations are provided.	OER provides on how reporting verbs can be varied and how reliability of text content can be controlled through appraisal resources. Sample links: http://writesite.elearn.usyd.edu.au/m2/m2u1/index.htm https://wenku.baidu.com/view/85294422590102020 7409cef.html

| Textual meaning in academic contexts and linguistic realization | In the mandatory textbook, there is a section on grammatical resources (e.g., conjunction words) in constructing fluent texts. No detailed explanations are provided. | OER provides more information on other cohesive resources (e.g., lexical cohesion) and the use of theme in constructing information flow.
Sample Links:
http://www.elc.byu.edu/classes/buck/w_garden/classes/buck/transitions.html
http://www2.ivcc.edu/rambo/eng1001/transitions.htm
http://writesite.elearn.usyd.edu.au/m3/m3u5/m3u5s3/m3u5s3_13.htm#
https://www.youtube.com/watch?v=yRSTp3BJT3c |

As shown in Table 1 above, my curriculum integrates the designated textbook and OER, in which SFL-based OER provides explicit knowledge on why and how certain language components can be learned from the textbook. The blended learning content was further facilitated through mediated teaching in class, in which the interaction among context, meaning-making, as well as the ways in which these are linked with lexico-grammar in English discourses, was explained in plain language (or the students' first language).

Participants

Participants were recruited from an academic writing course on argumentative writing taught by the author in the Chinese university. Although all students agreed to be involved in the project, four students were selected as focal participants because they were willing to share their writing samples and have in-depth talks with the researcher about the triadic relationship among materials, meta-linguistic knowledge, and their writing practices. In addition, they, like many other EFL writers, had been exposed to traditional teaching that primarily relied on one mandatory textbook and focused on structural accuracy or vocabulary learning. This group was made up of one male and three female students pseudonymously named Alex, Barbara, Charlie, and Debra. They were all born and raised in China, and spoke Chinese as their first language and English as a foreign language. In addition, while these four students had experiences with OER, they perceived OER as only being useful for providing examples of complex sentences or accumulating more advanced vocabulary than what was available to them in their textbook.

Data Collection Procedures

Data includes monthly semi-structured interviews. The questions developed for the interview were informed by both research questions in this current study as well as relevant literature (e.g., Colpaert, 2006; Kwak, 2017; Schleppegrell, 2001; see the appendix to this paper for sample interview questions). Interviews were conducted over one academic semester in the students' first language, Chinese. During the interviews, students were encouraged to talk freely about their experiences in the classroom, especially the triadic interaction among the mandatory textbook, OER, and theory learning.

Interviews were immediately transcribed and analyzed by the researcher; the transcription was confirmed by the participants prior to a further analysis. Other documents were also collected from the classroom to further anchor the validity of the data collected in the interviews. The documents were mainly about the students' reading and writing practices, such as their use of the knowledge gained from the mandatory textbook and OER to conduct independent text deconstruction or construction. In addition, the students' written reflections (in English) on their in-class and out-of-class learning activities (e.g., analysis of texts, academic writing) were also collected. In sum, three main sources of data were cemented to answer the two interrelated research questions: (1) the students' adjustment, and (2) the students' actual learning practices as a result of the blended learning environment.

Data Analysis

Data analysis was iterative; follow-up data was continuously supplemented to illuminate the researcher's questions (Dyson & Genishi, 2005). Primarily, the data collected from interviews and from the participating students' written reflections (in English) on their learning activities was analyzed via qualitative content analysis (Dyson & Genishi, 2005). Themes were identified in the students' interviews and reflections in relation to the research questions. The students' written documents (i.e., their text analysis and their academic writing samples) were analyzed through discourse analysis, and codes were informed by the core constructs of SFL (Rampton, Roberts, Leung, & Harris, 2002). The author's analyses were then rated by two experienced qualitative researchers who agreed with the analysis. Participants were also invited to read and comment on the analysis, and also agreed with the researcher's analysis.

