

## Feature Article

# Five Design Principles for Language Learning Materials Development

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### Abstract

*Creating teacher-authored materials can be a challenging task for a variety of reasons. While relying on coursebooks to provide a ready-made structure to our classes, we often design our own materials to meet some of the specific needs and interests of our learners. Teachers usually approach the task of materials development through intuition and trial and error without a clear understanding of the principles of design that might help us in the creation of successful materials. This article outlines five research-based design principles that form the foundation of materials development and gives practical suggestions for how to put these into practice to produce materials that are aesthetically appealing, well scaffolded, authentic, affectively and cognitively engaging, and consistently revised and updated.*

**Key Words** *materials design principles, aesthetics, scaffolding, authenticity, affective and cognitive engagement, revising*

### Introduction

As language teachers, we often find ourselves having to create our own materials since commercially available coursebooks often do not match our particular learning context or meet our learners' varied levels, needs, and cultural and educational backgrounds. Even with the most successful textbook, we sometimes design our own materials just to provide a needed change of focus in the classroom and further personalize and localize the input. With many now having moved to online learning, designing materials suitable for online platforms adds an extra layer of complexity since it can be difficult to find ones that fit our students' needs. However, because of a lack of training or experience, we commonly approach the task of materials development through intuition and trial and error, and may not recognize the shortcomings of our own materials (Howard and Major, 2004). Poorly designed materials can do more harm than good: "We can promote learning by changing the instructional materials presented to students and managing intrinsic and extraneous cognitive load. Conversely, we can have a negative effect on

learning by increasing extraneous cognitive load” (Feinberg and Murphy, 2000, p. 354). Beginning with a deep understanding of the process of second language acquisition gained through research, some vital principles of materials design for language teachers can be extrapolated. This paper will outline key principles that should inform materials design as well as practical guidelines to follow when creating our own materials, whether paper-based or digital, including a focus on aesthetics, scaffolding, authenticity, affective and cognitive engagement, and revision. Although originally directed at new teachers, experienced teachers may also benefit from being reminded of these principles as they continue to create and update materials.

### **Theory into Practice: Where do we start?**

It is important to start with the research that underpins our current understanding of how second languages are learned. Briefly stated: *comprehensible input + output + affective and cognitive engagement + time* leads to *meaningful and purposeful interaction* which leads to *language acquisition* (adapted from Mishan, 2015, p. 25). That is, exposure to meaningful language input (which is rich, comprehensible, relevant, and varied) combined with purposeful output and negotiated interactions (which flow from real-world texts and tasks and result in noticing and intake) will motivate, challenge, and stimulate learners in a welcoming and respectful environment (which fosters risk tolerance and creativity). Learners who are allowed sufficient time and repeated exposures to increasingly complex and recycled language input will acquire language that is more fully automatized and encoded in long-term memory. Although not strictly necessary for language acquisition, formal instruction and corrective feedback are helpful elements that can systematically provide opportunities to experience language-rich input as well as structured opportunities for focused attention on form, leading to more fluency, accuracy, and complexity in language output (Green, 2020). I find it useful to keep a visual summary of these essential elements of second language acquisition in view ([see Figure 1](#)) while designing materials as a reminder of the goal.

Keeping in mind our current understanding of how languages are acquired, the following five design principles should be applied to teaching materials so that the theories of language acquisition can be put into practice

