

Spoken Grammar and Its Role in the English Language Classroom

If you have never heard of spoken grammar, this article could change the way you think about teaching speaking skills and even how you evaluate students' speaking abilities. To see an example of spoken grammar, consider the two excerpts below and decide which one is from an English textbook and which one is from a real-life conversation.

Excerpt 1:

A: My little brother is a really good student.

B: Why do you say that?

A: Well, he is really smart, so he always gets good grades.

B: Maybe he gets good grades because he studies hard.

Excerpt 2:

A: Didn't know you used boiling water.

B: Pardon?

A: Didn't know you used boiling water.

B: Don't have to but it's um ... they reckon it's um, quicker.

As you probably guessed, the first excerpt is from an English textbook, while the second excerpt is from a

real-life conversation. But can you say why? Traditional, formal descriptions of English grammar are typically based on standards of written English; recently, though, particularly as a result of analysis of large corpora of spoken data and an emphasis on spoken communication, researchers and linguists have begun to focus on describing features of spoken grammar and to question the appropriateness of applying writing-based standards and grammatical descriptions to spoken English. Because of current trends emphasizing communicative language teaching and authenticity, recognizing the classroom role of spoken grammar is more important than ever before. Learning about characteristics of spoken grammar and ways to teach them empowers you to improve your students' overall fluency and face-to-face conversation, increases the authenticity of your speaking lessons, and prevents your students from speaking English like a textbook.

This article addresses key issues and considerations for teachers wanting to incorporate spoken grammar

activities into their own teaching and also focuses on six common features of spoken grammar, with practical activities and suggestions for teaching them in the language classroom. It is hoped that this discussion of spoken grammar and its place in foreign language instruction, along with the activities, will encourage English-language teachers and textbook writers to incorporate more elements of spoken grammar into their own curricula.

Features of spoken English

Although many grammatical features of everyday, unplanned conversation are judged incorrect by standards of written English (Carter and McCarthy 1995; McCarthy and Carter 1995), these features of natural conversation should not be considered incorrect deviations from standard English (Cullen and Kuo 2007). Unlike written English, spoken English is usually spontaneous and unplanned and produced in real time with no opportunity for editing (Cullen and Kuo 2007). This spontaneity produces some distinct features, as speakers deal with and adapt to the pressures of “real time processing,” resulting in a “step-by-step assembly” of speech (Cullen and Kuo 2007, 363). In addition, speech usually occurs face-to-face, resulting in highly interactive situations with a “shared context” (Cullen and Kuo 2007, 363). Thus, the nature and characteristics of conversational English itself lead to several distinct grammatical features of spoken English as speakers try to fulfill the interpersonal and interactive functions of spoken language in real time.

Not learning features of spoken grammar can impede students’ ability to speak English fluently and appropriately (Mumford 2009). The following six features of spoken grammar will help language instructors to understand what spoken grammar is and to provide classroom instruction and activities that advance their students’ development of spoken grammar knowledge and overall English speaking skills.

Six features of spoken grammar

Feature 1: Ellipsis

Ellipsis is the omission of elements normally part of a certain structure and is found in both spoken and written English. For example:

“Do you have any questions?” (No ellipsis)

“Any questions?” (Ellipsis—subject and verb omitted)

As Cullen and Kuo (2007) note, while ellipsis is found in both spoken and written English, *situational ellipsis*—omitting items that are apparent, given the immediate situation—is much more common in spoken English. This is in contrast to *textual ellipsis*, in which the omitted information is retrievable from the text itself (Carter and McCarthy 1995). Unlike textual ellipsis, situational ellipsis often results in the omission of subjects and verbs, a phenomenon not common in written English (Carter and McCarthy 1995; McCarthy and Carter 1995). McCarthy and Carter (1995) cite an abundance of ellipsis in corpora data, highlighting fixed phrases and routines such as “sounds good” and “absolutely right” as examples of situational ellipsis of subjects and verbs. Situational ellipsis arises from a “combination of informality and shared context” (Cullen and Kuo 2007, 368) and allows speakers to reduce the length and complexity of their comments (Leech 2000). Thus, the face-to-face nature of spoken language allows speakers to leave out information that is easily retrievable from the situation, which in turn helps them cope with the real-time pressures of conversation by speaking in shorter phrases.

Feature 2: Heads

Heads, also known as *left-dislocation*, are a way to introduce and orient listeners to a topic before giving information on the topic (Cullen and Kuo 2007, 366). For example:

“The soccer game last night, it was really exciting.” (With head)

“The soccer game last night was really exciting.” (No head)

As Hughes and McCarthy (1998, 273) note, heads are both “an act of sensitivity to the listener” and “a reflection of the exigencies of face-to-face interaction and real-time nature of talk.” Heads allow speakers to highlight the topic they want to talk about before commenting on it, giving both the speaker and the listener more processing time in real-time communication (Cullen and Kuo 2007).

Feature 3: Tails

Tails, also known as *right-dislocation*, are comments that are added to the end of a phrase. For example:

“My teacher is really nice, the one from America.” (With tail)

“My teacher from America is really nice.” (No tail)

Tails can be a whole phrase, as in the example, “It’s very nice, that road up through Skipton to the Dales” (McCarthy and Carter 1995, 211), or they can consist of just one word, as in the example, “It’s a serious picture, that” (Timmis 2010, 333).

Tails have a range of functions, including clarifying a comment, expressing a personal attitude or judgment of an item, or serving an interpersonal function (Timmis 2010). Tails enable speakers to deal with the real-time processing and interactiveness of speech by allowing speakers to both edit their comments and give evaluative statements of topics (Rühlemann 2006).

Features 4 and 5: Fillers and backchannels

Fillers are words and utterances like “er,” “well,” “hmm,” and “um” that do not have a specific meaning but rather fill time and allow the speaker to gather his or her thoughts (Willis 2003). Backchannels, on the other hand, are words and utterances like “uh-huh,” “oh,” “yeah,” and “I see” that are used to acknowledge what the speaker is saying and encourage him or her to continue (Stenström 2004).

Both fillers and backchannels are common in English conversation because they serve important communicative and interpersonal functions, and it would be both difficult and awkward to have a conversation without them (Willis 2003).

Feature 6: Phrasal chunks

Chunks are fixed words or phrases that can combine with other elements but act as ready-made lexical units of language, just as words do (Cullen and Kuo 2007). Because of the pressures of real-time processing, speakers rely on a relatively small number of fixed words and phrases to fill particular grammar functions (Leech 2000). Cullen and Kuo (2007, 370) cite different functions for different phrasal chunks, including terms to (1) create vagueness (e.g., “sort of,” “kind of,” and “stuff like that”), (2) modify and show politeness (e.g., “a bit” and “a little bit”), and (3) mark discourse structures (e.g., “you know” and “I mean”). Cullen and Kuo (2007)

also note that these phrases can act as conversation fillers, allowing the speaker time to pause and think about what to say under the constraints of real-time conversation.

Pedagogical issues

Even among researchers who advocate teaching specific characteristics of spoken English to English as a foreign language (EFL) students, there is no consensus on the approach teachers should adopt or the extent to which they should teach features of spoken grammar. This section focuses on three pedagogical issues for teaching spoken grammar: (1) the need for authentic materials, (2) the necessity of teaching spoken grammar for developing students’ spoken communication skills in all contexts, and (3) the question of whether to teach production or to focus on the recognition of spoken grammar characteristics. Teachers who want to incorporate spoken grammar activities into their own classes must consider these issues in light of their own specific teaching contexts.

1. Using authentic spoken texts

Numerous researchers note the artificiality of textbook dialogues and emphasize the need to develop and analyze larger corpora of spoken data to be used in the language classroom (Leech 2000; Rühlemann 2008). Indeed, Cullen and Kuo’s (2007) survey of 24 mainstream English language teaching (ELT) textbooks found that coverage of spoken grammar was inadequate and incomplete, and that there was an emphasis on phrasal chunks over syntactic structures common to conversation, which were either ignored or confined to advanced levels. Rühlemann (2008, 683–684) echoes this sentiment, claiming, “the type of ‘conversation’ most textbooks present cannot serve as a reliable model for the teaching of conversation.” It is clear that learners must be exposed to spoken dialogues—whether they are authentic or specially constructed—that include common features of spoken grammar that are so often missing in ELT textbooks. This means that teachers assigned to teach inauthentic materials may need to supplement textbook activities with authentic video, radio, and other audio materials to expose students to elements of spoken grammar.

2. Identifying when to teach spoken grammar

Because of spoken grammar's function in conversation and frequency in corpus data, a number of researchers recommend teaching it in all language classes (Cullen and Kuo 2007; McCarthy 2006; Goh 2009; Timmis 2002; Mumford 2009; Rühlemann 2008). Indeed, McCarthy (2006) emphasizes the importance of teaching spoken grammar:

Language pedagogy that claims to support the teaching and learning of speaking skills does itself a disservice if it ignores what we know about the spoken language. Whatever else may be the result of imaginative methodologies for eliciting spoken language in the second-language classroom, there can be little hope for a natural spoken output on the part of language learners if the input is stubbornly rooted in models that owe their origin and shape to the written language. ... Therefore, we believe it is timely to consider some of the insights a spoken corpus can offer, and to attempt to relate them more globally to the overall problem of designing a pedagogical spoken grammar. (29)

In other words, it does not make sense to emphasize spoken communication and communicative language teaching while refusing to acknowledge or teach important differences between spoken and written language. This implies that spoken grammar should be taught in all contexts—including EFL contexts—in which understanding and producing spoken language is a goal of second language teaching.

Similarly, Mumford (2009) argues that all students, regardless of likely interaction with native speakers, can benefit from learning some spoken grammar features. He identifies forms related to fluency, such as fillers, heads, tails, ellipsis, and phrasal chunks, which allow students to adapt to the pressures of real-time communication and speak more fluently and efficiently (Mumford 2009). Furthermore, surveys show that teachers generally support instruction of characteristics of spoken grammar, although this support can vary depending on the specific feature. For example, a survey by Timmis (2002) shows that teachers feel students need to at least be exposed to features of spoken grammar, and Goh's (2009) survey of teachers from China and Singapore shows that

teachers feel spoken grammar knowledge is useful for raising students' awareness of spoken and written language. If the ability for students to understand spoken English is a goal of language teaching, spoken grammar should be taught in the language classroom, even to EFL students.

3. Noticing versus producing spoken grammar

Another consideration when teaching spoken grammar is whether students should be required only to notice spoken grammar characteristics or whether they should be encouraged to incorporate features of spoken grammar in their language production. McCarthy and Carter (1995) advocate a "three I's" methodology when teaching spoken grammar. The "three I's" stand for illustration, interaction, and induction, where spoken data is first presented, spoken grammar is highlighted, and learners are then encouraged to draw their own conclusions about and develop their capacity to notice features of spoken English (McCarthy and Carter 1995, 217). Timmis (2005) recommends using four types of tasks when teaching characteristics of spoken English: cultural access tasks, global understanding tasks, noticing tasks, and language discussion tasks. Both of these approaches to teaching spoken English emphasize noticing and awareness-raising activities rather than production activities.

On the other hand, Cullen and Kuo (2007) and Mumford (2009) emphasize the need for learners to not only notice and analyze features of spoken grammar, but also to produce these features in their own speech. As Cullen and Kuo (2007, 382) note, because features of spoken grammar serve important communicative functions "relating to the unplanned, interactive, and interpersonal nature of conversation," they "cannot simply be covered by more conventional structures." It would seem that the most useful approach would be to select specific features of spoken grammar for students to notice or produce depending on the students' specific situation and needs.

Activities for teaching spoken grammar

Since characteristics of spoken grammar serve important interpersonal and communicative functions that help speakers deal with the interactive and real-time nature of conversation, it is critical to incorporate their instruction in communicative language class-

rooms. However, as most EFL textbooks contain inauthentic texts lacking many features of spoken grammar and usually do not explicitly address numerous features of spoken grammar (Cullen and Kuo 2007), many language teachers struggle with teaching them. Following are specific activities teachers can utilize to instruct students on ellipsis, heads and tails, fillers and backchannels, and phrasal chunks. These activities focus on raising awareness of spoken grammar, practicing spoken grammar features, utilizing authentic materials (such as videos), and using explicit instruction and discussion to sensitize students to varying degrees of appropriateness in different social contexts.

Spoken English activities for ellipsis

A number of activities and games can be utilized to introduce and practice situational ellipsis.

Activity 1: Ellipsis in videos

First, the teacher selects a short, authentic video where two or more people are talk-

ing. The teacher gives students a script that includes all the omitted subjects and verbs and asks them to cross out words that they do not hear in the video clip. Once students have listened and crossed out the words, the class discusses which words were omitted and why. Students also discuss which words can and cannot be omitted. It is sometimes difficult to find an appropriate, short clip with clear examples of ellipsis, so look for informal and authentic conversations in TV sitcoms, talk shows, and interviews, or on popular websites like YouTube. Table 1 shows an example from an English podcast (video and transcript can be found at Luke's English Podcast, <http://teacherluke.co.uk/2010/03/26/116>).

Activity 2: Long and short versions of conversations

In this activity teachers can either start with a short conversation that includes ellipsis and ask students to write a long version of the conversation by filling in the missing words, or give students a long conversation and ask

<p>Instructions: Watch the video and cross out any words in the script that you do NOT hear.</p> <p>Interviewer: So, uh, how long have you been in London? Interviewee: I have been in London two weeks. Interviewer: Is that really true? So what do you do? Interviewee: I study graphic design at Camberwell School of the Arts. Interviewer: So, this is your first two weeks? Interviewee: Yes, this is my first two weeks. It's quite a big impact. London is very big, there are lots of people, and it's quite expensive as well.</p> <p>Discussion questions:</p> <ol style="list-style-type: none"> 1. What types of words have been omitted? 2. Why do you think these words have been omitted?
<p>Answer key: (words not heard are in parentheses)</p> <p>Interviewer: So, uh, how long have you been in London? Interviewee: (I have been in London) two weeks. Interviewer: (Is that) really (true)? So what do you do? Interviewee: (I study) graphic design (at) Camberwell School of the Arts. Interviewer: So, (this is) your first two weeks? Interviewee: (Yes, this is my) first two weeks. It's quite a big impact. (London is) very big, (there are) lots of people, and it's quite expensive as well.</p> <p>Discussion questions (possible answers):</p> <ol style="list-style-type: none"> 1. Subjects (nouns) and main verbs have been omitted. 2. The meaning is clear from the context. The people are speaking casually.

Table 1. Ellipsis in videos

them to omit words to make it shorter. The activity illustrated in Table 2 will lead to a discussion about which words can be omitted and why.

Teachers can also ask students to write out two “identical” conversations with a partner: a long version and a short version. Students then perform both versions for the class, followed by a discussion. This activity helps students incorporate ellipsis into their spoken production.

Activity 3: Ellipsis game

Ellipsis can also be incorporated into short games. After dividing students into groups, the teacher writes a long question or sentence on the board. The teacher then goes around the room, giving each team a point for every new, shorter question or sentence they create that has the same meaning as the original. For example:

The teacher asks the long question: Do you want to dance?

Team 1: “You want to dance?” = 1 point

Team 2: “Wanna dance?” = 1 point

When no group can come up with a new, shorter question or sentence, the teacher writes a new question or sentence on the board, and the game starts over.