Findings

Research Question 1: Student Adjustment to a New Learning Environment

Initially, the four students all demonstrated similar reliance on the mandatory textbook, which developed out of their years of experience with the textbook playing a predominant role in their learning. As Alex said,

> I am used to using one textbook and conducting an in-depth analysis of its content... like in my reading class now...Supplementary materials or OER are fine... but I just need one textbook that covers everything I have to learn. It is reliable.

In a similar vein, Charlie said,

> In my previous learning experiences, I just mainly relied on one textbook for learning...although we have other resources that the teacher gave us... But it [using a mandatory textbook] makes me feel like a student...

Alex's and Charlie's interview excerpts show that at the beginning of the semester the students apparently favored the policy of having one mandatory textbook in class. Their conceptualization of the necessity of mandatory textbooks seemed to be either shaped by the cultural context they were in (i.e., that the content of the mandatory textbook represents a powerful and reliable resource in their first-language culture, as expressed by Alex) or arose out of their own perception of the link between the existence of a designated textbook and their identity as a student who is receiving formal education (e.g., Charlie). What was common, however, was that all four students were open to OER, though they initially regarded the resources as an ancillary mode of learning in the classroom.

Despite their alignment with the mandatory textbook, the students still felt the need for effective outside resources but had limited understanding of what that would look like. As Barbara noted:

> Obviously, there is limitation of using just one textbook... As English major students, we cannot learn everything from one textbook... It is necessary for us to learn beyond the textbook... but I just have a phobia of making selections by myself.

Similarly, Debra said:

> It is not that I am lazy and do not reach out to read more... There are lots of free resources... It is like I do not know what to do... there is so much information that I do not know what to read or what is the best for us...

As illuminated in the above two excerpts, the students were in a complex situation: they were torn between their respect for the mandatory textbook and their need for more knowledge in order to be advanced language learners. Their complex scenario was aggravated by their lack of effective guidance in selecting additional materials (e.g., OER). However, this scenario seemed to galvanize the students' expectations of their teacher's principled guidance for the addition of materials in class.

Their need for additional resources was also triggered by their interest in the most appropriate way to understand and use language. As Barbara said:

> In the traditional classroom, we basically used one textbook, learning vocabulary and grammar... but learning this is obviously not enough... We still cannot effectively communicate... In addition, there are some exercises in the mandatory book... but what is the significance [of these exercises]? ... Why we need to do them? There is need for additional resources for clarification.

As Barbara's excerpt shows, at the college level, these EFL students had knowledge demands that exceeded the textbook. It was not enough to simply follow along with the content of the textbook; they desired to be guided beyond the textbook and understand why they have learned what they have from the textbook. In other words, the students' need to go beyond the mandatory textbook was particularly

motivated by their need to be a critical language learner who must understand why they were learning about a particular language component.

In the theory-based blended classroom, the students began to experience the usefulness of SFL via the OER, and were obviously also challenged in the process of learning SFL from OER. As Alex noted:

> I did not expect these resources in a writing course... I had expected to just to write... [to learn about] structure... or language accuracy... It felt difficult to digest them [the OER resources] at first... but gradually I started to understand them bit by bit... These resources pushed me to understand more about the role of language in writing beyond sentence accuracy.

With a similar thought, Charlie said:

> Unlike other OER I had before—basically some interesting reading materials or more challenging reading materials... —I had no way to really know how to decode the OER... This time... I had been doubtful too... but it turned out it can really help me analyze texts and transfer practical knowledge to my own writing.

The above interview excerpts show that while the students' initial doubts about the use of OER in their classroom emerged out of their previous learning experiences (e.g., Alex's prior belief about writing as the process of producing structurally accurate sentences, Charlie's belief about the role of OER in enhancing reading comprehension), gradually these doubts diminished due to their experience with the practical role of OER that was focused on developing their meta-linguistic understanding of the English language. For example, Charlie's gradual alignment with SFL was a result of her positive use of linguistic knowledge in unpacking sample texts used in the classroom.