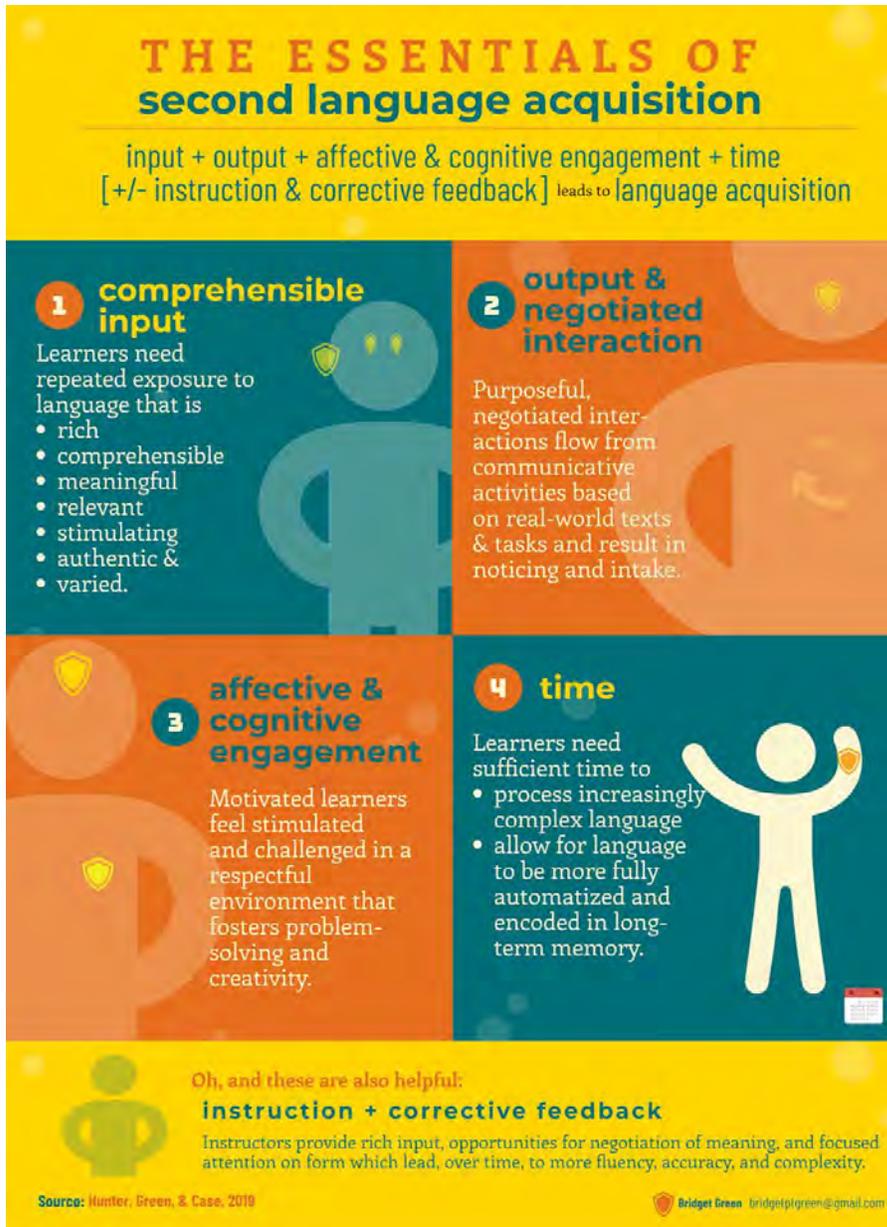


Figure 1: SLA essentials infographic

### 1 Aesthetics: Make it appealing

First impressions matter. When encountering visual materials for the first time, learners form an immediate first impression of its appeal based on how cluttered the page is (Tuch, Presslauer, Stöcklin, Opwis, and Bargas-Avila, 2012). The most common error in materials development by novice designers is a cluttered page with text that is laid out with no thought to the cognitive load imposed by such visual complexity. So use the space well. Spread out. Think of the page(s) as a blank canvas. Just as painters do not

generally leave a large blank space at the bottom of a canvas, materials writers should avoid a blank space at the bottom of the page. Sufficient white space, which allows the learners' eyes to rest, is key to an uncluttered look. Also, if you expect learners to use the space to fill in responses and work with peers, be sure to allow enough room for them to write. Double space any text that has blanks to fill; extend the blanks to a uniform length of 15 underlined spaces for a single word, longer for a phrase. If the space is at the end of a line, use the tab marker to extend the underlined blank to the end. Low visual complexity—spreading out content, leaving sufficient white space, and leaving room for students to write their answers—makes content much more engaging to learners (Tuch et al., 2012).