Similarly, in groups of four, students can challenge each other. For example, Pair A creates a long question and answer, and Pair B makes a short version of it. If Pair B creates an acceptable short question and answer, the pair gets a point; if Pair B does not, Pair A gets the point. The students decide for themselves whether the shorter version is acceptable, and if they are not sure, the teacher acts as a judge. After a few rounds back and forth, the game changes so that Pair A creates a shorter version of a sentence or question and Pair B must give a longer version.

Spoken English activities for heads and tails

A number of activities can be used to introduce the concept of heads and tails, discuss their roles in spoken English, and help students practice using heads and tails in their own conversations.

Activity 1: Heads and tails worksheet

A basic worksheet to teach students about heads and tails includes questions and statements written with and without heads and tails. For example, after discussing and

<p>Long-version instructions: Make the following conversation longer by filling in missing words.</p> <p>A: _____ Wanna go to the party on Sunday? B: Sure, _____ sounds good.</p> <p>Answer key: A: <u>Do you</u> wanna go to the party on Sunday? B: Sure, <u>that</u> sounds good.</p>
<p>Short-version instructions: Make the following conversation shorter by omitting appropriate words.</p> <p>A: Shall we go get lunch now? B: Yeah, that is a good idea.</p> <p>Answer key: (omitted words are in parentheses) A: (Shall we) go get lunch now? B: Yeah, (that is a) good idea.</p> <p>Discussion question: Which words can be omitted from conversations with friends? Why?</p> <p>Discussion question (possible answer): You can omit subjects and verbs because they are clear from the context, you can speak more quickly, and it is an informal conversation with friends.</p>

Table 2. Long and short versions of conversations

explaining the use of heads and tails in spoken English, the teacher asks students to indicate or create heads or tails in each of the questions and sentences in Table 3. In another possible activity in Table 3, the teacher gives students some sentences or questions that already contain heads and tails, then asks students to rewrite them without the heads or tails. Then, the teacher gives students sentences that do not contain heads or tails and asks them to rewrite the sentences with heads or tails. These activities raise students' awareness of the function and use of heads and tails in spoken English.

Activity 2: Heads and tails with partners

Because heads and tails create two-part sentences and questions, the class can be divided into pairs and create their own heads and tails together. If the first student starts with a head, the second student finishes with

the rest of the question or sentence; if the first student starts with a statement or question, the second student finishes with an appropriate tail. This activity can be turned into a game in which students receive points for correctly completing their partner's sentence or question. Having students discuss, identify, and write their own heads and tails will both raise their awareness of these characteristics of spoken grammar and give students practice producing them. For example:

Student A (head): Our teacher ...

Student B: she's really beautiful.

Student A (statement): Our teacher is really beautiful.

Student B (tail): she is.

Spoken English activities for fillers and backchannels

While common in everyday speech, fillers and backchannels are often missing in

Instructions: Identify which sentence or question below is more formal. Then underline any heads or tails.

- 1a. Isn't your sister an artist?
- 1b. Your sister, she's an artist, isn't she?
- 2a. Robert is really quite nice.
- 2b. He's really quite nice, Robert is.

Now add a head or tail to the sentences or questions below. Then rewrite each sentence and question without using a head or tail.

- 3. Samantha is a great singer, _____.
- 4. _____, he can play soccer well, can't he?
- 5. _____, it costs only two dollars, right?
- 6. You ate a lot for dinner, _____.

Answer key: (possible answers)

- 1a. Isn't your sister an artist? (more formal)
- 1b. Your sister, she's an artist, isn't she? (less formal)
- 2a. Robert is really quite nice. (more formal)
- 2b. He's really quite nice, Robert is. (less formal)
- 3. Samantha is a great singer, she is.
Samantha is a great singer. (rewritten)
- 4. Your brother, he can play soccer well, can't he?
Your brother can play soccer well, can't he? (rewritten)
- 5. That pen, it costs only two dollars, right?
That pen costs only two dollars, right? (rewritten)
- 6. You ate a lot for dinner, you did.
You ate a lot for dinner. (rewritten)

Table 3. Heads and tails worksheet

students' conversations and in textbook dialogues. A variety of classroom activities with discussion, authentic materials, and dialogues can highlight the ubiquity and usefulness of these features and encourage students to add fillers and backchannels to their own conversations.

Activity 1: Add fillers and backchannels to student dialogues

To raise students' awareness of fillers and backchannels, the teacher first has students work with a partner to write a short dialogue or conversation. Next, the teacher introduces the concept of fillers and backchannels, explains their function, and then asks students to categorize a group of words as either fillers or backchannels, as in Table 4.

After discussing the results, the teacher asks students to revise their original written conversation by adding in appropriate fillers and backchannels. Students then act out both conversations for the class, highlighting the difference between a more artificial dialogue versus a natural one containing fillers and backchannels. Alternatively, students can have

two conversations with a partner on a given topic: one using fillers and backchannels, and one without using fillers and backchannels. After the conversations are over, students discuss how including fillers and backchannels in their conversations affected their conversation skills, their relationship with their partner, and their feelings while speaking.

Activity 2: Fillers and backchannels in video clips

To highlight the pervasiveness of fillers and backchannels in everyday English, the teacher can play a short video clip and ask students to count the number of fillers and backchannels they hear in the clip, using the worksheet in Table 5.

Alternatively, the teacher could give students a script in which the fillers and backchannels have been omitted and ask them to fill in the missing words as they watch the video. These video activities show students how common these words are in conversational English. However, as with the ellipsis video activity, it is important to choose authentic video clips so that students are

<p>Instructions: Work with a partner to put the following 10 words and utterances in the correct column below. Then add at least two new words or utterances to each column.</p> <p>1. oh 2. hmm 3. ah 4. um 5. I see 6. uh 7. uh-huh 8. er 9. really 10. eh</p>	
<p>Fillers: words that give you time to think, create a pause, or indicate you're not finished talking</p>	<p>Backchannels: words that show you are listening and understand what someone else is saying</p>
<p>Answers: hmm, um, er, eh, uh Possible additional words: well, and</p>	<p>Answers: oh, ah, I see, uh-huh, really Possible additional words: wow, yeah, yes</p>

Table 4. Classifying fillers and backchannels

<p>Directions: Watch the video and every time you hear one of the words or utterances, check that box.</p>									
Oh	Hmm	Ah/Uh	Um	Well	I see	Uh-huh	Er	Really	Yeah/Yes

Table 5. Worksheet to count fillers and backchannels

exposed to natural conversations containing fillers and backchannels.

Activity 3: Add fillers and backchannels to textbook dialogues

In this activity, teachers select an artificial dialogue from the textbook—or write one themselves—and ask students to add fillers and backchannels. Table 6 shows the results after students have added fillers and backchannels. This activity will prompt discussion on the most appropriate places to use fillers and backchannels, their functions in conversation, and perhaps the artificiality of some ELT textbook dialogues.

Spoken English activities for phrasal chunks

ELT textbooks tend to emphasize phrasal chunks of spoken English over syntactic conversational structures, perhaps because of their accessibility and relative ease of being learned (Cullen and Kuo 2007). Even though phrasal chunks are featured in many textbooks, a variety of classroom activities can supplement textbook materials; highlight the function, usefulness, and ubiquity of phrasal chunks; and give students more practice incorporating lexical units into their own conversations.

Activity 1: Categorizing phrasal chunks

Phrasal chunks serve a variety of interpersonal and communicative functions. After

introducing new phrasal chunks or reviewing those from the textbook, teachers ask students to categorize them by function or situation, as shown in Table 7. This activity encourages students to categorize the new phrases they have learned, enabling them to memorize the new words more easily and use them in appropriate situations.

Activity 2: Phrasal chunks in video clips

In this activity, students watch a video and count the new phrasal chunks they hear to raise their awareness of the overall frequency of chunks. Alternatively, the teacher prepares a script with the phrasal chunks omitted and asks students to write them in while watching the video. Afterwards, the teacher discusses the role of the phrasal chunks in the conversation and asks students to act out the new script, including the phrasal chunks studied, for practice.

Activity 3: Add phrasal chunks to conversations

In this activity, students add phrasal chunks into pre-existing conversations, either from their textbooks or dialogues written by the students themselves. Acting out these new dialogues for the class leads to a comparison of different groups' dialogues and a discussion about the appropriateness of the different choices and placement of the phrasal chunks. Finally, for a more open-ended, communicative activity, students have a conversation with a partner and use at least five of the new terms. This range of

Dialogue from textbook (students have added the fillers and backchannels in italics)	
Teacher:	The question for Unit 1 is “Do you like your name?” How about you, Yuna? <i>Um ...</i> Were you named after someone in your family?
Yuna:	Yes, <i>er ...</i> my aunt.
Teacher:	<i>Oh, I see.</i> Is your name common in Korea?
Yuna:	Yes, it is.
Teacher:	<i>Really?</i> What about you, Sophy? <i>Um ...</i> Where did your name come from?
Sophy:	<i>Ah,</i> It's not really a family name. (teacher: <i>Oh</i>) My parents just liked it.
Teacher:	<i>Uh-huh,</i> Do you like it?
Sophy:	Yes, I do. But, <i>um ...</i> people spell it wrong a lot. (teacher: <i>Uh-huh</i>) Or they think it's short for Sofia, but it's not.
Teacher:	<i>I see.</i> Do you like your name, Marcus?
Marcus:	Sure. It's a great name. <i>Ah ...</i> It was my father's and my grandfather's and my great-grandfather's.

Table 6. Adding fillers and backchannels to textbook dialogue

activities introduces new phrasal chunks to the students, raises their awareness, and helps them incorporate the new words and phrases into their speech through practice.

Multiple spoken grammar features

The previous activities and suggestions isolate specific characteristics of spoken grammar in order to introduce the features, raise students’ awareness, and provide controlled practice. However, the fact is that natural, authentic conversation usually includes multiple features of spoken grammar. Accordingly, many of the activities can be adapted to include a focus on multiple characteristics of spoken grammar at the same time. For example, students could add multiple characteristics of spoken grammar to written conversations over the course of the semester, giving continuity to the instruction and allowing them to clearly see how their conversation changes with each new addition. At the end of the course, students could act out both the original and the final conversation for the class, followed by a discussion of the role of spoken grammar in face-to-face conversation. Similarly, after introducing a number of features of spoken grammar, teachers could ask

students to watch a video and count several features of spoken grammar at once or fill in blanks in a script for multiple characteristics of spoken grammar. Focusing on multiple features highlights how these characteristics work together to create smooth, natural speech and help speakers cope with the pressures of real-time conversation.

Interview project

Another way to raise students’ awareness of the role of spoken grammar in authentic speech is to ask them to complete a project where they interview and record an advanced or native speaker of English and then transcribe the conversation. After identifying the elements of spoken grammar that were taught in class, students give a presentation in which they play the recording, highlight the characteristics of spoken grammar in their transcript, and discuss with the class. Again, this type of project helps students apply what they learned in class to real, authentic speech and highlights the role of spoken grammar in everyday conversation. As an example of this project, Table 8 contains a short excerpt from an English podcast (video and transcript can be found at Luke’s English Podcast, <http://>

<p>Instructions: Put the following phrases into the appropriate column of the chart below. Then add two more phrases for each category.</p> <p>1. by the way 2. sort of 3. a bit 4. speaking of 5. a little bit 6. you know 7. stuff like that 8. kind of 9. I mean 10. as I was saying 11. or something 12. quite a lot of 13. plenty of</p>		
<p>Create vagueness: when you do not want to or cannot be very specific</p>	<p>Modify: to modify an amount</p>	<p>Mark discourse structures: to connect ideas</p>
<p>Answers: sort of, kind of, stuff like that, or something</p> <p>Possible additional phrases: or so, more or less, and so on</p>	<p>Answers: a bit, a little bit, quite a lot of, plenty of</p> <p>Possible additional phrases: a great deal of, a little, a large number of, the majority of</p>	<p>Answers: you know, I mean, as I was saying, by the way, speaking of</p> <p>Possible additional phrases: on the other hand, basically, actually, let’s see</p>

Table 7. Categorizing phrasal chunks

teacherluke.co.uk/2011/03/29/london-video-interviews-pt-3).

To transcribe their interview, students must listen carefully to their recording many times and analyze the authentic data, increasing their understanding of spoken grammar, its function in conversation, and its frequency in authentic speech. To prepare students for this project, the teacher could have students first transcribe and analyze texts in class before attempting the project on their own. Luke’s English Podcast (<http://teacherluke.co.uk>) is a useful resource for this activity, as it contains interviews of native speakers with transcripts already prepared. After watching the videos and analyzing the transcripts, students will feel empowered and motivated to make and share their own videos with their own interview questions.

Conclusion

A major goal of communicative language teaching is to develop students’ abilities to communicate in meaningful contexts. This article has outlined specific features of spoken English grammar and shown their usefulness in meeting the demands of interactive, real-time conversation. As Basturkmen (2001, 5) points out, recent communication methodologies often focus on “activities to get students to speak, rather than on providing them with the means to interact.” It only makes sense, then, that in order for our students to communicate effectively in spoken English, they need to both recognize and use these features of spoken grammar, even in an EFL context. For teachers who find that ELT materials lack activities for teaching spoken grammar, this

article outlines a variety of activities for teaching features that contribute to the development of fluency by allowing students to adapt to the pressures of real-time communication (Mumford 2009).

With English increasingly being used to communicate in international contexts, it is more important than ever that students be taught conventions and features of spoken English that will allow them to become effective communicators. Any teacher who advocates a communicative language teaching approach should also support specific instruction and practice of select features of spoken English, which allow students to cope with the pressures and interactive nature of English conversation. By incorporating a few of the suggested activities into English classes, teachers can both help students interact in English and prevent them from sounding like an inauthentic English textbook.

References

- Basturkmen, H. 2001. Descriptions of spoken language for higher level learners: The example of questioning. *ELT Journal* 55 (1): 4–13.
- Carter, R., and M. McCarthy. 1995. Grammar and the spoken language. *Applied Linguistics* 16 (2): 141–158.
- Cullen, R., and I. Kuo. 2007. Spoken grammar and ELT course materials: A missing link? *TESOL Quarterly* 41 (2): 361–386.
- Goh, C. 2009. Perspectives on spoken grammar. *ELT Journal* 63 (4): 303–312.
- Hughes, R., and M. McCarthy. 1998. From sentence to discourse: Discourse grammar and English language teaching. *TESOL Quarterly* 32 (2): 263–287.
- Leech, G. 2000. Grammars of spoken English: New outcomes of corpus-oriented research. *Language Learning* 50 (4): 675–724.

Example: Interview project (spoken grammar features in bold, with categories in parentheses after each speaker’s turn)

Interviewer: So, are you from London?

Interviewee: Yep, I sure am.

Interviewer: How long have you lived here?