Teacher agency in reorganizing the content of the textbook in alignment with the curriculum also prompted students to adapt to the theory-based blended context:

> Alex: I think my embrace of OER was also because of the appropriate selection of materials... The OER were not dense in theory... I know what is going on without having to know too many technical terms... It lessens my cognitive load.

> Charlie: The reading materials are well selected... were overall well suited to my understanding level... Some confusion was easily clarified in class when the instructor also used multiple methods to explain... in Chinese...or in more accessible expressions.

In other words, the students' moderately doubtful attitude towards OER gradually disappeared and they become more aligned with the necessity of using OER, because of the teacher's careful selection of materials that fitted in with the learning level of the students. In addition, mediated instruction in and out of classroom illuminated the importance of the teacher's knowledge base in the blended learning classroom.

Accompanied by the students' enhanced alignment with the theory-underpinned learning contexts, the students also refreshed their understanding of language learning and use:

> Barbara: Now I see how the OER provides multiple sources of reading, practicing online, and offering me pleasant experiences of learning the lived aspects of language… how context, meaning, and linguistic features are connected to each other, rather than in isolation liked I experienced before.

> Charlie: It is like we do not need to read too many resources… It is like through minimal learning resources we achieve the maximally effective knowledge in doing independent learning, because we know a theory that explains not just how to make correct sentences, but how to make meaningful writing through attending to the relation among meaning, words, grammar, and academic texts.

In other words, the students' experiences with the appropriate quantity of OER helped refresh their conceptualization about writing, No longer were they concerned with producing writing in a decontextualized way; instead they learned how to synergize linguistic features, meaning, and academic register together to create meaningful and authentic English writing. Their new understanding was different from their original understanding at the beginning of the semester, which further marks their active adaptation to the theory-based blended learning environment.

Most importantly, over the semester the students gradually established an appropriate conceptualization of the relationship between the mandatory textbook and OER.

> Alex: Of course, it is good if we have a textbook that has everything we need for our learning. But this is obviously impossible… We cannot be over-reliant on textbooks; we also cannot diminish the value of other materials… They must have value… It depends on how we select them and use them through appropriate guidance.

> Charlie: Indeed, a mandatory textbook and supplementary textbooks have to be concurrently used… So we can absorb more knowledge in and out of class… Of course… we need teachers to have appropriate knowledge… relying on students is impossible… We are just language learners and not experts… so a classroom has to be managed by a teacher with good knowledge of textbook use to achieve the optimal learning effect.

As shown in these two interview excerpts, over the semester the students came to realize the roles of mandatory and supplementary textbooks: they had given up on their idealized notion of an all-encompassing single mandatory textbook. Instead, for them, a mandatory textbook could not possibly contain everything they need. At the same time, the students also gained a new perception about their classroom learning, favoring a combination of the teacher's role, theoretical guidance, mandatory textbook, and OER.

Overall all, the students well adjusted to the blended learning environment in which SFL, mandatory textbooks, and the OER interact with each other. In particular, the students' adjustment to the role of blended learning that was different from their previous in-class learning was facilitated by two important factors: (1) their experience with the convenience of harnessing SFL in understanding texts, and (2) the appropriate mediation of these resources by their teacher. The students' adjustment ultimately also helped them conceptualize the complementary relationship among mandatory textbooks, OER, and writing as a meaning-making process.

Research Question 2: Students' Actual Practices Following Exposure to a Theory-Based Blended Learning Classroom

The adjustment of the students to this theory-based blended environment was also mapped to their writing (their writing of academic texts) and text deconstruction (their analysis of academic writing samples). In text deconstruction, the students were asked to decode a writing sample based on SFL-based concepts learned in class and the OER provided for after-class reading. Sample texts were selected from free online materials published by an authoritative publishing house. Following decoding, students were also asked to reflect upon their experience in regard to their future writing. For text construction, students were given the freedom to write on a topic they like and infuse their newly gained meta-linguistic knowledge into their writing. Overall, the students' four papers provided ample evidence of their active use of knowledge from the classroom, as they constructed argumentative writing that was acceptable both in terms of linguistic competence and meaning construction as expected in international English language communities.

