

Scaffolding Instruction for English Language Learners: A Conceptual Framework

Aída Walqui

Teacher Professional Development Program, West Ed, USA

Adolescent students learning academic subject matter in a new language face a number of challenges, both local and global in nature, as they negotiate the linguistic, academic and social world of schooling. Making a case for a pedagogy of rigour and hope, the author presents a model of scaffolding that emphasises the interactive social nature of learning and the contingent, collaborative nature of support and development. Drawing on Sociocultural Theory, as well as a large body of empirical research on effective practices with second language learners, the author examines the use of specific types of scaffolding to promote linguistic and academic development. The model, developed by the author, conceives of scaffolding as both structure and process, weaving together several levels of pedagogical support, from macro-level planning of curricula over time to micro-level moment-to-moment scaffolding and the contingent variation of support responsive to interactions as they unfold.

Keywords: second language learners, English Language Learners, scaffolding, sociocultural theory

The linguistic landscape of American schools is changing rapidly. In the decade between 1992 and 2002, the enrolment of English Language Learners (ELLs) grew by 84% while the total K-12 population grew by only 10%. ELLs are no longer exclusively new immigrants to the USA. In middle and high schools, 57% of them represent the second or third generation of immigrants to the USA (Batalova & Fix, 2005). Although these adolescents have been educated exclusively in US schools, they are still learning English, failing academically and dropping out of school in large numbers (Fry, 2003; Ruiz de Velasco & Fix, 2000).

There is an urgent need to turn around this situation. In this paper I present a pedagogy of rigour and hope. I maintain that it is possible for second language learners to develop deep disciplinary knowledge and engage in challenging academic activities if teachers know how to support them pedagogically to achieve their potential. While the focus of the paper is on secondary English Language Learners learning via the medium of English, the ideas presented here also apply to elementary schooling and to the teaching of academic courses in students' native languages.

Education never takes place in a vacuum but is deeply embedded in a sociocultural milieu. Thus learning is a matter not only of cognitive development but also of shared social practices. The cognitive and the social go hand in hand in classroom learning. The primary process by which learning takes place is *interaction*, more specifically, an engagement with other learners

and teachers in joint activities that focus on matters of shared interest and that contain opportunities for learning.

The social nature of learning has consequences at several different levels. At the global level, English Language Learners' perceptions of how the majority society accepts or rejects the culture and language they bring to school are extremely important for their eventual success in school (Cummins, 1984; Skutnabb-Kangas, 1984; Verhoeven, 1990). In every programme for English Language Learners, students' culture and language need to be appreciated and validated through class practices. Such validation of students' identity can only occur at levels that are deep and genuine rather than superficial.

Learners need to experience the global and local contexts in which their academic life is embedded as consistent and positive. If they are, then learners can develop their academic identity, because they will be treated with respect and they will be valued and listened to as 'speakers in their own right' (Kramsch, 1996). In such a climate, learners can develop skills of language use and argumentation in the different subject matter areas. They will have the 'right to speak' (Peirce, 1995) in class, and they will participate actively in their own and each other's academic development. In accordance with Lave and Wenger's theory of situated learning, their participation may be 'peripheral' at first, but it is always 'legitimate' (Lave & Wenger, 1991). In other words, students who are learning the language and practices of the discipline – mathematics, for example – may at first feel hesitant to contribute, and they may not have full control of the register and discourse of the subject matter. They will, however, feel legitimate if they recognise that the expectation of teachers and other more capable peers is that they, too, will soon become full-fledged members of that community as they become more socialised into it. There are a number of ways in which teachers can assist students in developing language and subject matter knowledge from the interactive, sociocultural perspective sketched here. One such way, *scaffolding*, is particularly consonant with sociocultural theory (SCT) and is well suited to English Language Learners.

Learning from a Sociocultural Perspective

SCT is based primarily on the work of Lev Vygotsky, a Russian psychologist, educator, philosopher and art critic, who lived from 1896 to 1934. The main tenets of Vygotsky's learning theory can be summarised as follows:

- Learning precedes development.
- Language is the main vehicle (tool) of thought.
- Mediation is central to learning.
- Social interaction is the basis of learning and development. Learning is a process of apprenticeship and internalisation in which skills and knowledge are transformed from the social into the cognitive plane.
- The Zone of Proximal Development (ZPD) is the primary activity space in which learning occurs.

Let's look at these main features in turn.