Visual clutter is sometimes exacerbated by formatting choices. Try to avoid adding boxes around titles, headings, vocabulary lists, or basically anything that is within the main body of the work as this creates visual noise that increases the cognitive load. Use hanging indents for all numbered content. Choose only one formatting intensifier (use bold *or* italics *or* underline) rather than piling them on. Make titles slightly larger than headings, which should be slightly larger than the 10- or 12-point body text. Traditionally, titles and headings should be in a sans serif font (without the spiky bits on the ends of the typeface) and text in a serif font (with the spiky bits on the end), but more important is choosing a font that is easy to read and not distracting.

Text-heavy handouts sprinkled with outdated clip art are all too common in some teacher-authored materials. Using colorful, evocative images may improve not only motivation, but learning as well—the picture-superiority effect is a well-researched phenomenon in which images are recalled far better than labels on memory tests (Whitehouse, 2006); images make materials more aesthetically appealing to learners and attract more readers than content without images (Ma, 2016). However, cognitive load and retrieval demands can reverse the picture-superiority effect (Carpenter and Olson, 2012). If the content is challenging, it is not enough merely to decorate our pages with colorful images; we must include retrieval activities that encourage learners to more elaboratively process the images so that the connection between language and concept is better encoded. (See Figure 2 for an example of a crowded landscape with unconnected images, unhelpful bullets, inconsistent headings and underlines, a lack of contextualization and personalization, unused space, etc.)

# Should've Said No

By Taylor Swift

- ◆ should have = should've  
"should have" is contracted form of "should've."  
Native English speakers say "should've" unless they are in formal situation.
- ✓ Same for: would have = would've  
Could have = could've

◆ Listen to the music, and fill in the blanks  
It's strange to think the songs we used to sing  
The smiles, the flowers, everything is gone

Yesterday I found out about you  
Even now just looking at you feels wrong  
You say that you'd take it all back, given one chance  
It was a moment of weakness and you said yes



You \_\_\_\_\_ no, you \_\_\_\_\_ home

You \_\_\_\_\_ twice 'fore you let it all go

You \_\_\_\_\_ that word

But what you did with her get back to me

And \_\_\_\_\_ there in the back of your mind

I shouldn't be asking myself why

You shouldn't be begging for forgiveness at my feet

You \_\_\_\_\_ no, baby and you might still have me



- ◆ Draw lines to connect phrasal verbs and verbs

### Phrasal Verbs

Find out

take back

get back

### Verbs

discover

return

return an item

- ◆ Write a story about the singer. Why does she feel this way? What happened? "...should have..."

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Figure 2: Materials with a heavy cognitive load

Thus, materials developers should insert clear, colorful images that aid learners' comprehension near the content that we hope to highlight and should build in activities that ensure students connect the content and the image(s) in a constructive way. For example, after a vocabulary activity, ask the students to connect the images to one or more of the words or phrases that are being practiced; later, ask students if they can recall, or better, reproduce any of the images and the words they illustrate. Using a variety of evocative images will help learners better understand and remember the content if the images are used as a tool for learning and not just ornamentation. As long as you are only using your materials for teaching, you should be able to use Google image search for teaching, research, and study. (Read the [Statement on the Fair Use of Images for Teaching, Research, and Study](#) for more information.)

## 2 Scaffolding: Break it down

Design principles for language learning materials must acknowledge the central role that scaffolding plays in making language input accessible by breaking learning into manageable chunks, progressing from simpler to more complex tasks, and providing language support along the way since “if too much cognitive load is created through poor instructional design, or dealing with complex materials, then learning is compromised because insufficient working memory resources are available to be devoted to the processes required to learn” (Ayres and Paas, 2012, p. 827). Although teachers naturally provide that support in their classroom while teaching, these vital steps may be omitted in materials we develop. When teaching online, whether synchronously or asynchronously, it is even more important to scaffold carefully since peer and teacher support are much harder to access. If we design materials with clearer, more explicit instructions and examples, keeping students’ independent work uppermost in mind, we may resist the urge to hurry through the very steps that assure that learners know what to do. Including careful scaffolding also gives teachers another opportunity to talk less and for groups of students to interact more as they work together to negotiate meaning, which contributes to better language acquisition by encoding learning in long-term memory.