Table 2

Charlie's Understanding of the Interpersonal Meaning in the Blended Learning Environment

Reflections on a writing sample, which she coded with SFL-based interpersonal categories	Writing during the early half of the semester	Writing following exposure to the blended curriculum
I have found mood of sentences is basically declarative.	Too many questions were used to engage readers (a way of arguing a point in spoken discourse).	Declarative mood was used in her writing to refute a point, including when she made counter arguments, instead of asking readers questions.

Verbs that reveal the relationship between evidence and claim should vary based on the evidence.	The semantic pole was either positive or negative. There was no trace of explicit knowledge of adjusting the semantic load of verbs.	Modal verbs, including *may*, *could*, and *will*, were used.
Modal verbs have to be used appropriately.	There was monotonous use of verb *show*, although the evidence followed may be weak.	Verbs started to appropriately vary according to the strength of evidence, such as *implicate*, and *suggest*.
Argumentative texts are not absolutely objective; authorial attitude is all over, especially through some non-adjective phrases.	There was almost no trace of using appraisal resources in showing authorial attitude.	Adverbs are used to show her evaluative stance. For example, *undoubtedly,* is used to show her dis-alignment with a counterargument, before she refuted it.

In Charlie's early writing, she struggled, particularly, with how to effectively enact interpersonal meaning in her writing. For example, she had not used modal verbs in her early writing: claims following evidence in her writing were mostly either positive or negative, even though the evidence she presented was not strong enough and needed a soft tone. Through exposure to the theory-based blended learning environment and the instructor's guidance, Charlie gradually learned the importance of projecting interpersonal meaning and orchestrated the relationship between linguistic features and interpersonal meaning in her later writing (see Table 2). For example, she became skilled in using modal or reporting verbs (e.g., the verbs *may, implicate*) to show the credibility of claims that were supported by weak evidence. In addition, she also used non-adjective appraisal resources (e.g., the word *undoubtfully*) to strengthen her follow-up refutation of a counter-argument (see Table 2), which shows her mastery of knowledge in implicitly and appropriately projecting her negative authorial attitude toward a counter-argument. In other words, over the semester, she came to understand the demands posed by academic writing discourse and learned to use her knowledge of coding and decoding materials, as evidenced by her transfer of this knowledge from text deconstruction to the construction of linguistically appropriate texts.

Barbara, Alex, and Debra, unlike Charlie, seemed to have trouble in all three dimensions (see Table 3). Table 3 shows how the other three students shuffled between reading-based knowledge to the

construction of their own writing. The transfer from reading to writing, though not perfect, demonstrated their ability to use SFL-based knowledge from the theory-based classroom, making up for their previous knowledge that was characterized by a focus on sentential accuracy. For example, these three students, who had been instructed on language accuracy, had not been aware of the choice of participants in constructing the content of a language activity (i.e., ideational meaning); their use of too many inappropriate participants (i.e., the overuse of *I* as sentence participant) had jeopardized their authority as academic writers when making claims in their writing. However, in this classroom, their choice was more inclined to impersonal participants, meeting the requirements of academic writing. In addition, their knowledge of interpersonal meaning was further enhanced by their understanding of reporting verbs in relation to the strength of evidence, which was almost never taught to them before. In terms of textual meaning, they also gained enhanced knowledge of cohesive devices in understanding how sample texts were constructed, and how to appropriately use the knowledge in regulating their own writing; this shows that they overcame the constraints of their early writing practices in which they had limited awareness of the importance of coherence in academic writing.