Interviewee: **21 years.** (ellipsis)

Interviewer: **Right, okay.** So, **uh**, what’s the best thing about it? (backchannel, filler)

Interviewee: **Best thing**, there’s always something to do, places to go. There’s lots of tourist attractions around here. **Um, things**, that’s the main thing, it’s things to do. You can never be bored in London. (Interviewer: **Yeah**). **Always places, things to see.** (head, filler, head, backchannel, ellipsis)

Table 8. Multiple spoken grammar features activity

- McCarthy, M. 2006. *Explorations in corpus linguistics*. Cambridge: Cambridge University Press.
- McCarthy, M., and R. Carter. 1995. Spoken grammar: What is it and how can we teach it? *ELT Journal* 49 (3): 207–218.
- Mumford, S. 2009. An analysis of spoken grammar: The case for production. *ELT Journal* 63 (2): 137–144.
- Rühlemann, C. 2006. Coming to terms with conversational grammar: ‘Dislocation’ and ‘dysfluency.’ *International Journal of Corpus Linguistics* 11 (4): 385–409.
- . 2008. A register approach to teaching conversation: Farewell to standard English? *Applied Linguistics* 29 (4): 672–693.
- Stenström, A. 2004. *An introduction to spoken interaction*. London: Longman.
- Timmis, I. 2002. Native-speaker norms and international English: A classroom view. *ELT Journal* 56 (3): 240–249.
- . 2005. Towards a framework for teaching spoken grammar. *ELT Journal* 59 (2): 117–125.
- . 2010. ‘Tails’ of linguistic survival. *Applied Linguistics* 31 (3): 325–345.
- Willis, D. 2003. *Rules, patterns and words: Grammar and lexis in English language teaching*. Cambridge: Cambridge University Press.

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Personal Learning Environments for Supporting Out-of-Class Language Learning

A Personal Learning Environment (PLE) is a learner-controlled environment for language learning. More specifically, it is a combination of tools (usually digital) and resources chosen by the learner to support different aspects of the learning process, from goal setting to materials selection to assessment. The importance of PLEs for teachers lies in their ability to help students develop autonomy and prepare them for lifelong learning. New technologies are making the creation of PLEs easier and their use more effective. Although PLEs can be created without the aid of technology, in this article I will consider their use mostly in the context of online resources. I will also discuss PLEs' use for language learning and look at ways in which teachers can use them to help students take responsibility for their own learning.

The challenge: How to encourage learner autonomy?

One of the challenges I have faced over the years is how to encourage my

students to develop learner autonomy. Most programs I've taught in have made it hard for me to do this; in Thailand, which is an English as a foreign language (EFL) instructional context, most students attended my class for only two hours per week and had very little opportunity outside to encounter and use English. Meanwhile, in New Zealand, where I do most of my teaching, students are not usually given credit for their learning outside the classroom. The majority of my students are at university, and their busy schedules thus make it unlikely they will spend much time actively planning and managing their own language learning beyond the requirements of the course. A problem common to all contexts I have taught in is that most learners are simply not used to learning on their own. Without proper guidance and ongoing support, many do not have the skills and experience to be successful in learning independently.

The main challenge then is to find ways to extend students' learning

beyond the classroom—to encourage them to take control over their learning while still being able to monitor and support them. I have found that using PLEs is an effective way to do this.

What are Personal Learning Environments?

PLEs bring together tools and resources that help learners control their language-learning process. These tools and resources are usually selected and maintained by learners themselves and can be accessed from a computer or (increasingly) from a smartphone.

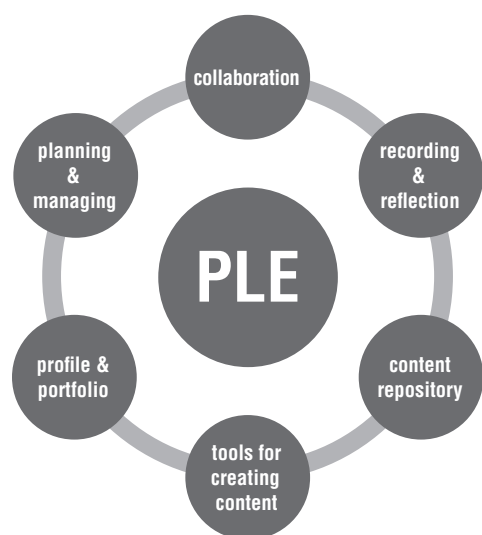


Figure 1. Common tools used to create a PLE

Figure 1 shows the common tools used to create a PLE; all of them help manage the learning process. For example, a portfolio (or e-portfolio if it is online) allows learners to collect evidence of completed work, as well as more formal achievements, such as course completions, grades, test scores, and so on. Learners can choose the extent to which they want to make this information public and share it with their teacher, peers, and possibly future employers. Related to the portfolio is a profile, usually public, showing learning experience, the language(s) the person is learning, and any other personal information the learner wants to share with others.

Collaboration tools allow learners to connect with others. Such tools can be designed specifically to help learners work together on a project, such as a wiki, or they can be more

general tools that learners use to post questions to each other. Examples include social networking sites like Facebook and Google+, as well as social bookmarking tools to share bookmarks of interesting sites for learning. Synchronous tools, which require participants to communicate in real time, such as chat or Instant Messenger (IM) programs and Voice over Internet Protocol (VoIP) programs like Skype also fall into this category.

In terms of managing learning, various planning and monitoring tools help learners to set goals, create to-do lists for short-term actions (as Evernote does), and check progress. For example, mindmapping programs help learners brainstorm and categorize areas for improvement. Journals help learners record and reflect on their work and can take the form of a blog, a simple text document, or one of many dedicated programs and apps. Finally, a content repository is where learners store language-learning content, such as videos (for example, by subscribing to a YouTube channel), websites (which can be subscribed to with RSS feeds), shared documents and files (Google Drive), and so on.

Clearly there is some overlap between these categories, and different tools can be used for different purposes. For example, a learner could create a Google+ page, share certain posts with other learners, and keep private the posts that are intended for personal reflection. As will become clear, most of the tools in a PLE are not specific to language learning but instead are sites and apps that many students already use for a range of purposes in their everyday lives. In my own teaching I have found this familiarity to be a major benefit, as it means I have to spend less time showing the students how to use the technology and have more time to show them how to learn with it.

PLEs imply or facilitate certain pedagogic approaches to learning (Attwell 2007). They are individualised environments, specific to learners' preferences and needs. Learners tailor the environment with their preferred tools and use those tools in the ways that suit them, usually at times and in places convenient to them. PLEs are also social spaces that allow learners to connect with other learners, native speakers, and teachers. In this way, they are open environments, not restricted to the classroom but supporting interaction with the broader

community. The other main characteristic of PLEs is that they offer informal environments that learners themselves create without the help of a teacher and use in the full range of contexts that make up a learner's life. As a result, PLEs also extend beyond the immediate pedagogic environment of a course or a school and provide support for lifelong learning.

Those who are familiar with Virtual Learning Environments (VLEs) might ask how PLEs differ from VLEs. Although terminology is used differently across contexts and is continually changing, in general VLEs are environments controlled by an institution or a teacher for the delivery of courses. For example, a course website hosted on Moodle or Blackboard places the responsibility for determining lesson content and sequencing, monitoring, and assessment with the teacher. Such environments often include some of the tools also found in PLEs, such as blogs or forums; of course, they are not static environments, and many teachers have succeeded in using such environments to give learners more control over their learning. But on the whole, VLEs are teacher-directed, institution-focused environments that support the delivery of set courses. In this sense they can be used as a complement to a PLE. Successful integration relies on students being able to transition from the VLE and continue working with their PLE once they finish the course or leave the school.

Of course, learners' success in doing that depends on a range of factors, such as their willingness to learn independently, their ability to select the most appropriate resources, and their knowledge of how to use them effectively. Clearly, there is a potential role for teachers to support learners in developing the necessary skills. That is the focus of the rest of this article.

Benefits of PLEs for teachers

Although many learners use PLEs informally, it is possible to bring PLEs into the curriculum as a non-formal complement to the course or as a resource for teachers to draw on. For one thing, the use of PLEs offers teachers a way to foster autonomy. Because PLEs include tools for goal setting and assessment, for example, they can be used to model, practise, and give feedback on different aspects of autonomous learning.

PLEs also make it easy for students to extend their learning beyond the classroom, so in this sense they offer a practical way for teachers to facilitate transfer of skills from the formal to the non-formal domain. Many of the programs included in PLEs allow the sharing of information, which means that teachers potentially can see learners' progress and give feedback.

Similarly, students can share content with others, and most PLEs include tools for this specific purpose. In this sense, PLEs can be used by teachers to support various types of learner interaction, such as group learning and peer feedback.

But perhaps the main benefit is that PLEs prepare students for ongoing development beyond the classroom and provide a practical means to introduce the tools that will support lifelong learning.

For these reasons, teachers may want to acquaint themselves with PLEs to enhance the long-term learning outcomes of their students. I now offer an example of how to integrate PLEs; I then discuss some of their practical and technical aspects.

Implementing PLEs in the language classroom

What follows is an outline of how I have integrated PLEs into my classes. The key is to make their use an integral part of the course by asking students to use their PLEs to take increasing control over managing all aspects of their learning. This is not something that can be done in one or two lessons, but rather is something that students should be guided towards throughout the course.

Extending the classroom with a PLE

Week 1

1. Provide a rationale. Explain to learners what a PLE is and why you intend to use it. Give them a rationale for the importance of knowing how to manage their own learning. If possible, particularly if you are working with tertiary students, consider asking a more senior student or a graduate to come in and share stories of needing to improve their English throughout their studies and careers and the importance of being able to do this by themselves.

2. Set clear expectations. Be clear to your learners about how (and how much) you want them to use their PLEs and what skills you want them to be able to demonstrate. For example, explain that by the end of the course they will need to be able to identify their own language needs, develop a learning plan, and monitor their progress.
3. Give incentives. Consider the possibility of giving students credit for using their PLEs, completing a portfolio, creating a learning plan, and so on.
4. Provide training in the use of a PLE. Show examples of some of the programs students can use—ideally, choose those they are already familiar with—and the types of information they can record. For example, show a learning record in Evernote or a student’s written reflection in a blog post.

Week 2

1. Because most students will have little or no experience in managing their own learning, it is important to start simple. One suggestion is to begin by asking learners to record what language they learn during the week, both in class and outside. Encourage students to use any tool they are already familiar with. In some contexts, students are most likely to keep notes on paper; in others, students are more likely to use a note-taking app on their phones. An alternative is for learners to audio-record their notes on their phones. Learners can also upload short videos of themselves on a private YouTube channel.
2. Ask learners to identify three things they found difficult. The difficulties could be related to English skills, to their learning in class (e.g., they found it difficult to concentrate in class), or their learning outside class (e.g., they could not find the time to practise or make themselves understood when conversing with a native speaker).

Week 3

1. Ask learners to share some of their notes. One benefit of sharing is that many learners are fascinated to see that others pick up very different things from class than they do; at the same time, many learners are reassured to see that they share similar problems in their learning.

2. Brainstorm possible solutions to problems learners have identified.
3. Pair students based on the similar problems they experienced. Explain that in the coming week, as part of their homework, they will try out some of the solutions discussed in class and share their experiences by posting their reflections on the social network of their choice. Tell them that they can include pictures, audio recordings, or texts—whatever gets their message across.

Weeks 4 and 5

1. Tell students that during these two weeks they will have to decide on one topic or skill (depending on the level of your students and the focus of the course) and develop a simple learning plan. For this they will have to identify (a) any resources (online or otherwise) they will use, (b) the estimated amount of time they will spend, and (c) the tools they will use to record and share their learning with you.
2. It is important to give students an example of what you expect their learning plan to look like.
3. Monitor students’ activity and give feedback. Optionally, students can comment on each other’s plans.

Week 6

1. Explain to students the importance of monitoring their learning and developing the ability to assess their progress, either individually, through self-assessment, or through peer feedback.
2. Model and practise giving feedback in class.
3. Take an existing homework task or assignment that is part of the course. Pair students and in the week following, ask them to complete the assignment and assess themselves and each other.

Toward the end of course

1. Show students one of the available e-portfolio tools and explain its purpose. Get them to add your course to the portfolio along with their personal summaries of what they feel they have learned.
2. Show students an example of a long-term learning plan and have them complete their own and add it to their preferred

- application (e.g., a calendar, a blog, or—if students are working in pairs or small groups—a wiki).
3. Give detailed feedback to ensure students have a workable plan, which will encourage them to continue learning after the end of your course.

Of course, doing *all* of the above may not be necessary or possible in all situations. Although the amount of time needed is not as great as it may seem (as the use of the PLE is related to the course content), it is not insignificant. You may instead, for example, wish to focus on just one or two elements, such as getting students to identify their learning needs or to record their reflections.

Implementing PLEs in the language classroom: Technical considerations

As is true of most technological environments in education, the implementation of PLEs in the classroom has both a practical and a pedagogical side. At the practical level, there are a number of questions to consider:

1. Do I really need to learn how to use all those programs?

No. The point is to encourage learners to do this for themselves. You may need to know *about* different programs for, say, sharing documents online, but you do not need to install or use all of them yourself. In a sense, the tools within the PLE are like the books in a library; you do not need to read them all, just guide your learners in using them. In the PLE Resources at the end of this article, you will find a link to a website that offers a good compilation of software for different learning purposes; that can be used as a starting point.

2. Who builds the PLE?

The learners do. You may want to use some of the examples in the PLE Resources list as models to show learners what a PLE looks like and what tools it is made up of, but the responsibility for creating their personal environment lies with them.

3. Do learners need extensive technical skills?

Yes and no. They need to be comfortable using technology and in particular the Internet. But many of the tools used in PLEs are commonly available programs that learners are familiar with, such as social networking

sites, microblogs, and forums. What will be new for most learners is how to use these tools to support their learning.

4. How much information should learners share from their PLEs?

PLEs are highly personal spaces that contain information from beyond the classroom, or indeed outside the educational sphere. Many learners will also continue using their PLEs for years, and so the PLEs may contain information that is not related to your particular course. For this reason, learners may be reluctant to give anyone else access to their information. Luckily, most applications make it easy to share only particular information (for example, learners can choose to share one Google document, but not another).

5. Are there any privacy considerations?

As is the case with many social media, information can be shared easily with other learners or people outside the classroom. This has benefits for learning but at the same time also has obvious drawbacks. With younger students, safeguards should restrict access to this information. At all age levels, learners will need to be clear about what they are sharing with whom and what happens to that information, and teachers need to be on the lookout for bullying. In some situations, it might be helpful or necessary to explicitly discuss rules and guidelines with the class and perhaps have students sign contracts.

6. How about the cost of the software and support?

The vast majority of the programs used in PLEs are freely available online, and for programs that are not, alternatives are often available. Also, most of the programs are designed to be used by the general public and are very user-friendly; technical support is unlikely to be needed. The use of electronic PLEs does assume that learners have access to Internet-connected computers, either at school or (ideally) at home. This assumption cannot be made in all contexts or for all learners. However, an increasing number of students do have smartphones, and most of the tools for PLEs are designed to be accessed on them. Nonetheless, before implementing PLEs, you should check that the necessary hardware and bandwidth are available.

Implementing PLEs in the language classroom: Pedagogical considerations

At the pedagogical level, implementing PLEs requires examination of several other issues:

1. Moving towards learner control

The most challenging and also the most exciting aspect of using PLEs with learners is the way PLEs can have a profound effect on learning and on classroom teaching practice. For one thing, PLEs change the balance of power in class in that students take more responsibility for their learning. For some learners, this may be a new experience, and some may well question this change. As with all classroom practice, the best approach is to explain the rationale behind this aspect of PLEs. Another is to introduce student-directed learning tasks gradually and to give ample support. For more on introducing the concept of learner autonomy to learners, see Benson (2011).

2. Monitoring personal learning

Frequent feedback on personal learning practice is important, as is the inclusion of models of alternative and additional ways of learning, suggestions for further practice, and so on. Here are examples of the types of follow-up questions I would commonly post in reply to learners' reflections or records:

- Why did you decide to focus on this grammar point?
- Did that activity help you to practise what we learned in class?
- How else could you have done this?
- How did your classmates tackle this problem?