Begin by making instructions simple, clear, concise, and direct. Think carefully about the steps that need to be laid out before and after exposure to the central input. Notice, for example, the instructions in [Figure 3](#) which begin with “Put the words in the correct blanks below.” This sudden leap into the center of the action passes over essential scaffolding steps that invite the learner to care about the topic being discussed by previewing the title and activating learners’ background knowledge and attitudes about the topic being discussed by previewing the title and activating learners’ background knowledge and attitudes about the topic itself.

**Practice Vocabulary Exercises**  
**Put the words in the correct blanks below. You may have to change the verb form. A word can be used more than once.**

embrace advocate artificial estimate hilarious advocate exception ups and downs participant

*Coming to Study in the US*

As an international student, I have to \_\_\_\_\_ the challenges of living in the United States. Otherwise, I may not enjoy my time here. Learning English and a new culture has its \_\_\_\_\_. Some days I am so excited to learn new things, and I want to try to express myself in a new language. Other days, I want to cry and go back to my home country because I don't have to struggle to be understood there. In my own country, everything is natural for me.

Sometimes in American culture, people say "Hi" to me and try to talk to me suddenly. I know it's part of American culture to be friendly, and saying "Hi" to strangers is natural for them. Yet, my first thought is that their "Hi" may be \_\_\_\_\_. I don't know why I react this way, but it just feels fake. In my country people are less demonstrative with their friendliness. They often talk to people they know. It's harder to talk to strangers.

I came to study in the United States because my mother is an English teacher. Her and her colleagues strongly \_\_\_\_\_ that it was necessary for me to know English. They said it was for my benefit. It seems like most of my mom's friends agreed with her opinion that English is vital to my success in life. However, my father said I didn't need to learn English, and that I should follow my own desires. He was an \_\_\_\_\_ to the other people my mom talked to. So, she sent me here, I don't mind though, I enjoy the opportunity. I \_\_\_\_\_ I will finish studying English in four or five years. I hope so anyways!



Figure 3: Un scaffolded materials

Students may or may not know the vocabulary being used, so taking the time to read the vocabulary list and mark the words they know allows them to fully engage with the work to come (see [Figure 4](#)). Building in thinking time as well as time for peer teaching is also a way to reduce teacher talking time, leading to a more effective learning environment. Well-scaffolded material should include examples, explicit opportunities for peer interaction, a (re)focus on the image, and crucially, the learners' responses to the content of the text. In Figure 4, notice the 3 invitations to interact with peers (*Talk to your classmates about the topic. Check with a partner. When you're finished, check with a partner.*), discuss the image (*What vocabulary word does the image show?*), and respond personally to the content of the article (*What do you know about this topic? Did the article surprise you?*)

## Coming to Study in the US

Building your vocabulary

**What do you think?** You are going to read an article about an international student who goes to another country to study. What do you know about this topic? Before you read the article, talk to your classmates about the topic.

**Read the words below. Do you remember the meanings of the words? Put a checkmark (✓) next to the words you know.**

- |                                     |  |                                      |
|-------------------------------------|--|--------------------------------------|
| <input type="checkbox"/> artificial | <input type="checkbox"/> exception     | <input type="checkbox"/> participant |
| <input type="checkbox"/> advocate   | <input type="checkbox"/> ups and downs | <input type="checkbox"/> hilarious   |
| <input type="checkbox"/> estimate   | <input type="checkbox"/> embrace       |                                      |