Table 3

Alex, Barbara, and Debra's Understanding of Writing as a Meaning Making Process in the Blended Environment

Reflections on a writing sample, which the students coded with SFL-based interpersonal categories	Writing during the early half of the semester	Writing following exposure to the blended curriculum
Ideational dimension: The three students coded participants "cell phone" and emphasized the adoption of non-human participants, and coded logical relationship by marking some logical connectors. They also reflected upon the importance of the explicit use of logical connectors, such as *however* and *because*.	Ideational dimension: Logical relationship is implicit or inappropriate. The three students overused "I" as participant	Ideational dimension. Logical relationship between sentences was more explicit through logical connectors (e.g., *as a result*, *therefore*). Logical fallacy was overcome.
Interpersonal dimension: The three students coded mood type, types of reporting verbs (e.g., *suggest*, *show*), and attitudinal words (adjective and non adjective). They also reflected upon the linguistic features of their early writing and emphasized the importance of following their new knowledge.	Interpersonal dimension: The three students had inappropriate use of questions to refute a counterargument, instead of evidence-based refutation.	Interpersonal dimension: There was appropriate use of reporting verbs to enhance readability of their essay, along with appropriate citation. Mood of sentences has been regulated in response to

	In addition, they failed to use appropriate reporting verbs or modal verbs.	written register: the use of declarative sentences in writing. In addition, the choice of non-adjective words in projecting authorial attitude (e.g., the use of *admittedly* as a modifier to a counterargument shows their partial alignment with the counter-argument).
Textual dimension: The three students coded cohesive types and theme patterns; for example, they coded lexical cohesion by coding the multiple use of "cell phone." In addition, students reflected that the use constituted lexical cohesion and constant theme pattern, and should be used in their own writing.	Textual dimension: Dim knowledge of cohesive devices was exemplified.	Textual dimension: The three students appropriately used diverse cohesive devices that overcame constraints from their previous knowledge.

In sum, along with their adjustment to this blended learning classroom, the four students also gradually internalized knowledge related to SFL, which they drew from the mandatory textbook, OER, and the teacher's explicit instruction. Their knowledge about SFL and positive language performance beyond their previous performance further supported the necessity of the inclusion of an SFL-based theory for the process of English language material selection and adoption.

Discussions

One of the findings from this study is that by being exposed to a blended teaching and learning context, the students involved in the study constructed a refreshed understanding of the value of mandatory textbooks: there is no perfect textbook, and the way in which the teacher used OER to enhance their understanding of the content of a mandatory textbook was more important than the textbook itself. In other words, through highlighting the agentive role of the teacher (e.g., the use and their mediation of these OER and the mandatory materials) in influencing student perception of a mandatory textbook, this study complements existing research on language textbooks/materials that emphasized the innate value of textbooks and mostly focused on analysis of the textbook content itself, without taking the actual use of materials into consideration (e.g., Römer, 2004; Tomlinson, 2003). In addition, the teacher's efforts in linking the textbooks to OER also disrupts the stereotypical impression that teachers generally use mandatory textbooks and have limited space for innovating their teaching in most EFL classrooms (e.g., Wang & Farmer, 2008; You, 2004). The finding thus echoes the call from researchers that classroom learning can be diversified and enhanced in terms of

learning resources (e.g., the use of OER) so as to prepare students for meeting the challenges of international English language communities (e.g., Blyth, 2014).

Another finding of this study shows that, when guided by SFL, the mixture of OER and the mandatory textbook seems to effectively transform students into learners who have effective meta-linguistic knowledge of language (the interaction among grammar/vocabulary, meaning and context) and who are able to regulate their own language learning, positioning themselves as linguistically and culturally sensitive language users. In contrast, while research is limited, there has been some research on the agency of teachers in selecting materials (e.g., Allen, 2008; Menkabu & Harwood, 2014), which found that the selections teachers made were not guided by a particularized language theory that fits in with the language needs of their students (e.g., Kwak, 2017). In this study, from the perspective of SFL-based guidance, the teacher used SFL-based materials along with the textbook, to help students scratch the surface of language and effectively unpack/construct the content of English texts (e.g., sample academic writing texts). In other words, this study also answers the international demand for developing theory-based OER education (e.g., Ariza & Hancock, 2003) and shows how the adoption of both a mandatory textbook and supplementary OER can be effectively guided by SFL to maximally transition students into advanced language learners who can meet the demands of academic English literacy (e.g., Blyth, 2014), thus further illustrating the mediating power of SFL in language classrooms (e.g., Gibbons, 2006; Symons, Palincsar, & Schleppegrell, 2017; Yasuda, 2015).