3. Assessing learning with PLEs

PLEs are not directly about language learning, but rather about organising, monitoring, and critically reflecting on that learning. It is important that learners see that you value the time they spend on these tasks. As with the assessment of learner strategies, there is no easy quiz you can administer or a score you can give. Nonetheless, you can rate the frequency, extent, and depth of learners' reflections, the amount of time they engage with their PLEs, the number of helpful comments they make on other learners' PLEs, and so on. Some teachers have successfully experimented

with learner self-assessment (see Ekbatani and Pierson 2000).

4. Encouraging out-of-class learning

PLEs are, at their heart, collections of tools for student-directed learning, and if they are to support lifelong learning, learners will need to start seeing and using them as such. This only works if learners perceive direct links with their language-learning practice and are required to make use of PLE tools in tasks that gradually extend beyond the classroom and the school. Learners could, for example, complete a group project and report their results online to share with other learners, who can then comment on them.

The impact of PLEs on learning and teaching practice

PLEs can lead to significant changes in the role of teacher, the learners, and in some ways the broader curriculum. As mentioned above, PLEs give students more control over their learning, which may disrupt regular classroom practice. Breen and Littlejohn (2000) discuss the role of negotiation and argue that the most successful classes are those that revolve around the learners, not around the teachers or predetermined and static sets of content. PLEs allow learners to explore their wants and needs and to share these with the teacher. In fact, perhaps the most important benefit I have experienced is that PLEs have allowed me to learn things about my students, their difficulties, their preferences, and their backgrounds that I would have otherwise not found out. This awareness has certainly made me a better teacher, but it also requires significant flexibility on my part. In addition to the ability to learn about and accommodate different learner preferences, teachers may also need to take on new roles, such as monitoring online portfolios, commenting on learners' posts, and giving feedback on language practice done outside of class. In this sense, the teacher's role becomes more of that of a facilitator.

PLEs can also affect the way the role of assessment is perceived. With their focus on lifelong learning, PLEs are less about test scores and more about cultivating learners' ability to find opportunities to improve by themselves, regardless of any educational support. This may require the development of alternative means of assessing not just

continued on page 27

Integrating Environmental Education into a Genre-Based EFL Writing Class

Although many fields of study are increasingly promoting awareness of the need to protect the ecosystem by thinking and acting “green,” the concept of environmental education actually has a long history; for example, concerns about global environmental problems were discussed at a 1972 United Nations Conference (Nkwetisama 2011), which resulted in the Belgrade Charter (UNESCO-UNEP 1976), a document that sets out six objectives for environmental education: awareness and knowledge of problems, an attitude of concern, skill at overcoming problems, and evaluation of and participation in solutions. Considering the ambitious objectives of environmental education, increasing students’ awareness of environmental problems and possible solutions is a challenging task.

Nkwetisama (2011, 111) says that environmental education deals with various areas where human activity has a harmful effect and defines

environmental education “as concerted efforts conscientiously organized to teach or draw the attention of human beings about how natural environments function and how these human beings can manage and protect them.” He proposes a long list of environmental issues as possible topics of study, including global warming, greenhouse gas, ozone depletion, species extinction, deforestation, and more (Nkwetisama 2011). As suggested by Jacobs and Cates (2012), there is a great need to take action—not just developing awareness but developing an understanding of causes and becoming competent in evaluating plans to deal with problems. The most important objective of environmental education is actually to get students to participate. That objective is a good fit for language teaching and learning, particularly with language-teaching approaches that emphasize participation in learning rather than merely passing tests (Jacobs and Goatly 2000).

With participation as the goal, teachers can focus instruction on information and activities that protect the environment. Activities might be directly related to school life, such as adopting a zero-waste classroom policy, growing gardens on the school ground, or bringing nature to the classroom (which can be as simple as having students bring in plants and take responsibility for caring for them). Other activities that can raise students' environmental awareness and encourage active participation include:

- getting to school “greenly” by walking, bicycling, or taking public transport; students and parents then realize that replacing car or motorcycle trips to school reduces air pollution.
- minimizing the use of paper, or if possible going paperless, by submitting all assignments, reports, and papers by email or other electronic means; students learn that the more paper they use, the more trees need to be cut.
- reducing the use of plastics through recycling and reuse; students understand the consequences of behavior such as throwing a bag of garbage into a river or lake, leaving plastic snack packages lying around, and using plastic bags for almost everything and discarding them in places other than waste bins.

This article suggests practical activities for integrating environmental education into English language teaching (ELT), based on the experiences of one of the authors, who added environmentally related elements to an English as a foreign language (EFL) writing class. Since the general EFL teaching and learning process in our context applies the genre-based approach (GBA), this article also discusses how environmental issues can be incorporated using that approach, especially for teaching the productive skills.

The environment and language education

With the number of challenges facing our planet, it is critical to raise students' environmental awareness and teach them environmental values. For language teachers, trends towards socially responsible education motivate them “to use global issues as a context to develop language and social skills” (Gürsoy and Sağlam 2011, 47). The educational benefits are pointed out by Hauschild, Poltavtchenko, and Stoller (2012), who show that

connecting environmental concerns with language instruction (1) increases students' interest in significant current issues, (2) educates them on how to make the planet more healthy, and (3) offers real contexts for language learning and authentic interaction.

Because environmental awareness has increased all over the world, there is a wider availability of appropriate materials, and environmentally themed topics are found in numerous textbooks (Hauschild, Poltavtchenko, and Stoller 2012). In addition, “teachers can use the Internet, where available, to find environment-related resources that can be adapted to meet their students' content- and language-learning needs” (Hauschild, Poltavtchenko, and Stoller 2012, 4). It is becoming common for language instructors to integrate environmental issues through their materials, techniques, media, classroom activities, and syllabus design (Cates 1990). Teachers can also find lists of “green” resources—including environmental curricula, lesson plans, pictures, flashcards, poems, songs, videos, graded readers, and art projects—on websites provided by environmentalists, teaching experts, teachers' associations, government institutions, and others.

The genre-based approach and the teaching of writing

According to Yan (2005), the GBA gained popularity in the 1980s, when it was realized that students would benefit from studying various text types. The approach originated in response to dissatisfaction with the practices of previous writing approaches that focused on narrative genres and mostly overlooked other types of writing (Oliver 1999). In the Australian context, according to Feez and Joyce (1998, 24), the genre approach to language learning was introduced by linguists and teachers who had “been working with disadvantaged groups of students.” The GBA offers students “explicit and systematic explanations of the ways language functions in social contexts” and helps them “to consider the forces outside the individual that help guide purposes, establish relationships, and ultimately shape writing” (Hyland 2003, 18). In other words, the GBA reveals the strong association between aspects of language forms and functions, which are essential in teaching

writing. Additionally, it enables students to develop flexible thinking and observe the way ideas are organized (Kim 2006).

The GBA to teaching writing thus equips students with explicit knowledge of how genres of texts are organized and why they are created that way (Hyland 2007). Students learn that genres have special communicative functions, and the subject matter and writing style, as well as the introduction, body, and conclusion of a text, are guided by a particular genre (Martin 1989; Swales 1990).

In our context, genres are taught in a four-stage procedure with different learning objectives and activities for each stage. This allows students to gradually achieve independent control of a particular text type. The step-by-step procedural activities of teaching writing using the GBA are described in detail below.

Stage 1: Building knowledge of the field

The purpose of this stage is to activate students' schema, or background knowledge, which is essential for them to understand the topic. To reinforce schema activation, teachers encourage idea sharing about the topic so that later students will be ready to write about it. To orient students to general text features, vocabulary, and social and situational contexts, teachers ask leading questions or provide students with information by using aids such as pictures, movie excerpts, slides, or webpages. Some vocabulary related to the topic is also introduced and discussed in this stage.

Stage 2: Modeling of the text

This stage is intended for students to explore a genre through the presentation of a model text, which can be created or found in various places, such as brochures, fliers, newspapers, magazines, and webpages. Teachers help students investigate the text type and its features, covering the social function, the generic structure, and linguistic features (Cope and Kalantzis 1993). Teachers also ask students about the audience of the model text.

Awareness of the text style and format during the modeling stage provides students with input about the organization of the type of text that they are going to write—and what to expect when they encounter other examples of the same text type later on. Student–student and teacher–student conferences can be conducted to identify the generic structure

and grammatical features found in the text. Understanding the overall structure of the text goes a long way toward helping students construct their own texts later on.

Stage 3: Joint construction of the text

This stage involves students constructing an example of the genre in pairs or small groups. The philosophy behind this pedagogical activity is based on Vygotsky's (1978) concept of *zone of proximal development*, which is the stage of learning where students can acquire new knowledge only with assistance and social interaction with the teacher. Therefore, teachers scaffold or provide help for students, particularly at the beginning phase of learning a genre where teachers need to intervene to help students map out the model texts (Hyland 2003). When students begin to contribute to the construction of the text more independently, the teachers gradually reduce the help they offer (Feez and Joyce 1998). Hyland (2003) suggests that this support should be strategically reduced as students make gains; when they have gained confidence with their knowledge and skills, they can jointly construct a text with peer assistance in pairs or in groups.

Stage 4: Independent construction of a text

In this stage, students draft and present an entire text. Working independently on the construction of a text “explicitly encourages creative exploitation of the genre and its possibilities” (Martin 1999, 127).

The following sections illustrate how to apply these four stages of the GBA to teach environmental themes in the descriptive, narrative, and procedure genres.

Teaching descriptive writing

In descriptive text, students should be able to describe something or someone through the exploitation of their senses, and they need to become quite familiar with the object that they are going to describe. To help them, the teacher explores objects within the school context, home context, or the surrounding area, and students describe an object and relate it to environmental concerns.

Stage 1: Building knowledge

To begin, the teacher brings a picture of a tree in the school yard or has the students look

out the window at one. The teacher asks general questions about the tree, such as what the name of the tree is, whether the students are familiar with that kind of tree, and where it is usually found. Further questions about details build on the students' knowledge, such as the approximate height and diameter of the tree, parts of the tree, the color of the tree, and the fruit (if any). In terms of raising students' environmental awareness, it is essential to discuss the tree's benefits for humans and animals, and to ask thought-provoking questions such as how the immediate environment would be affected if the tree were cut down. In this question-and-answer session, the teacher writes on the board related vocabulary that will be useful when students describe the tree later on. The teacher can also use semantic webs or graphic organizers to help students classify the vocabulary.

Stage 2: Modeling

In the modeling stage, the teacher shows a model text to the students and asks them to read it individually before working in groups to analyze the text in terms of purpose, generic structure, and linguistic features. Students are given a chart to fill out to help them keep track of these features. It is ideal if the model text relates to the description of the tree or other object presented earlier in order for students to see the vocabulary in use, which means that teachers might need to create the model text themselves.

Stage 3: Joint construction

After the modeling stage, the teacher presents a picture of another tree in a different location. Then students work in pairs and brainstorm ideas about this new tree, perhaps by using semantic webs or graphic organizers. The teacher supports students by giving them a guided writing activity sheet on which they write down the generic structure of the text—that is, the identification and the description sections. To add a sense of environmental awareness, the teacher also provides space for students to fill in their feelings about the tree, describe ways they think the tree is useful, or suggest what should be done to keep it standing strong.

Next, students use the writing activity sheet to draft their composition. The length of the draft will depend on students' ability. Drafts are reviewed by teachers or by peers;

reviewers particularly focus on checking to see whether the drafts include (1) features of the description genre and (2) details about the importance of the tree in the environment.

Stage 4: Independent construction

The independent construction stage is the most interesting part of teaching description and relating it to environmental education. Either as groups or individuals, students go outside and observe their school environment. This can be done during class and takes 10 minutes or more. Students receive a list of objects that they can select within their school environment—one of the trees in the school yard, flowers in pots, flowers in the school garden, fish in a pond, waste bins, and so on. Students write down important information, such as the name of the object or place to be described, reasons for choosing it, details they noticed, the relationship of the object to other things near it, and benefits to humans and animals. If they like, students can take pictures to help them describe the selected object. Later, back in the classroom, the writing process continues, as students brainstorm ideas and vocabulary, draft, review, and revise. In the end, teachers ask students to revise their composition in pairs and publish it in a class magazine or on their own social media site.

A similar activity, which can also take place in the independent construction stage, is an outside-school observation. Teachers assign students to observe their surrounding environment, such as their home or neighborhood. Students are equipped with the following lists:

- common and easily found things that they can describe, such as a gutter full of rubbish, butterflies flying around a blooming flower, a full waste bin in the kitchen, a clean yard, a dirty yard, a small river nearby, or a wilted plant or flower
- questions about the object or place they are going to describe (e.g., What is the name of the object? Why did you choose the object? What does the object look/smell/feel like? How does the object benefit or harm humans, animals, or plants?)

Whether students do their observing at the school or somewhere else, they will develop awareness of problems and recognize the need to take an active role in protecting the envi-

ronment. Students are encouraged to write and share their descriptions electronically, on posters, or by reading to the class or in groups, and the class can hold a follow-up discussion in which students consider questions such as:

- What did you learn from this activity?
- What did you notice that you never noticed before?
- What things did you observe that you like and would like to see preserved or strengthened?
- What things did you observe that you do not like, or that are harmful, and would like to see reduced or eliminated?
- What can you do, or what can we do as a class, a school, and a community, to help?

Following is an example of a descriptive text based on an observation outside the classroom written by our students Ella and Ummul. It is called “The Waste Bins.”

There are three waste bins in front of our class that keep our class clean. These bins are the place for us to throw away our trash. They are made of truck tires that are not used anymore. The colors of the bins distinguish the types of waste that we throw away. The blue waste bin is for plastic, the green bin is for paper, and the yellow one is for leaves and grass. The bins have similar shape. They are round with approximately 35 cm. diameter. The length is perhaps 80 cm., with plastic handle on each side. Unfortunately our bins do not have the lids to close. So that when they are full of trash, they smell so bad. However, we like the bins. Without them, we do not know where to throw away our trash.

Teaching narrative writing

Before students are asked to write a narrative text, they should be immersed with examples. The texts chosen should not be difficult in terms of grammar and vocabulary. For example, children’s storybooks that are rich with environmental themes are appropriate for teaching narrative writing.

Stage 1: Building knowledge

To take advantage of background knowledge, the teacher provides a text or plays a short video or excerpt from a movie (not more than a few minutes). The book or movie

should relate to an environmental topic. Some videos found on the Internet include *Shaun the Sheep – Save the Tree*; *The Story of Fizzy and Sparkling*; *The Giving Tree*; *Gazoon: The African Carrots*; and *The Little Blue Fish*. A question-and-answer session then follows, with students exchanging opinions about the setting, characters, conflicts, moral issues, and environmental themes.

Stage 2: Modeling

If students have watched a video, it is best to use the same story to model the narrative text. Teachers might even create their own story based on the movie. This approach is beneficial in certain ways. First, the language used in the model text can be adjusted to the students’ level; second, teachers can use their language and imagination in creating the story. Teachers guide students in investigating the generic structure of the text—the orientation, complication(s) or conflict, sequence of events, and resolution—as well as language features of the text, such as vocabulary, the use of verb tenses, phrases used to connect events and show relationships, and the dialogue and behavior that develop actions and characters. Teachers work with students to identify these characteristics, and students create and display charts or lists that show these features.