**Check with a partner. Help each other understand.**

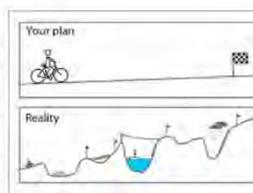
**Read the text below. Use the words above to fill in the blanks with the missing words. You can use a word more than once. You may need to change the word form. (If there are any you don't know, skip them and come back later.)**

### Coming to Study in the US

As an international student, I have to embrace the challenges of living in the United States. Otherwise, I may not enjoy my time here. Learning English and a new culture has its \_\_\_\_\_. Some days I am so excited to learn new things, and I want to try to express myself in a new language. Other days, I want to cry and go back to my home country because I don't have to struggle to be understood there. In my own country, everything comes naturally to me.

Sometimes in American culture, people say "Hi" to me and try to talk to me suddenly. I know it's part of American culture to be friendly, and saying "Hi" to strangers is natural for them. Yet, my first thought is that their "Hi" may be \_\_\_\_\_. I don't know why I react this way, but it just feels fake. In my country people are less demonstrative with their friendliness. They often talk to people they know. It's harder to talk to strangers.

I came to study in the United States because my mother is an English teacher. Her and her colleagues strongly \_\_\_\_\_ that I go abroad in order to learn English. They said it was for my benefit. It seems like most of my mom's friends agreed with her opinion that English is vital to my success in life. However, my father said I didn't need to learn English, and that I should follow my own desires. He was an \_\_\_\_\_ to the other people my mom and I talked to. In the end, though, I decided to come. I'm not sure, but I \_\_\_\_\_ that I will finish studying English in four or five years. I hope so anyway!



**When you're finished, check with a partner. Do you have the same answers?**

**What vocabulary word does the image show? Explain it.**

**What do you think now? Did the article surprise you? Discuss it.**

Figure 4: Scaffolded materials

Note, too, that the image of going up and down stairs in Figure 3 does not illustrate the idiomatic meaning of 'ups and downs' in this context ('the mixture of good and bad experiences that happen in any situation or relationship'), while the one in Figure 4 does. It is important to choose images that clearly illustrate the words or concepts you hope the students will retain.

Cognitive load theory is about more than just the complexity of the text that is presented to students: "the manner in which information is presented to learners and the learning activities required of learners can also impose a cognitive load" (Paas, Renkl, and Sweller, 2003, p. 2). The lack of confidence one feels when struggling to learn another

language can be mitigated by well-designed materials that are clear and easy to navigate. Materials that are carefully scaffolded like those in Figure 4 can increase retention and help learners feel more engaged, supported, and successful because with the reduction in the cognitive load, students feel confident that they know what to do and can focus on the input being presented.

### **3 Authenticity: Don't reinvent the wheel**

It is widely accepted that exposure to authentic input is more beneficial for language learners than are simplified, contrived texts (Mishan, 2005; Tomlinson, 2013). If possible, we should choose varied authentic content that match the learners' needs and interests, and develop affectively- and cognitively-engaging scaffolding around it. Choosing authentic, real-world, culture-rich examples of language in use—songs, commercials, advertisements, podcasts, artwork, movie trailers, official forms, tiktok videos, and on and on—are especially motivating to learners and it is scaffolding that makes them accessible. Creating materials that support learners, focus their attention on select aspects of language, and guide them towards noticing, understanding, and using language is the only way to make authentic content accessible.

However, teachers are often required to use textbooks which may or may not incorporate authentic language; for the purposes of this discussion, therefore, we will focus on developing the texts already on offer in an authentic way as well as supplemental texts that we develop to support learning objectives. When scaffolding input, we sometimes fail to use authentic learner resources and instead rely on our own knowledge, however faulty. Take for example a teacher-authored handout for the song *Ironic* by Alanis Morissette developed for an intermediate-EFL class (see [Figure 5](#)), which presents 26 vocabulary words with their definitions in a matching activity. [Insert Figure 5 here.]

**1. VOCABULARY MATCH**  
 In pairs or groups, find the vocabulary word on the left in the song. Then find the definition in the list on the right. **Write the vocabulary word in front of the definition. No numbers** - this is not math class!