Learning precedes development

Vygotsky takes issue with traditional psychology for assuming that development is a prerequisite of learning. Traditional psychology assumes that learning can only be successful after the learner shows that the relevant mental functions have already matured. From this standpoint, all else would be premature instruction and would therefore be useless. Instead, Vygotsky proposes that learning is only useful if it is ahead of development, that is, if it challenges learners to think and act in advance of their actual level of development.

Language is the main vehicle of thought

Vygotsky does not claim that there is no thought before language. Rather, he claims that thought and language arise separately but that when language arrives on the scene, thinking and speech intermingle and merge, and in so doing transform one another so that both become quite different as a result of their 'merger'. Language starts as social speech, as dialogue. In fact, Vygotsky, like his contemporary, the Russian linguist Bakhtin (1981), considers all language, spoken and written, as dialogical rather than monological. This means that the basic unit of language is conversational interaction, not sentence structure or grammatical pattern.

The internalisation of social speech, of dialogue, is mediated by private speech, as when a child speaks to herself to facilitate a difficult task. For example, she might be thinking to herself, 'Hmm . . .let's see . . .what if I . . .no, no, no, that wouldn't work, but what if I . . .' and so on, clearly using language that is social in origin. Whenever a task is very difficult, inner speech can be made overt in order to mediate between the task demands and the available resources. By talking to herself the child (or learner) attempts to marshal resources and control the task. Gradually, as speech is internalised, it changes shape, both syntactically and semantically, but even so it remains essentially social and dialogical.

Mediation is central to learning

The difficult concept of mediation is generally regarded as the centrepiece of Vygotsky's theory of learning. In its most literal sense, mediation is the use of a tool to accomplish some action. To till the soil, the farmer uses a spade or a plough. The spade or plough mediates between the farmer and the soil, making the desired result – soil that is ready for sowing and planting – easier to accomplish. The child learns to use tools of various kinds: sticks, cups, spoons and so on. Many of those tools are culturally and historically produced. They are made available to the child in social interaction, thus adding another layer of mediation: activity mediated by tools is mediated by social interaction. When language comes along, it provides the most powerful mediation tool of all: mediation by signs, or semiotic mediation. Pointing is accompanied or replaced by linguistic reference, the immediate environment becomes describable and can be commented upon, expectations can be raised about future talk (e.g. when children learn to use phrases such as 'Guess what?'), past experiences can be recounted and relationships can be described.

Thought can be socially shared and can break away from the bounds of the here-and-now.

Social interaction and internalisation

The basis for all learning is social interaction. Vygotsky emphasises that social interaction precedes the development of knowledge and ability. Consciousness, the notions of self and identity, physical skills and mental abilities, all these have their origin in social interaction between the child and parent, and between the child, peers and others, including teachers. Vygotsky (1978: 88) points out that 'human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them.' In addition, he asserts that 'every function in the child's cultural development appears twice, on two levels. First, on the social, and later on the psychological level; first, between people as an interpsychological category, and then inside the child, as an intrapsychological category' (Vygotsky, 1978: 128). An important consideration that Vygotsky stresses is that the social function and the corresponding mental function are not the same: the process of internalisation is a process of transformation, involving appropriation and reconstruction. Solitary work, either in tests or in classroom activities, is incompatible with Vygotsky's conception of pedagogy. As all knowledge and ability arises in social activity, all learning is co-constructed, and nothing is ever gained by taking the interactional dimension out of the equation. There is a role for individual work in SCT, but only in the context of collaborative work.

The Zone of Proximal Development (ZPD)

The ZPD is the best known construct in SCT. The most straightforward and most often quoted definition of ZPD is the following:

It is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky, 1978: 86)

While the concept of the ZPD is widely known, it is also frequently misunderstood. The common failure to see the connections between the concept and Vygotsky's theory as a whole means that the ZPD concept is difficult to differentiate from other instructional techniques that systematically lead children, with the help of an adult, through a number of steps in the process of learning some set of skills. For Vygotsky, the context in which the interactions occur is of crucial importance (Tudge, 1990).

The ZPD was developed as a research tool, as a means of establishing the developmental/learning potential of children, particularly children with learning disabilities (such as deaf or blind children) in the Institute of Defectology, which Vygotsky was then directing. He complained that traditional mental tests only tested the already achieved level of competence ('the past'), but that if children received appropriate assistance, their performance would be more predictive of what they might be able to achieve ('the future'). Thus he made mental testing a more collaborative, guided experience instead

of the solitary, individual performance it had hitherto been. He conducted rigorous experimental studies that showed clear evidence that his ZPD-based testing was a better predictor of success than the traditional individual test. It is interesting to note that assessment and testing have, to this day, never managed to incorporate the collaborative features that Vygotsky introduced the better part of a century ago. Individual, solitary performance continues to be the norm in educational testing at all levels. Even though alternative assessments, in the form of portfolios or collaborative projects, are an accepted practice in many schools, they are not accorded significance in the debate about school performance rankings and accountability measures.