Stage 3: Joint construction

In the joint construction stage, the teacher and students work together to construct texts in the narrative genre through group writing with the help of a picture series or a short movie. Pairs or groups brainstorm environmental themes they would like to emphasize before they write their stories.

Stage 4: Independent construction

Finally, in the independent construction stage, students choose their own environmental theme and then write a story that illustrates that theme. Sample stories with environmental themes might be based on:

- a fish that lives in a dirty pond, told from the fish’s point of view
- a baby bird that has fallen from a tree because someone has cut down the tree
- a boy who saves a floating kitten from a flooding sewer
- a girl who feeds a hungry cat that she found in a dark alley

There are many more appropriate scenarios that teachers can suggest; as an alternative, students can come up with their own themes. As the list suggests, it is fine to let students explore using different points of view (not necessarily their own) to imagine what it is like to be an animal or plant in a certain situation. Teachers should not be demanding in telling students how many paragraphs they should write. After students go through the process of writing—including reviewing and revising—they read their text in front of the class or put it on a wall in the classroom. Again, as with the descriptive texts, follow-up discussions focus on what students learned about the genre and what they noticed about the environment as the result of this activity.

Teaching procedure writing

A procedure is a clearly organized set of steps, the main purpose of which is to enable the reader or audience to follow instructions. For a reader to be able to replicate each step of the procedure, the writer needs to comprehend the entire set of steps clearly before writing. Better yet, the writer should experience the process itself before sharing it with the audience.

Since experiencing is important for comprehension, teaching techniques for this type of text in the writing class include presentation and demonstration. With these techniques, students make predictions about the number of steps needed to complete the process, and they see that the steps are real and concrete. One way to incorporate environmental themes into the procedure-writing activity is to assign students to describe a process in which materials can be recycled in a useful way.

Stage 1: Building knowledge

Presentation and demonstration provide students with adequate background knowledge that can later trigger better comprehension. In the building-knowledge stage, teachers present products from recycled materials either in the classroom or on a screen. Examples of such products are food covers made from plastic bottles, tin flowers made from soft-drink cans, a stationery box made from a shoebox, and a money box made from soft-drink cans. Seeing these objects arouses students' curiosity.

Teachers ask students what the objects are made of, where they can find the materials, and why the creators made the objects from those

materials instead of buying new ones. Next, teachers show students how to make one of the products (or perhaps ask students if they know how to make one). This demonstration should not take too much time, so the product chosen should be a fairly simple one, such as bowling pins made from empty water bottles. If it is impossible to bring the real objects to class, the teacher can use a series of pictures, a wall chart, or a computer presentation.

Stage 2: Modeling

After the demonstration, it is ideal if the model text given to students and the product demonstration are based on the same process so that the students have a vivid connection between what is shown and what is written. The discussion of the model text can be done in pairs or in groups. The discussion should be about the generic structure of the procedure, such as the overall goal, the materials (what tools or items are needed to complete the process and how they are presented and described in the text), and the steps (the actions that must be taken and how they are explained). Teachers also help students investigate the language features that are typically used in the procedure genre, such as temporal conjunctions, action verbs, imperative sentences, and the present tense. During the classroom discussion of the model text, teachers refer to the demonstration presented earlier.

Stage 3: Joint construction

During the joint construction stage, students list things that they see around them and generate ideas about different ways to use those things. Students then select the one best idea to develop into a composition. They construct the text together with peers, while the teacher moves around the class and checks the students' progress to support their learning.

Stage 4: Independent construction

In this stage, individuals write their own procedural composition. For example, the teacher assigns a writing project by asking students to look around their homes at unused things and to think of other uses for those items. Students then choose one idea and describe the procedure involved. Once the process of writing is finished, students share their writing with the class. A follow-up discussion again focuses on both the features

of the procedure genre and the environmental lessons that the students have become aware of during the activity.

There are several ways to publish the students' compositions. Presenting the composition orally by demonstrating each step of the procedure with the help of the chosen media (e.g., pictures, a short video, actual objects) allows other students to ask questions and presenters to answer. Students' work can also be written on a big piece of paper and hung on the classroom wall, in which case groups of students take turns presenting their procedures to other groups. If the texts are posted on a class blog, other students can then react, pose questions, or comment on the clarity of the steps, the creativity of the idea, and the environmental impact of the procedure described.

Conclusion

The activities described in this article connect students to life beyond school, making them aware of the challenges of real life, including environmental issues. Incorporating environmental issues into the English teaching classroom is highly possible because as Cates (1990) suggests, it is a matter of the way we teach; there is no time anymore for students to sit silently learning. It is time for them to venture out to explore their surroundings and to learn from their environment. Learning a language does not mean only learning its structure; it also means learning how to use it to communicate and deliver messages to other people. Thus, it is enriching to have students use the language while they explore life outside the classroom, learn from the world, improve their awareness of the environment, and participate in protecting it.

The genre-based approach is a tool to help students master the language, to enable them to broaden their knowledge about the world, and to allow them to express their opinions about environmental problems and ways to solve them. Incorporating environmental education into ELT does not necessarily mean doing it in every lesson. However, as Jacobs and Cates (2012, 6) suggest, environmental education should "be a regular and consistent part of the curriculum, not just something that is thrown in once or twice a year." It takes years, though, to see the fruits of equipping students with environmental education in the ELT classroom. Having an optimistic view for

a better world enables us to have many reasons to keep trying to empower the younger generation to brighten the shades of green to come.

References

- Cates, K. 1990. Teaching for a better world: Global issues in language education. *The Language Teacher* 14 (5): 3–5.
- Cope, B., and M. Kalantzis. 1993. Introduction: How a genre approach to literacy can transform the way writing is taught. In *The powers of literacy: A genre approach to teaching writing*, ed. B. Cope and M. Kalantzis, 1–21. Bristol, PA: Falmer.
- Feez, S., and H. Joyce. 1998. *Text-based syllabus design*. Sydney: National Centre for English Language Teaching and Research, Macquarie University.
- Gürsoy, E., and G. T. Sağlam. 2011. ELT teacher trainees' attitudes towards environmental education and their tendency to use it in the language classroom. *Journal of International Education Research* 7 (4): 47–52.
- Hauschild, S., E. Poltavtchenko, and F. L. Stoller. 2012. Going green: Merging environmental education and language instruction. *English Teaching Forum* 50 (2): 2–13.
- Hyland, K. 2003. Genre-based pedagogies: A social response to process. *Journal of Second Language Writing* 12 (1): 17–29.
- . 2007. Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of Second Language Writing* 16 (3): 148–164.
- Jacobs, G. M., and K. Cates. 2012. Global education in second language teaching. *International Journal of Physical and Social Sciences* 2 (8): 1–22.
- Jacobs, G. M., and A. Goatly. 2000. The treatment of ecological issues in ELT coursebooks. *ELT Journal* 54 (3): 256–264.
- Kim, M. 2006. Genre-based approach to teaching writing. *TESOL Working Paper Series* 4 (2): 33–39.
- Martin, J. R. 1989. *Factual writing: Exploring and challenging social reality*. 2nd ed. Oxford: Oxford University Press.
- . 1999. Mentoring semogenesis: 'Genre-based' literacy pedagogy. In *Pedagogy and the shaping of consciousness: Linguistic and social processes*, ed. F. Christie, 123–155. London: Cassell.
- Nkwetisama, C. M. 2011. EFL/ESL and environmental education: Towards an eco-applied linguistic awareness in Cameroon. *World Journal of Education* 1 (1): 110–118.
- Oliver, R. 1999. Another look at genre in the teaching of writing. Paper presented at the International Federation for the Teaching of English conference, Warwick, England.
- Swales, J. M. 1990. *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- UNESCO-UNEP. 1976. The Belgrade Charter: A global framework for environmental education. *Connect* 1 (1): 1–9.

Vygotsky, L. S. 1978. *Mind in society: The development of higher psychological processes*, ed. M. Cole, V. John-Steiner, S. Scribner, and E. Souberman. Cambridge, MA: Harvard University Press.

Yan, G. 2005. A process genre model for teaching writing. *English Teaching Forum* 43 (3): 18–26.

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Personal Learning Environments...

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language, but also language-learning skills. For example, students could be asked to show their ability to determine their own language-learning needs, to self-assess, or to create a relevant learning plan.

As PLEs encourage learning beyond the classroom, the focus moves away from the institution and to the learners' lives, both present and future. In the longer term, this shift may affect the way that schools and teachers see their roles. Perhaps, as learners move from a class to a university, the workplace, or the community, teachers will assume more of a longer-term support role.

All these changes pose considerable challenges that may concern administrators and of course teachers who appreciate the need to support students for lifelong learning but who are also keenly aware of practical restrictions: limited time, the requirements of a set curriculum, the need to prepare learners for compulsory tests, and so on. Nonetheless, these changes also offer opportunities to open up the language classroom and to make the language-acquisition process a more personalised and social experience, where the focus is squarely on the learner.

References

Attwell, G. 2007. Personal learning environments—the future of eLearning? *eLearning Papers* 2 (1): 1–8.

Benson, P. 2011. *Teaching and researching autonomy in language learning*. 2nd ed. London: Routledge.

Breen, M., and A. Littlejohn, eds. 2000. *Classroom decision-making: Negotiation and process syllabuses in practice*. Cambridge: Cambridge University Press.

Ekbatani, G., and H. Pierson, eds. 2000. *Learner-directed assessment in ESL*. Mahwah, NJ: Lawrence Erlbaum.

PLE Resources

1. Jane Hart manages a website that includes an annual list of the 100 best tools for learning. Many of these are suitable for PLEs. You can find the site here: <http://c4lpt.co.uk/top100tools>
2. Interesting articles about PLEs can be found here: <https://onlinelearninginsights.wordpress.com/tag/personal-learning-environment>
3. To see examples of various tools used in PLEs, search for “personal learning environments” on Google and click on “Images” at the top of the screen. You will see many examples of ways that educators have brought together different resources to create PLEs.
4. If you would like to read more about PLEs, you may be interested in the *International Journal of Virtual and Personal Learning Environments*.

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Teaching Students to Categorize TOEFL Essay Topics

With the growing popularity of standardized instruments for testing proficiency in academic English, such as the Internet-based Test of English as a Foreign Language (TOEFL iBT), teachers of English as a second or foreign language (ESL/EFL) are increasingly called upon to meet the preparation demands for prospective test takers. For many of these learners, a particularly troublesome component of the TOEFL iBT is the 30-minute timed essay. To prepare students for the essay, teachers must provide guidance in lower-order writing skills such as grammar, vocabulary, and paragraph structure, and they must also decide on the utility of imparting an awareness of possible topics for the essay. These topics may include the qualities of a good neighbor, local public spending priorities, or local educational opportunities. Since there are many potential topics, instructors may wish to reduce them to a more manageable number by grouping individual writing prompts into larger categories of topics, for example

by including the aforementioned three topics into a group labeled “community issues.” This article presents a method for guiding students to generate topic categories and discusses the benefits of this approach.

It is worth asking whether prior knowledge of possible topics or categories of writing topics helps prospective test takers to write better essays. After all, the test developer, Educational Testing Service (ETS), claims that the subject matter is designed to be “familiar” to examinees in accordance with the overall purpose of the TOEFL, which is a test of language skill, not content knowledge. This claim implies that students are already sufficiently knowledgeable about topics that may appear and should therefore concentrate preparation effort on lower-order writing skills such as grammar and vocabulary.

It turns out, however, that there is a very good reason to include categories of essay topics in TOEFL writing preparation. Categorization is an inherent and omnipresent function of human cognition that is vital for organizing

and understanding the perceived world (Medin and Aguilar 1999). Knowing categories of writing prompts greatly assists test takers because higher orders of semantic groupings are more readily remembered and retrieved than lower-order labels; these groupings, once retrieved, can aid in the recovery of more-specific vocabulary (Federmeier and Kutas 1999; Kuipers, La Heij, and Costa 2006). This benefit in turn facilitates both top-down and bottom-up writing processes (van Gelderen, Oostdam, and van Schooten 2011). Accordingly, empirical studies on ESL/EFL writing outcomes have shown that TOEFL writing prompt topics do influence scores (Breland et al. 2004; Lee, Breland, and Muraki 2005), that topic familiarity is a factor (He and Shi 2012), and that attempts at achieving greater fairness by devising more general or familiar topic choices are not entirely successful (Lee and Anderson 2007).

The literature has two important take-aways. First, the more knowledgeable writers are about a particular topic, the better they can write about it—in terms of both content and structure. Second, it is unreasonable to assume, from the viewpoint of fairness, that every test taker is equally familiar with every topic. ETS appears to recognize as much, as it provides on its TOEFL website a list of 185 writing prompts and advises prospective test takers to familiarize themselves with the list from which a topic may be selected for the actual test. In addition, simple familiarity may be insufficient for addressing the task. The pitfall of “familiar” topics is the assumption that extensive experience with something equates to critical thinking about it, when more often than not we tend to take the familiar for granted. The TOEFL essay requires test takers to think critically (in many cases for the first time) about institutions, customs, and artifacts that they have grown up with, increasing the cognitive load of the task at the same time they are struggling with foreign language mechanics.

The benefits of student-generated topic categorization

A prior knowledge of the higher-order semantic groupings of prompts allows test takers to prepare more efficiently by targeting their preparation efforts at learning about

unfamiliar topics and thinking critically about aspects of their lived experiences that they had heretofore taken for granted. A categorization of topics would ideally be both rigorous and meaningful from the standpoint of learners. For these two reasons, I suggest involving the learners in the categorization process as opposed to providing a teacher- or textbook-generated grouping system. Specifically, I suggest involving the students in an activity known as a *content analysis*, which is a formal method of producing a hierarchy of categories. Bryman (2008) describes this as a type of qualitative research that involves coding a data set consisting of an unstructured text in order to seek general trends. As a formal method of research, content analysis has the advantage of flexibility in that it can apply to a wide variety of textual data. This analysis generally involves the detailed scrutiny of a given text with the aim of uncovering facts about the culture that produced it (Bryman 2008); however, for instructional purposes, it is sufficient to stop short of learning about the culture of TOEFL iBT writers and instead to use the process to generate a categorization of writing topics.

A student-generated categorization results in more understandable and robust groupings, and it fits well into a learner-centered, project-oriented instructional approach. Even a formalized system of categorization is fundamentally subjective because coding always involves a degree of construal by the coder (Bryman 2008). This means that categories chosen by students themselves would be more meaningful to them than those made by an instructor, materials writer, or other authority. At the same time, it also means that collaboration among students adds rigor to the categorization, making the final result more robust. The element of collaboration further makes this application ideal for educators who subscribe to constructivist approaches and who wish to engender discussion and knowledge sharing among their students. In the next sections, I illustrate a collaborative content analysis of the TOEFL writing prompts by describing my own classroom methods.

Classroom methods

An analysis requires a data source. The text source I use is the list of 185 TOEFL prompt questions available as a PDF download from

the ETS website at www.ets.org/Media/Tests/TOEFL/pdf/989563wt.pdf. An identical list is available in *The Official Guide to the TOEFL Test* (Educational Testing Service 2009), which encompasses the TOEFL iBT. An additional 35 prompts for the same task are listed on ETS's Criterion Topics website at www.ets.org/Media/Products/Criterion/topics/topics.htm; however, 25 of these are identical to prompts already included in the list of 185. Adding the 10 unique prompts to the list yields a combined corpus of 195 distinct prompts.