<u>Vocabulary Words</u>	<u>Definitions or explanations</u>
1. turned	a. curse word, expressing anger or condemnation
2. the lottery	b. a notice in a public place to give information or directions
3. a fly (n.)	c. airplane trip
4. to fly (vb.)	d. black flying insect (dirty)
5. Chardonnay	e. many cars in the streets
6. death row	f. slang for children
7. pardon	g. direction, helpful information, guidance
8. ironic	h. forgiveness, removal of punishment
9. wedding	i. game where one wins money or a prize after a drawing
10. free	j. had an accident
11. advice	k. having a meaning or result of the opposite of what you would expect
12. afraid	l. having fear
13. packed	m. hopes or images / pictures you have when asleep
14. suitcase	n. kitchen utensil for cutting
15. kids	o. kitchen utensils for soup
16. whole	p. line of prison cells where the criminals who are condemned to die stay
17. damn	q. luggage, bag to carry clothes in when traveling
18. flight	r. marriage ceremony
19. crashed	s. no cost, gratis
20. sneaking	t. put clothes and possessions in a suitcase
21. traffic	u. to travel in an airplane
22. sign	v. to walk or come up quietly
23. spoons	w. total, complete, entire
24. knife	x. verb meaning to change your age by one more year
25. dreams	y. white wine - originally from France, popular in CA
26. wife	z. women married to man

Figure 5: Teacher-authored vocabulary matching exercise

Leaving aside the excess of items presented and the lack of a designated space to write answers, or an example to lead the way and alleviate some of the visual overload, the definitions themselves are problematic—*spoons* is defined as ‘kitchen utensils for soup’; *turned* as ‘verb meaning to change your age by one more year’ and *crashed* as ‘had an accident.’ It seems clear that these definitions were invented on the fly without much thought to the difficulty of the defining language (since *utensils* is far less common than *spoons*) or the nuances of the word (since *crash* means to have an accident specifically ‘in a car, plane, etc. by violently hitting something else’). When making our own materials, it is very important to use those authentic learner tools/teacher resources that are readily available, such as learner dictionaries like the [Oxford Learner’s Dictionary](#) and, for lower level students, the [Longman’s Dictionary of Contemporary English](#), in order to make the input more accessible. (Note that in both of these learner’s dictionaries, *spoon* is illustrated with an image—by far the simplest method of conveying the meaning of the term.)

The [New General Service List](#) of core high-frequency vocabulary words is another corpus-based resource that allows teachers to move beyond their intuition when choosing which vocabulary words to gloss by listing words in order of frequency beginning with

K1 (the 1,000 most common words) and moving on to K34. *Spoon*, for example, is in the K5 category (5,415) whereas *utensil* is K11 (11,826). Another useful tool is a vocabulary profiler such as [LexTutor](#), which reveals that over half (fifteen items) of the words glossed (*afraid, case, death, dreams, fly, free, kids, pack, pardon, sign, suit, turn, wedding, whole, and wife*) in Figure 4 are K1 and therefore may not need to be glossed at all, but may be recalled. In contrast, six of the words (*row, advice, flight, crash, traffic, and knife*) are K2, two are K3 (*ironic, damned*). Knowing, rather than intuiting, the frequency and therefore usefulness of the vocabulary is vital. When addressing the needs of high-intermediate and advanced students of English, materials developers should also access the [New Academic Word List](#) which expands on Coxhead's (2000) version.

Another teacher resource that should be on every ESL/EFL materials developer's menu bar is the [Corpus of Contemporary American English](#). COCA allows teachers to test their intuition about frequency and collocations. (From COCA, we learn, for example, that *spoon* occurs in the corpus 8,281 times, while *utensil* occurs only 188 times.) Further, when developing activities such as gap fills to practice vocabulary in use, COCA is useful for supplying authentic sample sentences that, when clicked on, provide more contextualization from which to draw, thus again avoiding reinventing the wheel. For those who lack the time to invest in learning how to use COCA, [Google Ngram Viewer](#) is a corpus made up of the scanned books available in Google Books and is a quick, visual way to check for frequency of written words.