Conclusions and Implications

Despite the innate constraints of case studies in making generalizations (Yin, 2013), the case study on an SFL-based blended learning context has yielded two important findings. First, in a mandatory textbook-based classroom, OER that aligns with the current need of students can effectively supplement the knowledge base of EFL students and help them gain an in-depth and extended understanding of the content of mandatory textbooks, as well as knowledge about English discourses, transforming them from passive readers of textbooks to flexible material users. Second, when guided by the language-learning theory of SFL, the study also illuminates that the selection of OER, or the reorganization of the content of the mandatory textbook, could effectively help students achieve a better understanding of the expectations of international English communities, as well as enable students to become self-regulated in the process of language learning.

Implications of this study include the following aspects. First, in educational contexts where textbooks are mandatory and constrained by content arrangement, using supplementary materials available online seems to be a good option for refreshing students' knowledge bases and meeting the challenges of English communities in regard to language use (Albirini, 2006; Mushayikwa & Lubben, 2009). Indeed, in this Web 2.0 world, many resources are free and provide an optimal channel for teachers to collect useful materials and enhance their textbook-based teaching in the classroom (Hilton, 2016). In particular, when providing supplementary materials found online, teachers should bear in mind the

principle of coherence: the chain of materials (in-class and supplementary) should center on a principled learning theory so that students do not feel disoriented (Kwak, 2017). In other words, while OER are available, students are also reliant on teachers in combining and collecting these resources to achieve the maximal learning effects (Donato & McCormic, 1994).

Secondly, since language use varies according to contexts, students need to gain effective meta-linguistic language by means of learning through textbooks or OER. This suggests that SFL be promoted among pre-service and in-service teachers so that they can design SFL-curricula when using textbooks and OER to facilitate student socialization into international language communities. Indeed, in international language communities, language is not merely required for smooth communication, but also reflects learner identity (Hyland, 2002). By intersecting the SFL-based knowledge and textbook content, students can be prepared for diverse challenges in our globalized communities (Paltridge, 2001; Schleppegrell, 2001).

Most importantly, the study also suggests the importance of including principled teaching and learning strategies in the process of online or distance education, particularly through highlighting language as an important gateway of improving student understanding of texts in different disciplinary subjects. Indeed, in spite of the popularity of online or distance education, teachers often struggle with what and how to teach (Kwak, 2017). In response to this, Colpaert (2006) called on teachers to narrow "the gap between technology and pedagogy" (p. 494). Given the complexity of academic discourse, and SFL's focus on language form and language meaning, and its explicit explanation on features of cross-disciplinary subjects, such as science and history (Schleppegrell, 2001), it would be optimal if teachers could use SFL and design online or distance education curricula that could help learners approximate semiotic resources specific to different disciplinary subjects and prepare students for academic success across disciplines (Blommaert, 2008).

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Appendix

Sample Interview Questions

(1) How did your previous teachers use textbooks?

(2) How did you practice writing?

(3) How did your current writing teacher use textbooks?

(4) What was your understanding of learning through textbooks?

(5) What was your experience with language theories?

(6) Have you experienced with online or distance education?

(7) How you do feel about the blended learning/teaching this semester?

(6) How do you think what you are learning is different from what you learned before?

(9) What is your understanding of interpersonal meaning through OER?

(10) What is your understanding of textual meaning through OER?

(11) What is your understanding of ideational meaning through OER?

(12) Based on this semester experience, how do you understand the relationship among mandatory textbook, OER, and SFL?

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[i] The term *textbook* refers to traditional hardcopy resources required by an educational institution.

[ii] The term, *materials*, used in this paper, refers to both the traditional hardcopy textbook and supplementary teaching and learning resources, such as open educational resources.

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