It should be noted that, although the primary list of 185 prompts is associated with an older Computer-based TOEFL (CBT) version of the test, it should not necessarily be considered outdated. Prompts are carefully vetted for reliability and an acceptable level of fairness, so they are not readily generated or replaced. In fact, my students have encountered many of the same prompts in actual examinations.

Depending on the facilities available, I may use either an Excel file or paper cards to support the content analysis process. Obviously the latter is much more labor-intensive in terms of preparation, but it may also be preferred by students. It is important to remember that the main purpose of the medium is to allow for the labeling and sorting of individual prompts. While this is readily accomplished in Excel, I have encountered many students who actually find writing each prompt on a separate card an easier way to sort, re-sort, and keep track of the data.

Coding and analysis

The coding and analysis of the corpus follow an abbreviated version of the procedure described by Saldaña (2009). The process is divided into two cycles.

Cycle 1: Assigning keywords

The initial cycle begins by “tagging” the prompts with keywords. I divide the class into groups of five or six students and provide each member with a list of 32–39 random prompts from the original corpus of 195. I then ask the students to tag the prompts with two or three words that are central to or representative of the prompts. Since it often takes time for each individual to read through and understand each of the prompts, this activity is best suited as homework. The result is a group of keywords taken by each student directly from the prompts themselves. Table 1 shows how three prompts might be tagged.

As an inherent semantic function of natural languages, keywords may have synonyms or nuances that are essential to understanding the topic represented by a prompt and that can be determined only by observing the words or phrases individually in context. So the next step is to compare and contrast the data by bringing together prompts that are similarly tagged in order to determine whether relationships exist. In class, I ask students to work in their groups to create groupings of prompts based on keywords. Since there should be several keywords, students are able to perceive most given prompts in various distinct groups, as illustrated in Table 2. I encourage them to look for similarities and differences among the

Prompt	Keywords
1. Do you agree or disagree with the following statement? <i>Television has destroyed communication among friends and family.</i>	television; communication; family; friends
2. If you could make one important change in a school that you attended, what change would you make?	school; change
3. Which would you choose: a high-paying job with long hours that would give you little time with family and friends or a lower-paying job with shorter hours that would give you more time with family and friends?	high-paying; low-paying; job; family; friends; time

Table 1. Tagging prompts with keywords

prompts in a grouping and to examine how the groupings are represented by the keywords.

At this point, I ask students to look for similarities among the keywords and, when appropriate, to replace them with *meta-labels*, which are words or phrases that add additional or emphatic topic-related information to a prompt. Because the ultimate goal is to identify higher-order categories, I ask students to seek more general terms for describing the topics represented in the prompts. For example, of the tags in Table 1, “friends” and “family” may be replaced by “relationships,” while “television” and “communication” may be replaced by “media” (see Table 3). These meta-labels are the initial categorization of the prompts.

Cycle 2: Comparing and contrasting categories

The second cycle of coding involves comparing and contrasting the provisional categories both internally and externally. That is, students examine prompts sharing the same labels for additional similarities and differences in their topics. At the initial stages of this cycle, comparison of categories usually results in subsequent reshuffling and re-categorization, which may or may not entail the creation of subcategories several levels deep. The analysis begins with an “exhaustive” set of categories that explores as many options as possible; in a qualitative investigation this process would continue until the coder is con-

Grouping 1. Keyword = <i>school</i>	Grouping 2. Keyword = <i>change</i>
<p>If you could make one important change in a school that you attended, what change would you make?</p> <p>Do you agree or disagree with the following statement? <i>Classmates are a more important influence than parents on a child's success in school.</i></p> <p>Do you agree or disagree with the following statement? <i>Boys and girls should attend separate schools.</i></p>	<p>If you could make one important change in a school that you attended, what change would you make?</p> <p>Nowadays, food has become easier to prepare. Has this change improved the way people live?</p> <p>If you could change one important thing about your hometown, what would you change?</p>

Table 2. Grouping of prompts by keyword

Prompt	Meta-labels
<p>Do you agree or disagree with the following statement? <i>Television has destroyed communication among friends and family.</i></p> <p>If you could make one important change in a school that you attended, what change would you make?</p> <p>Which would you choose: a high-paying job with long hours that would give you little time with family and friends or a lower-paying job with shorter hours that would give you more time with family and friends?</p>	<p>media; relationships</p> <p>education; change</p> <p>income; employment; relationships; lifestyle</p>

Table 3. Grouping of prompts by meta-labels

fidant that the categories are “mutually exclusive” (Bryman 2008, 288). However, in an educational setting the validity requirements should not be as stringent, and the analysis may conclude when students feel comfortable that they have achieved a useful result.

It is also worth noting that in practice many prompts may straddle categories. For example, a prompt regarding “the qualities of a good parent” may arguably fit into either a category entitled Ideal Personality Traits or one called Parenting (see Table 4). However, I do not believe this detracts from the utility of the exercise. Students may initially be stymied by overlapping categories but will tend to settle on a categorization through discussion as long as they are aware that ambiguity can

be resolved by determining degrees of acceptability. I tell students that they may categorize such a prompt however they wish, but that they must also clearly articulate the reasons for the choice. A discussion triggered by the recognition that a prompt could be included in two separate categories serves only to deepen understanding of the prompt, the categories, and the other prompts within the relevant categories. So, in this sense, ambiguity actually has a beneficial impact on learning.

Finally, it is important to point out to students that there will inevitably be *outliers*—that is, individual prompts that do not seem to fit into any established categories or prompts whose inclusion somewhere would make it necessary to reshuffle existing categories and create

Prompt: What are some of the qualities of a good parent?	
Category: Ideal Personality Traits	Category: Parenting
<p>What are some important qualities of a good supervisor (boss)?</p> <p>Neighbors are the people who live near us. In your opinion, what are the qualities of a good neighbor?</p> <p>Many students have to live with roommates while going to school or university. What are some of the important qualities of a good roommate?</p>	<p>Some people think that parents should plan their children’s leisure time carefully. Other people believe children should decide for themselves how to spend their free time. Which idea do you agree with?</p> <p>Do you agree or disagree with the following statement? <i>Parents or other adult relatives should make important decisions for their older (15- to 18-year-old) teenage children.</i></p> <p>Do you agree or disagree with the following statement? <i>Parents are the best teachers.</i></p>

Table 4. Possible ambiguity in categorization

Definition: A narrative of important events connecting past, present, and future
<p>Learning about the past has no value for those of us living in the present. Do you agree or disagree?</p> <p>What discovery in the last 100 years has been most beneficial for people in your country?</p> <p>The twentieth century saw great change. In your opinion, what is one change that should be remembered about the twentieth century?</p> <p>The 21st century has begun. What changes do you think this new century will bring?</p>

Table 5. Definition and prompts for History category

new outliers. I usually handle this by having students include a Miscellaneous category and asking them to keep it as small as possible.

Focusing strategies

To assist the analysis, Saldaña (2009, 186) recommends two “focusing strategies,” one

of which is to write out definitions of the emerging categories. The students formulate these with the intent to encompass all the prompts represented in a provisional category. For example, the category of History can be defined as shown in Table 5, effectively including all listed prompts.

Category	Definition	Subcategories	Examples of Prompts
Education	The social and cultural institution of formal learning and teaching	School Policy	Schools should ask students to evaluate their teachers. Do you agree or disagree? Do you agree or disagree with the following statement? <i>Boys and girls should attend separate schools.</i>
		Prioritizing Subjects	Do you agree or disagree with the following statement? <i>All students should be required to study art and music in secondary school.</i>
			Do you agree or disagree with the following statement? <i>It is more important for students to study history and literature than it is for them to study science and mathematics.</i>
People and Nature	The interaction between human civilization and the natural environment	Animals	Many people have a close relationship with their pets. These people treat their birds, cats, or other animals as members of their family. In your opinion, are such relationships good? Why or why not? Do you agree or disagree with the following statement? <i>A zoo has no useful purpose.</i>
		Using Natural Resources	Some people think that human needs for farmland, housing, and industry are more important than saving land for endangered animals. Do you agree or disagree with this point of view? Many parts of the world are losing important natural resources, such as forests, animals, or clean water. Choose one resource that is disappearing and explain why it needs to be saved.

Table 6. Sample of categorization by TOEFL writing students

The act of defining categories often leads to the dissolution and reconstitution of provisional categories, and to subsequent relabeling and redefining. This is an iterative process that may or may not be carried out over several classes. I believe that it is up to the instructor to “read” the students and decide when they have reached an acceptable level of satisfaction with their categorizations. That said, some groups will reach a satisfactory conclusion relatively quickly, even within one class session. In this case, I would suggest dedicating at least some time in a subsequent meeting to re-examining the results for the same reason that revisiting any project after an interval of thought and reflection enhances knowledge construction (Kolb 1984).

Another focusing strategy suggested by Saldaña (2009) is to seek peer input, which is inherent in the project-based approach I am advocating, but the rationale still deserves mention. A sole coder is unavoidably informed as well as limited by individual experience and existing knowledge, and reducing the possible negative influences of partiality requires communication with other observers of the data. This communication may also entail groups comparing final categorizations and the creation of one hierarchical categorization for an entire class.

Results

My students typically produce between 20 and 25 major categories with subcategories

up to three levels deep. The largest categories may include up to 20 prompts, and the smallest as few as three. There are also usually up to 10 outliers. Table 6 is a sample of one categorization effort and contains two major categories with two subcategories each.

Using the results

After the categorization is completed, the students have a robust and self-organized knowledge of what topics may appear on the test. Since this knowledge mostly involves higher-order semantic groupings, it can be characterized as “wide and shallow,” but it provides a definite guide for students to direct their own preparation efforts.

I advise students to learn more about areas where they feel under-informed; the rationale is that they cannot provide the reasons and examples that are required by the test prompts if they have no declarative knowledge of the topic. To illustrate, I have seen several groups produce the prompt categorization Preferred Learning Styles, shown in Table 7.

The topic of learning is of course familiar to my Japanese college students, and they do have preferences, but they often find it difficult to express the reasons why. For instance, when considering the second prompt listed in Table 7, not many of my students have experience with, let alone understand the rationale for, a class where “the students do some of the talking.” Yet in order for test takers to think critically about the different classroom modalities and

Category	Prompts
Preferred Learning Styles	<ol style="list-style-type: none"> 1. Some students prefer to study alone. Others prefer to study with a group of students. Which do you prefer? 2. Some students like classes where teachers lecture (do all of the talking) in class. Other students prefer classes where the students do some of the talking. Which type of class do you prefer? 3. Some people think that they can learn better by themselves than with a teacher. Others think that it is always better to have a teacher. Which do you prefer? 4. People learn in different ways. Some people learn by doing things; other people learn by reading about things; others learn by listening to people talk about things. Which of these methods of learning is best for you?

Table 7. Preferred Learning Styles prompts

provide a reasoned response to the prompt, knowledge of the pros and cons of various learning approaches is essential. To contextualize the entire category, I introduce the concept of learning theories, provide resources for students to gain declarative knowledge of the concepts, and follow up with group discussions.

Of course, the goal is not to convert students into educational psychologists, so I concentrate on finding short, introductory articles and videos. Happily, my students have good Internet connectivity and are net savvy, so I can easily direct them to a multitude of free resources. For example, Wikipedia has a page introducing the four major theories of learning—behaviorism, cognitivism, humanism, and constructivism—that provides a brief description of the main principles and some rationale; the page also includes further information on topics such as learning styles and instructional theory. Other free resources for this particular topic include Learning-Theories.com, or for media other than text, simply performing a keyword search in YouTube for “learning theories” will yield several dozen multi-media overviews at various levels of detail. I follow up the exploration of these resources with discussions about my students’ own learning experiences, asking them to identify theories that would underpin or explain those experiences, and to articulate the aspects of knowledge acquisition that the various theories were devised to address.

Finally, it is worth emphasizing that prospective test takers do not typically have the time to delve into every one of the 20 or so categories during a preparation course. Yet this fact highlights the advantage of having a categorization in that it allows learners to target their areas of weakness and plan their preparation efforts accordingly. For instance, education majors who are already familiar with learning theories would probably not need to spend time reading about them, whereas engineering majors would more likely benefit from the knowledge. In this way, the categorization affords the ability to tailor preparation to meet the needs of individual learners.

Conclusion

In this article I have described a method of creating a student-generated categorization of TOEFL iBT writing topics using materials

freely or readily available online. Although my particular course focuses on the TOEFL iBT, the flexibility of this type of qualitative analysis allows it to be applied to various other sources of unstructured data, including essay topics for the International English Testing Service, which are also freely available online. Involving students in the categorization process deepens their understanding of the categories and provides them with a tool for directing their own learning efforts.

References

- Breland, H., Y. Lee, M. Najarian, and E. Muraki. 2004. *An analysis of TOEFL CBT writing prompt difficulty and comparability for different gender groups*. Princeton, NJ: Educational Testing Service.
- Bryman, A. 2008. *Social research methods*. 3rd ed. Oxford: Oxford University Press.
- Educational Testing Service. 2009. *The official guide to the TOEFL test*. 3rd ed. New York: McGraw-Hill.
- Federmeier, K. D., and M. Kutas. 1999. A rose by any other name: Long-term memory structure and sentence processing. *Journal of Memory and Language* 41 (4): 469–495.
- He, L., and L. Shi. 2012. Topical knowledge and ESL writing. *Language Testing* 29 (3): 443–464.
- Kolb, D. A. 1984. *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- Kuipers, J., W. La Heij, and A. Costa. 2006. A further look at semantic context effects in language production: The role of response congruency. *Language and Cognitive Processes* 21 (7–8): 892–919.
- Lee, H., and C. Anderson. 2007. Validity and topic generality of a writing performance test. *Language Testing* 24 (3): 307–330.
- Lee, Y., H. Breland, and E. Muraki. 2005. Comparability of TOEFL CBT writing prompts for different native language groups. *International Journal of Testing* 5 (2): 131–158.
- Medin, D. L., and C. Aguilar. 1999. Categorization. In *The MIT encyclopedia of the cognitive sciences*, ed. R. A. Wilson and F. C. Keil, 104–106. Cambridge, MA: MIT Press.
- Saldaña, J. 2009. *The coding manual for qualitative researchers*. London: Sage.
- van Gelderen, A., R. Oostdam, and E. van Schooten. 2011. Does foreign language writing benefit from increased lexical fluency? Evidence from a classroom experiment. *Language Learning* 61 (1): 281–321.

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FISH

ALL AROUND US

by Phyllis McIntosh







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A colorful home aquarium



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Goldfish bowl

In the hit animated film *Finding Nemo*, a clownfish (Nemo), through a series of misadventures, ends up in a fish tank in a dentist's waiting room. The film's writer and director, Andrew Stanton, admits that the story was inspired in part by his own childhood memories of looking forward to a visit to the dentist so he could watch the fish in the aquarium in the dentist's office.

Fish tanks are popular fixtures in dental and medical facilities throughout the United States—for good reason. Research shows that gazing at fish swimming in an aquarium has a calming influence on people facing anxiety-producing situations and coping with certain medical conditions.

The pleasure derived from caring for and watching fish leads millions of Americans to purchase aquariums for their homes. According to a recent National Pet Owners Survey, over 14 million U.S. households own fish, making fish the third most popular pets in the country, after cats and dogs.

Because aquariums are universally appealing, they are part of the decor in all sorts of public places, from restaurants to baseball stadiums. Huge state-

of-the-art aquarium complexes that create ocean environments and exhibit spectacular aquatic species rank among the most popular tourist destinations in a number of U.S. cities.