The focus on authenticity should extend to the language used to describe learning activities as well; when developing materials, avoid teacher-centric language such as "Vocabulary Practice", "Pre-Listening Task", "Reading Comprehension", as well as the use of Roman numerals, in favor of the more authentic and learner-centered "Building your vocabulary", "Before you listen", "Did you understand?" and Arabic numbers.

Finally, and perhaps most important, the language you choose to use should move beyond the usual native-speaker-centric, formal language that is prevalent in many coursebooks to better mirror the English that is used globally and that learners will most likely encounter (Kiczkowiak, 2020). Find examples of the authentic speech of successful English speakers from the culture(s) of your students; remind them that as speakers of global English, they will most likely be communicating with others using English as a lingua franca.

#### **4 Affective and Cognitive Engagement through personalization and higher-order thinking**

Cognitive engagement comes as a result of materials that are intellectually stimulating and meaningful. Choosing topics that challenge learners and that they care about, or come to care about, leads to more productive language exposure (Mishan, 2015), but how

do we do that? Use frequent needs assessments to help you focus on what is relevant to the learners, what motivates, interests, and intrigues them, but also on what surprises, amazes, and challenges them, and present those topics in a variety of ways that meet different learning styles. Ask them how they learn best and try to present materials that clearly respond to that information. Materials that are explicitly designed to engage learners cognitively and affectively can lead to intrinsic motivation in those who seem checked out during class.

Show your students the levels of learning in Bloom's taxonomy and the need to do more than just memorize lexical items. To retain language, we need to analyze, evaluate, and create; we need to use language as a tool to communicate our whole selves. Develop materials that reflect this. Begin by contextualizing the input and allowing learners to share their own knowledge and experience. Personalize materials. Instead of the usual inner-circle, native-speaker personas, substitute your and your current students' names and interests when appropriate. Thus, *Tom and Sue \_\_\_\_\_ (watch) a movie yesterday* becomes, for example, *Abdullah and Kenji \_\_\_\_\_ (watch) the FIFA World Cup final match yesterday*. For vocabulary practice, including of academic words like *obtain* and *impact*, rather than a word bank followed by a teacher-authored gap-fill, ask leading questions such as *What has been difficult for you to obtain in this country? Which person has had the greatest impact on you?* By responding to these questions (in full and complete answers that include reasons and details), learners demonstrate their understanding of the target vocabulary in a way that is both creative and personal, and which builds community as we come to know each other better.

When in doubt, ask, don't tell. Give choices. Choice is essential for stimulating cognitive and affective engagement (Mishan, 2015), and texts, tasks, and activities should incorporate as many opportunities for learner choice as possible including the choice of topics, presentation formats, and assessment approaches. Try to allow for choices at the individual, pair, group, and full class. Making a choice in conjunction with others allows for negotiation, compromise, and group cohesion.

Include explicit instructions that give students permission to take the time they need to learn. After instructions on how to, for example, do an activity, you can add, *If there are any you don't know, skip them, and come back later*. This allows students to de-stress and do their best without the expectation that they need to get it all correct on the first attempt.

Include frequent checks of their affective and cognitive responses to the text, and their rating of its level of difficulty and interest. To increase motivation, provide explicit information about the relevance of what they are learning by including corpus data about the usefulness of the language being presented when possible. For example, when

presenting affixes, include information such as “*The 15 prefixes listed here represent 79% of the most common prefixes used in American high school textbooks!*” Ask them to supply their own response to the relevance by asking often how they feel about what they are learning and whether it is useful to them. For example, follow up activities with a Likert scale asking *How difficult was this? How useful was this?* or *What did you learn?* Ask *Why are we learning this? What is the best way to remember it?* Move beyond micro-comprehension of details to global meaning, personal connection, and local context. Ask, for example, *What do you think? Is this true for you? What happens in your country? In what way does this challenge your beliefs about this topic?* These questions allow learners to respond critically to the core message of the content, to analyze its personal and cultural meaningfulness, and to create a culturally appropriate response. Even a rejection of the content is an engaging and creative response if it’s accompanied by reasoned explanations. These metacognitive practices, or thinking about thinking, can lead students towards the habit of higher-order responses to what they learn.