Keeping Fish as a Hobby

Keeping fish to look at rather than eat is nothing new. The Chinese were breeding carp for decorative purposes well over a thousand years ago, although ornamental goldfish did not appear in Europe until the 17th century. The first public aquarium opened in 1853 at Regent's Park in London. Within a few years, American showman P.T. Barnum opened the first display aquarium in the United States at the American Museum in New York City.

Home aquariums became popular in the mid-20th century as commercial fish-breeding operations and air transport made it easy and affordable for many Americans to purchase tropical fish. At the same time, more durable tanks and improved filtration systems enabled hobbyists to sustain fish for longer periods.

Today, home aquariums range from a child's goldfish bowl to elaborate tanks holding several hundred gallons of water and dozens of exotic fish. Most

beginners start with a five- to ten-gallon freshwater tank and fish such as tetras, mollies, and gouramis, which can be purchased inexpensively at large department stores and pet stores.

More adventurous hobbyists opt for saltwater tanks, which take more work and equipment to maintain a stable environment. Saltwater fish are more costly and more susceptible to changes in temperature and water quality than freshwater species. On the positive side, they are spectacularly colorful and turn a tank into a dramatic focal point. Popular choices for aquarium owners are lionfish, tangs, marine angelfish, and—especially since the release of *Finding Nemo*—clownfish.

Other trends in fishkeeping include:

- **Backyard fish ponds.** An aquarium is not the only choice for fish enthusiasts. Some people incorporate a pond—usually stocked with goldfish or colorful koi—into their outdoor landscape. A large pond that includes plants as well as fish becomes a self-sustaining ecosystem. If the pond is three feet deep or more, fish can survive the winter, even in cold climates.
- **Pampered pet fish.** Like other pet parents, fish owners are increasingly willing to spend



Lionfish



Yellow tang



Powder blue tang



Marine angelfish



Clownfish

considerable sums on their pets' well-being. Reportedly, there are now more than 2,000 veterinary fish specialists who perform surgery, x-rays, ultrasounds, and CAT scans on goldfish, koi, and other pet species.

In a recent survey, 31 percent of fish owners admitted to buying gifts for their pets. Saltwater enthusiasts are especially indulgent, spending an average of 27 dollars per gift. One in ten saltwater-fish owners buy their fish a birthday gift. And just what is an appropriate gift for a fish? One option is the R2 Fish School kit, which includes a feeding wand and all the other paraphernalia an owner needs to train fish to do “amazing tricks” such as limbo, fetch, and slalom.

- **Aquariums as home decor.** Modern aquariums have evolved far beyond the boring rectangular tank. Today's models come in almost any shape imaginable—round, hexagonal, bow front, concave, free-form, and flat to hang on the wall, to name just a few.

Aquariums also have become key elements in home and office decor. They are built into walls and incorporated into tables, lamps, desks, the ends of sofas, and even bathtubs and bathroom sinks. Almost any object, it seems, can be turned into a fish tank. Aquariums have been installed in telephone booths, old wooden TV sets, and the shells of Apple Macintosh computers. The latter are called Macquariums.

- **Professional aquarium maintenance.** Owners who enjoy having an attractive aquarium but dislike the dirty work of maintaining one can hire professional companies that regularly send technicians to change the water, clean the tank, and monitor water quality. As one expert noted, maintaining an aquarium ecosystem “is really no different than having a beautiful lawn and garden. You can do the work yourself or pay someone else to do it. Either way, the beauty is there for all to enjoy.”

Fish (in the Tank) Are Good for You

Fishkeeping has benefits that make it an attractive hobby for millions of Americans. Aquariums can bring a bit of nature, a living ecosystem, into any home, including apartments that do not allow other pets. Like tending a furry animal, helping to maintain a fish tank can teach a child the responsibility of caring for other living creatures.

As pets, fish have distinct advantages: They are quiet, they do not chew or scratch the furniture, and with a few slow-release feeders in their tank, they can safely be left alone for a week or two.

But it is likely the documented benefit to human health that has helped make aquariums so popular in the United States. Like petting a dog or cat, gazing at an aquarium at the end of a long, hard day can reduce stress and lower blood pressure. Likewise, research shows that people waiting to see a doctor or undergo medical procedures were less anxious after watching fish swimming in a tank. In one study, for example, patients who viewed fish before seeing a dentist were more relaxed and required less pain medication than patients who did not encounter fish.

Watching fish also has a significant calming effect on children with attention deficit/hyperactivity disorder, as well as on elderly people with Alzheimer's disease. A Purdue University study of Alzheimer's patients in three health care facilities found that those who were exposed to aquariums had increased appetite and exhibited less aggressive behavior.

In addition to their popularity in medical facilities, aquariums are now found in restaurants, libraries, shopping malls, department stores, grocery stores, and even some churches.

A Strange Home for Fish

Probably the strangest, and most controversial, location for an aquarium in the United States is behind home plate at Miami's professional baseball stadium. Perhaps the marine theme is understandable because the team is known as the Miami Marlins, named for a popular Florida sport fish. The giant fish tanks are just one of the quirky features at the ballpark, which also boasts a swimming pool, a nightclub, and a garish outfield structure that comes alive with lights and "jumping" fish when the Marlins hit a home run.



A girl at a clinic watches fish in an aquarium as she waits to see the doctor.



Monterey Bay Aquarium juts out over Monterey Bay at the edge of the Pacific Ocean.

The two 22-foot-long 450-gallon aquariums house one hundred or so saltwater fish, including angelfish, triggerfish, tangs, surgeonfish, and wrasses, that swim among artificial corals. Before the fish arrived, Marlins first baseman Gaby Sanchez hurled balls at the tanks to test their sturdy acrylic panels, designed to protect the fish from foul balls, wild pitches, and thrown bats.

The tanks are suspended on a flexible neoprene material intended to act as a shock absorber. Nevertheless, animal rights activists, who argue that a baseball stadium is no place for an aquarium, question whether the fish are sufficiently protected from the noise and vibration created by thousands of shouting, sometimes jumping, fans.

Aquarium Attractions

For the ultimate fish-watching experience, Americans can visit dozens of large aquarium complexes across the country. Designed to re-create coral reefs and other ocean features, these aquariums exhibit

large and exotic sea creatures in settings that make visitors feel as though they are part of the marine environment.

The best of these public aquariums include:

- **Shedd Aquarium.** A lakefront fixture in downtown Chicago since 1930, the Shedd Aquarium houses 1,500 species ranging from alligator snapping turtles to zebra sharks. Its elaborate aquatic habitats include Caribbean Reef, a 90,000-gallon circular habitat featuring rays, sea turtles, and moray eels; Wild Reef, with more than 20 sharks; and Amazon Rising, a re-creation of an Amazon flood plain, complete with thatched huts, birds, snakes, lizards, and spiders. The highlight of any visit is the aquatic show starring dolphins, beluga whales, and sea lions.
- **Monterey Bay Aquarium.** Located on the site of a former sardine cannery along historic Cannery Row in Monterey, California, this

aquarium exhibits an array of marine creatures, including seahorses, penguins, sea turtles, and sea otters. Special features include The Jellies Experience, a colorful display of 16 unusual species of jellyfish, and a 28-foot-high kelp forest (like those along the California coast) that houses leopard sharks, wolf-eels, and a host of other fish.

- **National Aquarium.** Highlights of this complex in Baltimore, Maryland, include the 225,000-gallon Shark Alley that encircles visitors and the Dolphin Discovery exhibit, where guests can watch training, feeding, and play activities of the marine mammals. Special exhibits on Australia, a tropical rain forest, and an Amazon River forest feature a variety of animals, such as frogs, snakes, crocodiles, birds, sloths, and monkeys, as well as fish.

- **Georgia Aquarium.** One of the newest aquarium complexes in the United States, Georgia Aquarium, located in downtown Atlanta, also ranks among the world's largest. Its 10 million gallons of water house 120,000 animals of 500 different species, including whale sharks, beluga whales, and manta rays. Visitors can walk through a 100-foot-long tunnel with water around them on three sides. Other features include touch pools, crawl tunnels for children, and pop-up windows where kids can get a close-up look at penguins and piranhas.

The major aquariums typically offer additional experiences, such as Halloween and Christmas programs, behind-the-scenes tours, children's classes and camps, and sleepovers for families and other groups. Some also use their exhibits to provide services to groups in the community. Mystic Aquarium in Connecticut, for example, offers two



Colorful fish swim among coral in one of the many tanks at the Monterey Bay Aquarium.



Crown jellyfish attract attention in The Jellies Experience exhibit at the Monterey Bay Aquarium.

programs to help children and teens with learning and developmental disorders improve their social

skills. Teens encounter marine mammals with a variety of social behaviors and meet with aquarium staff to learn about preparing to get a job. Younger children with autism, attention deficit disorder, and other intellectual disabilities learn to focus and interact with their peers through touch-and-learn sessions with the aquarium's invertebrates.

Via a video camera in its Passages of the Deep exhibit, Oregon Coast Aquarium in Newport, Oregon, feeds live images to the emergency room waiting area at a nearby hospital. The underwater scenes help calm people in stressful situations while sparing the hospital the costs of installing and maintaining an actual aquarium.

* * *

Whether in a home tank, in a state-of-the-art aquarium complex, or even on a video screen, fish—as they go about their business of simply being fish—have a remarkable ability to soothe the human spirit.



Visitors to the Georgia Aquarium view some of the 500 species of fish there.

Fish Talk

acclimation – the process of slowly introducing a fish to a new tank or new water conditions

algae eater – a fish that feeds on algae and helps keep an aquarium clean

aquascaping – the process of decorating or arranging an aquarium to suit the needs of the fish and to be aesthetically pleasing

brine shrimp – a quarter-inch-long species of shrimp used as fish food

bubble nest – a fish nest constructed of tiny air bubbles; produced by the male to protect the eggs and fry (baby fish)

detritus – organic waste matter that collects on the bottom of fish tanks

ich – a common parasitic disease in aquariums that causes white specks on the fish

substrate – material such as sand or gravel used to cover the bottom of a fish tank

Websites of Interest

Aquatic Community

www.aquaticcommunity.com

This website contains detailed information about dozens of species of freshwater and saltwater tropical fish, listed by both their common and scientific names. An extensive list of articles covers everything from algae control in the home aquarium to vegetables for your fish. A forum for fishkeepers is conveniently divided according to skill level and interest in specific kinds of fish.

Fish Lore

www.fishlore.com

Billing itself as a website designed for hobbyists, this site provides step-by-step guides to setting up freshwater and saltwater tanks, profiles and photos of different species of fish, and a detailed rundown on fish diseases. Especially fun is a section of fish-related computer games, complete with reviews by people who have played them.

Rate My Fish Tank

www.ratemyfishtank.com

The attractions here are color photos of beautiful home aquariums. Hobbyists upload pictures of their freshwater and saltwater tanks, which are then rated by visitors to the site. Also useful are interactive tools to help people determine which fish are compatible with one another and what equipment is required for tanks of various sizes. There is also a guide to help you find a public aquarium in your state.



Algae eater



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The marine park and sanctuary of Hanauma Bay, Oahu, Hawaii, is a favorite locale for snorkelers.

SWIMMING WITH THE FISH

As thousands of diving and snorkeling enthusiasts can attest, no aquarium exhibit can compare with the thrill of joining fish in their own environment. Not surprisingly, the best scuba diving and snorkeling spots in the United States are in the tropical waters of Florida and Hawaii, although waters off the California coast also offer excellent opportunities to observe marine environments up close.

Top locations include:

- **The Florida Keys.** This 120-mile-long chain of islands off the southern tip of Florida offers spectacular settings for observing hundreds of species of tropical fish. Shallow waters and a stunning array of corals make the country's first undersea preserve, John Pennekamp Coral Reef State Park at Key Largo, a top choice for snorkelers. The Florida Keys National Marine Sanctuary contains a trail of nine historic shipwreck sites, from Key Largo to Key West, that provides excellent habitat for marine life. So, too, do three artificial reefs off Hutchinson Island. Consisting of a sunken ship, a pile of old tires, and a cluster of plumbing fixtures, these man-made marine habitats attract

numerous fish and provide an excellent diving spot for enthusiasts at all levels.

- **Biscayne National Park, Florida.** Located within sight of downtown Miami, this park is famous for its Elkhorn coral formations, more than 500 species of fish, and an underwater interpretive trail for snorkelers.
- **Hanauma Bay, Oahu, Hawaii.** A collapsed volcanic crater has created a protected cove, now a marine park and sanctuary, just off a beach 10 miles from downtown Honolulu. The shallow clear waters, home to 400 species of fish, are a paradise for snorkelers, who especially enjoy the abundance of parrotfish and green sea turtles.
- **Southern California coast.** La Jolla Cove in San Diego, Laguna Beach near Santa Ana, and Catalina Island 22 miles from Los Angeles are prime diving and snorkeling spots. The waters are cold enough that divers need wet suits, but all three locations provide excellent views of underwater forests of kelp (a giant seaweed) and the numerous species of fish they harbor.

This section presents three stand-alone language-learning activities related to the theme of fish. Each activity is designed for students at the proficiency level indicated.

Aquarium

Level: Beginner and up

Time required: 5–10 minutes

Goal: To have students form groups by practicing pronunciation and listening, and (at upper levels) by using imagination and critical-thinking skills

Materials: Small pieces of paper (one for each student)

Background: This is a grouping activity, inspired by fish in the sea or large aquariums swimming together in groups with other fish of the same kind.

Procedures:

1. Decide how many groups you want students to form. Then choose the same number of words (e.g., vocabulary items) as groups; for example, if you want students to form five groups, choose five words. If your class has been studying fish, you can choose the names of five fish: goldfish, tuna, salmon, shark, trout (or other kinds of fish common to your teaching context).
2. Write one word (in this case, the kind of fish) on each small piece of paper. If possible, you should have an equal number of pieces of paper for each word; that is, if you have 40 students and want to form five groups, you should have eight pieces of paper with the word *goldfish*, eight with *salmon*, eight with *tuna*, eight with *shark*, and eight with *trout*. Mix up the pieces of paper.
3. Tell students you are going to give each person a piece of paper with a word on it, and that when they get the paper, they should read the word silently to themselves. They should not tell the

word to anyone else yet, and they should not look at anyone else's paper.

4. Hand out the pieces of paper so that each student has one. After each student has read the word on the paper silently, tell students to remember the word and fold the paper so that no one else can see it.

5. Tell students that they are going to get into groups and that they will do so by finding all the classmates who have the same kind of fish written on their paper. Tell students that when you say "Go," they should walk around the room saying the name of their fish to their classmates. When they find someone with the same fish, they should stay together to form a group. If they meet someone with a different kind of fish, they should not stay with that person. Tell students that they must find everyone in the class with the same kind of fish that they have.

Remind students that they cannot show their paper to anyone. And, to prevent shouting, tell students that they must speak quietly.

6. Have students stand up; then say, "Go!"

7. Students should mingle, saying their words. Students will form pairs and then groups as they find classmates with the same kind of fish.

8. When students have formed their groups, you can ask them to try to name, within their group, the names of all the other fish they heard while they mingled. You can then point to each group, one by one, and ask other groups if they know the name of that group's fish.

9. Following this activity, students are in groups, and you can go ahead and continue class with students working together in these groups.