### **5 Revision: Keep making it better**

Perhaps the most important principle that leads to the production of good materials is revision. Tomlinson (2013) reminds us that “Good materials developers are thinking developers who have confidence in their ability and in their materials but who are prepared to rethink and revise their principles and beliefs in response to further stimulus and information” (p. 493). Good developers take immense professional pride in excellence but recognize that materials development is a long-term process. Think of each use of your materials, therefore, as a ‘pilot’, or initial test, which you are assessing for consistency and clarity. After the first use, clear up any confusion. If you do not have time to revise immediately, add a quick note in red at the top of the page to remind you of changes to make later. Every time you return to re-use material, update it to reflect your growing knowledge of the latest research, what works with your current group of students, and what does not. Encourage the sharing of materials among your colleagues so that each subsequent use can lead to better materials development. (Always add your name to the footer in 6-point type to document your own progress as well as to limit plagiarism and the use of materials outside of the group or level of learners for which they were intended.) This recursive process of development, adaptation, and re-use is never completely finished as each iteration of our materials invites further improvements.

### **Conclusion**

Materials developers should have a deep and growing understanding of the essential elements of language acquisition in mind as they apply the following five design principles (see [Figure 6](#)) to their in-class and online materials development:

- **Aesthetics:** present visually appealing content while using the space well and incorporating evocative, relevant images that aid comprehension;
- **Scaffolding:** progress from simpler to more complex tasks, elicit background knowledge of language and culture, build in thinking time, interaction, and noticing while encouraging learners to respond to global meaning;
- **Authenticity:** include stimulating, current content and focus on meaning while scaffolding real-world tasks with learner-centered language using authentic language and helpful teacher resources;
- **Affective and cognitive engagement:** encourage learner responses to language and culture through a variety of relevant (personal, local, contextualized) input that matches your students' needs and interests, and incorporates Bloom's depth of learning; and
- **Revision:** systematically edit, update, rethink, and revise materials for consistency and clarity.

# Principles of Materials Design

based on SLA research, for language teachers

Bridget Green



## Aesthetics

- Minimize visual complexity/cognitive load with a balanced use of **space**, ample white space, room to write.
- Choose evocative **images** that help Ss understand/remember.
- Make **formatting** decisions carefully to model correct use of language & avoid clutter.



## Scaffolding

- Move from **simpler to more complex** tasks.
- Make **instructions** simple, clear, concise, explicit.
- Elicit **background knowledge** of language and culture.
- Build in **thinking time & interaction & noticing**.
- Allow Ss to **de-stress**, and **absorb and respond to meaning**.
- Build in **challenge** to the stretch learner's interlanguage.
- Systematically **recycle**/retrieve language and themes.
- Include an **example**, indicate word stress of new vocabulary.



## Authenticity

- Choose stimulating, current **content** and focus on meaning.
- Use teacher **resources** to scaffold authentic, leveled language.
- Use **learner-centered language** that focuses on **language & culture-rich** content. Limit metalinguage.
- Build in **real-world tasks** that stimulate noticing and intake.
- Respond in a **personal & real** way to the task/author's intent.
- Highlight **global English** speakers.



## Affective and Cognitive Engagement

- Focus on **depth of learning** (Bloom's).
- Ask for feedback and encourage learner **responses** to language and culture.
- Choose **relevant** input that matches your students' needs/interests.
- Add **variety & choice** -- learning styles, motivation, surprise.
- **Personalize, localize, contextualize, & humanize.**

**Trust yourself. Share. Grow. Adapt. Revise, revise, revise.**

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Figure 5: Principles of material design infographic

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