Classroom Activities

Variation for Beginners

You can do the same activity with vocabulary that is not related to fish. For example, students might have different letters, numbers, colors, days of the week, months, kinds of fruit, adjectives, emotions, and so on. Or they might have words that have similarities in the way they are pronounced: *leg*, *lake*, *look*, *like*, *luck*.

Variation for Upper Beginners

The procedure is the same as it is for beginners, but the level of difficulty is raised slightly. Prepare different sets of words that go together; students will mingle to find other students who belong to the same “category.” For example, there might be a “fish” group, a “colors” group (e.g., red, blue, yellow, green, purple), an “emotions” group (e.g., happy, sad, surprised, excited, bored)—or a “countries” group, a “months” group, a “vehicles” group, a “fruit” group, a “careers” group, a “shapes” group, and so on.

A student with the word *salmon* would mingle with classmates, saying his or her word and listening to other students’ words. As classmates meet, they must decide whether their words naturally belong to the same category or not. If so, they should stay together and look for other students with words that fit in their category. If the student saying “salmon” meets a student saying “shark,” they might realize that they both belong in the “fish” group and should stay together to look for other members of their group. But if they then meet a student saying “blue,” they should realize that the color doesn’t seem to fit in their category and that the student saying “blue” is not a member of their group.

You can decide whether to tell students beforehand the number of groups or the number of students in each group. But it is best not to tell students beforehand the names of the categories; let students determine the category to which they belong.

A quick follow-up activity for the whole class is to have all members of a particular group say aloud the word they were given and have other groups identify the category that that group belongs to. Then do the same with other groups.

Variations for Intermediate Learners

1. You can make the categories more challenging (e.g., the categories might include different parts of speech), or you can add a level of difficulty: students are not allowed to say the word on their slip of paper; instead, students ask questions to find classmates in the same group. For example, if group selection is based on colors, a student with the word *blue* might ask another student, “Do you have the color of the sky?” By answering a question or two, students should be able to determine whether they are in the same group. After everyone in the class has found a group, group members can tell one another the word on their paper and check to see if they have found the right group.

2. Add a level of critical thinking to the activity: words are distributed to students, and they can choose their own group members—but they must explain how all the words in their group go together. For example, a student with *salmon* and a student with *blue* might say that salmon live in blue water or that some salmon have blue eyes. (The important thing is not necessarily to be factually correct; the goals are for students to make connections, use their imaginations, and enjoy using English.) Note that creating these connections among all group members becomes more difficult as the groups get larger, so you might want to limit the number of students in each group to three.

If you want, you can then extend the activity. After students in a group have come up with ideas for how their words can be connected, ask each group to stand up, and have each group member say the word he or she was given. The group members should not yet explain the connections they have come up with. Instead, ask the rest of the class to suggest ways that the words in the group might go together. Encourage them to use their imaginations! Then have the group members who are standing explain the connections that they thought of. Continue with other groups.

Living in a Fishbowl

Level: Intermediate

Time required: 40 minutes

Goal: To practice descriptive writing

Procedures:

1. Write the word *fishbowl* on the board. Ask students if they know what a fishbowl is. (A fishbowl can refer to a large, clear bowl where one or more fish live and that people can see into and watch the fish. See page 38 for a picture of a fishbowl.)

2. Now write the phrase *living in a fishbowl* on the board. Ask students to discuss with a partner what they think the phrase might mean.

3. After a minute or two, ask for volunteers to suggest possible meanings. You are not necessarily looking for the “right” answer here, so encourage participation and effort. You might want to write students’ suggestions on the board.

4. Praise the imagination and thoughtfulness reflected in the students’ suggestions; then explain that someone living in a fishbowl has little or no privacy. That is, other people will see or know about nearly everything the person does.

5. Ask the class to suggest people who seem to be living in a fishbowl. Students might mention careers (e.g., actors, athletes, musicians, politicians), they might give the names of people, and they might suggest situations (e.g., people who live in crowded houses or towns, people who live in small villages where everyone lives close together). You might also ask students whether they think they would like to live in a fishbowl.

6. Divide the class into pairs or groups of three.

7. Tell students to imagine that their home is the fishbowl and that someone has come to visit for the first time. In their pairs or groups, have students orally describe to each other things that the visitor would notice.

- What is going on?
- What would that person see?
- What sounds would the person hear?
- What are different members of the family doing?

If students are having trouble getting started, you can suggest that they choose a specific time of day, perhaps in the morning before school, in the evening after school, or at night before everyone has gone to bed. Let students talk for about 5 minutes, or a little more if they have a lot to say.

8. Now tell students that they will have 15 minutes to write a description of what someone might observe when visiting their homes. Students can choose the style and content. Some might write in a general way; others might write about specific details or incidents. Some might focus on a particular moment; others might write about a series of things that happen. That’s fine; students experience and interpret things in different ways.

9. After students have written their descriptions, have them compare and contrast their descriptions in groups.

- What similarities do they notice?
- What differences?
- What are the reasons for those similarities and differences?

10. As a class, ask students how they felt while they were describing the activity taking place in their homes.

- How would they feel if they were observed in that way?
- Are there some things they would be happy to have someone observe?
- Are there some things they would not be happy to have someone observe?
- What might it be like to live in a fishbowl?

Classroom Activities

Extension

Tell students to imagine that the fishbowl is their classroom. Have them write descriptions of what takes place in the classroom and collect the descriptions in a “group journal” where they take turns writing entries. The entries could be posted in a blog, on poster paper on a wall, or in a notebook that is shared among classmates. Each day, one person is assigned to write the day’s entry and takes notes about what happens; at the end of the day or for homework, the student writes his or her observations on the day. The next day, the student reads the entry to the class, and the assignment

(and the notebook, if that’s what you’re using) is passed to the next person. Other students are able to add details that they noticed, particularly if the entries are posted on a blog.

The length of each entry depends on the ability level of the student writing it and on what takes place in the class. The content is up to the student—some might want to summarize the day in general; some might want to pick a particular event and describe it in detail. Students might review the lesson(s) studied that day, tell about something amusing that happened or that someone said, or describe something surprising or a break in the routine.

Fish and Wishes

Level: Intermediate and up

Time required: 30–40 minutes

Goals: To practice making wishes; to listen to and comprehend a story

Background: This activity can be used to supplement a lesson involving wishes—and the grammar we use when we make them. Briefly, we wish for things we want that may not seem possible at the time; we *wish something would/could happen*, and we *wish that something were true*. The following examples illustrate the meaning and grammar:

- “I wish I could see you tomorrow” suggests that it will be impossible for these two people to meet, even though the speaker wants to.
- “I wish Nat were here today” suggests that Nat isn’t here.

Procedures:

1. Ask students if they have ever wished for anything. If students are willing to share what they’ve wished for, you might want to write their responses on the board. Make sure students understand that we wish for things we really want, or really want to happen, even though those things might not seem possible when we wish for them.

2. Tell students to make three wishes that they would like to come true and to write them down. Tell students the wishes could be for themselves or for friends, family, or the school or town where they live. They can make a wish for their country or for the world. Give them a few minutes to come up with their wishes—but let them know that they will be sharing the wishes with a classmate, so their wishes should not be too personal or “private.”

Students’ wishes might be anything from “I wish I were invisible” and “I wish that (the name of a movie star) would fall in love with me” to “I wish that everyone in our country had enough food to eat” and “I wish that the water in the pond were clean.” But it’s probably best not to give examples of wishes in this case because you want students to think freely, on their own.

3. As students come up with their wishes, circulate to answer questions and to check grammar. Students are going to be making wishes in this activity, and you want them to practice using the correct “making wishes” grammar.

4. Have students put their wishes aside for a few minutes. Tell them they are going to listen to a story called “Two Fish Wishes.” Ask them to predict what they think the story will be about. Elicit

details for a minute or two, or as long as students continue to be interested in making predictions about the story.

5. Have each student choose one prediction and write it down. Tell students that, as they listen to the story, they should check to see whether the prediction they chose is correct.

6. Read “Two Fish Wishes” (see page 52) to the class—at least two times. Depending on how well your students comprehend the story, you might have to read it a third time.

7. Have each student meet with a partner to decide whether the predictions they made were correct. After a minute or two, have a few students share their predictions and let the class decide whether the predictions were correct—and why. (For example, “The prediction ‘Two fish will make wishes’ is not correct because in the story, two people make wishes, not two fish.”)

8. As a class, continue to discuss the story for a few minutes. The type of discussion you have will depend on the level of your students’ listening comprehension. You can check their basic understanding by asking about events in the story; you might ask some of these questions:

- What did the first girl wish for? Did her wish come true?
- What did the second girl wish for? Did her wish come true?
- What did the first girl do that the second girl didn’t do?
- What did the second girl do that the first girl didn’t do?
- How did each girl feel as she walked home?

You can also ask students what lesson each girl said she learned. And you can ask them the question at the end of the story: “Which girl was right?” (Answers may vary, and that is fine. Students might have differing opinions, and some might say that both girls are right: a wish is more likely to come true if you do something to try to make it come true.)

9. Now ask students to take out their list of three wishes and work with a partner. (It is also possible

to continue the activity with students working in groups of three or four.)

10. Have one student (Student A) tell his or her first wish to the partner (Student B). Student B will listen and ask questions to make sure he or she understands the wish and to get more information about the wish from Student A. But Student B must ask at least these three questions:

- Why do you want to make that wish?
- What would you do if your wish came true?
- Is there anything you can do to make your wish come true?

11. Have Student A and Student B switch roles until they have discussed each student’s three wishes. Together, the partners can brainstorm ways that they can make their wishes come true. What steps can they take to at least get started?

Extensions

1. Have students share one of their wishes with the class and tell why it’s important to them. The class can discuss ways that the student can try to make the wish come true.

2. Assign students to select one of their wishes—or come up with another—and write about it. They should explain the wish in detail, tell why the wish is important to them, and then suggest steps they could take to make the wish come true.

Variation

Have the class make a collective wish (that is, one wish for the whole class, such as “We wish there were no more litter in the schoolyard” or “We wish everyone in our class treated one another well”) and work toward making it come true.

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Two Fish Wishes

One morning not long ago, a girl who lived in a small village woke up and said to her parents, “I want to see if wishes come true.” She walked to the pond near her village, carrying a bucket.

On that same morning, a girl who lived in a different small village woke up and said to her parents, “I want to see if wishes come true.” She walked to the pond near her village. She was carrying a bucket, too.

The first girl held out her bucket, closed her eyes, and said, “I wish I had fish in my bucket!” She opened her eyes and looked in her bucket; it was still empty. Nothing had happened. She thought, “Maybe I’m being too greedy.” So she tried again: “I wish I had one fish in my bucket!” Nothing happened. She tried shouting her wish, and she tried whispering her wish. She stood on one leg when she wished; she jumped in the air. Nothing happened. She stood beside the pond, disappointed. The first girl walked home carrying the empty bucket and feeling tired.

Meanwhile, the second girl held out her bucket, closed her eyes, and said, “I wish I had fish in my bucket!” Then she opened her eyes ... and she reached into her bucket and took out the net she had brought with her from her home. She waded into the pond, threw the net into the water, and pulled it back. It was empty. So she threw it again. This time, it was full of fish. The second girl put the fish in her bucket, filled it with water, and walked home, happy to carry the heavy bucket.

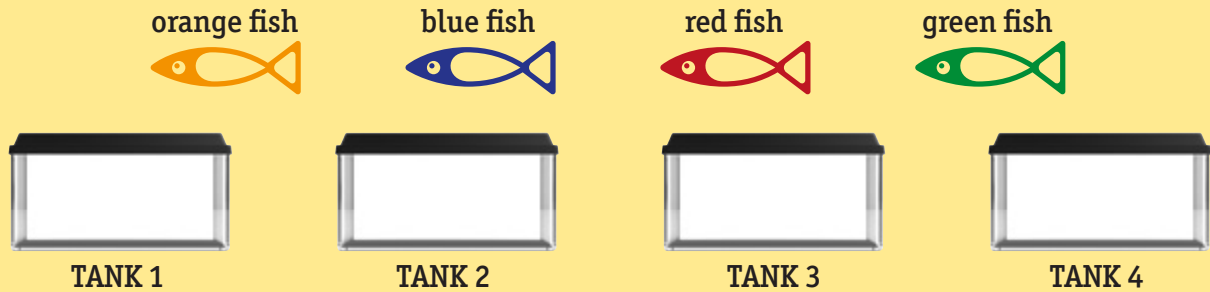
The first girl went home to her parents and said, “Do you know what I learned today? I learned that wishes don’t come true.”

The second girl went home to her parents and said, “Do you know what I learned today? I learned that wishes come true.”

Which girl was right?

Fish Tanks

PUZZLE 1. Place the fish—orange, blue, red, and green—in the tanks according to the clues.

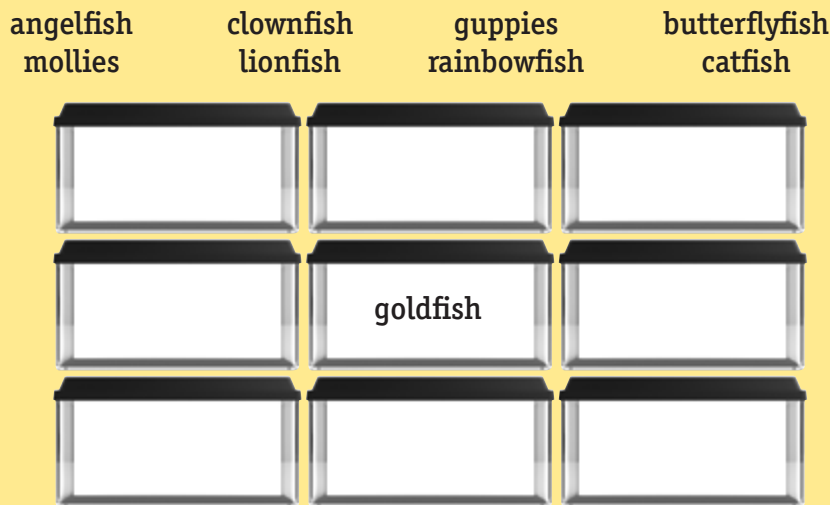


Clues

1. The orange fish is between the blue fish and the red fish.
2. The blue fish is next to the green fish.
3. The red fish is not in Tank 1.

PUZZLE 2. Each tank below holds a different kind of fish. There are three rows (across) and three columns (up and down). Read the clues and figure out which tank holds each kind of fish.

The goldfish are in the middle tank; here are the fish in the other tanks:



Clues

1. The angelfish are in a corner tank, to the left of the clownfish.
2. The mollies are between the lionfish and the butterflyfish, in the same row.
3. The catfish are below the butterflyfish, but they are not in the bottom row.
4. Neither the guppies nor the clownfish are in the top row.
5. The lionfish are in the same column as the angelfish and the guppies.
6. The rainbowfish are in the bottom row, but the mollies are not.
7. The guppies and the catfish are in the same row.
8. The catfish, the clownfish, and the lionfish are not in the same row or in the same column.
9. The guppies are in the tank above the angelfish.

ANSWERS TO *THE LIGHTER SIDE*
FISH TANKS

PUZZLE 1
Tank 1: green fish; Tank 2: blue fish;
Tank 3: orange fish; Tank 4: red fish

PUZZLE 2
Top row (left to right):
lionfish, mollies, butterflyfish
Middle row (left to right):
guppies, goldfish, catfish
Bottom row (left to right):
angelfish, clownfish, rainbownfish