Vygotsky extended the concept of the ZPD to pedagogical activity, even though he did not work out a detailed theory of instruction using the ZPD as a guiding metaphor (Wells, 1999). This work was left to others, after Vygotsky's death. In the USA and other Western countries, Vygotsky's thinking, and the ideas flowing from the ZPD, did not begin to have an impact on education until the 1980s.

Scaffolding

Creating contexts for linguistic and academic learning in the ZPD occurs in part through the scaffolding of social interaction. Scaffolding is closely related to the ZPD. In fact, it is only within the ZPD that scaffolding can occur. As we saw above, working in the ZPD means that the learner is assisted by others to be able to achieve more than he or she would be able to achieve alone. Scaffolding refers to the detailed circumstances of such work in the ZPD.

According to David Wood, scaffolding is tutorial behaviour that is contingent, collaborative and interactive (Wood, 1988: 96). Behaviour is contingent when an action depends on (i.e. influences and is influenced by) other actions. It is collaborative when the end result, whether it is a conversation or the solution to a problem, is jointly achieved. And it is interactive when it includes the activity of two or more people who are mutually engaged.

Scaffolding as structure and process

The original idea of scaffolding comes from the work of Jerome Bruner, who defines scaffolding as follows:

a process of 'setting up' the situation to make the child's entry easy and successful and then gradually pulling back and handing the role to the child as he becomes skilled enough to manage it. (Bruner, 1983: 60)

Bruner's notion of scaffolding was developed in the 1970s in the context of an intensive investigation of six infants (ages 7–18 months) over a period of 10 months, as they and their mothers played games. The researchers focused particularly on the game of 'peekaboo', which was played frequently over the entire period. The game consists of an initial contact, the establishment of joint attention, disappearance, reappearance and re-establishment of contact. These are the obligatory features of the 'syntax' of the game, whereas other features, such as vocalisations to sustain the infant's interest, responses to the infant's

attempts to uncover the mother's face, etc. are optional. These 'non-rule bound' parts of the game are an instance of the mother providing a 'scaffold' for the child (Bruner & Sherwood, 1975: 280).

The game becomes conventionalised, a ritual, but at the same time it allows for variations. Gradually there is a shift in agency, a 'take-over', with the child becoming self-directed and the roles of agent and recipient being reversed. Eventually the child can play the peekaboo game on her own, with a toy animal, or with other children or adults.

There are two distinct but related elements in this example. On the one hand we have the conventionalised, ritual structure that is more or less constant (though flexible), and on the other hand we have an interactional process that is jointly constructed from moment to moment. Just as in the case of the scaffolding around a building, there is a facilitative structure of supports and boards (temporal and changeable, which the workers need to carry out their work), and there is the actual work that is being carried out.

In pedagogical contexts, scaffolding has come to refer to both aspects of the construction site: the supportive structure (which is relatively stable, though easy to assemble and reassemble) and the collaborative construction work that is carried out. Some educators are uneasy with the term scaffolding, because in normal usage it refers to a rigid structure, not the fluid dynamics of collaborative work that we associate with working in the ZPD (Gibbons, 2003). Indeed, if we think only of the support structure without focusing on the actual construction work, then such a reservation is justified. Most importantly, then, the dynamics between the scaffolding structure and the scaffolding process must be kept in mind. The process is enabled by the scaffolding structure, and a constant evaluation of the process indicates when parts of the scaffolding structure can be dismantled or shifted elsewhere.

In education, scaffolding can be thought of as three related pedagogical 'scales'. First, there is the meaning of providing a support structure to enable certain activities and skills to develop. Second, there is the actual carrying out of particular activities in class. And, third, there is the assistance provided in moment-to-moment interaction. Schematically, this can be represented in the following way:

- Scaffolding 1 Planned curriculum progression over time (e.g. a series of tasks over time, a project, a classroom ritual)
- Scaffolding 2 The procedures used in a particular activity (an instantiation of Scaffolding 1)
- Scaffolding 3 The collaborative process of interaction (the process of achieving Scaffolding 2)

We can see how the sequence here moves from macro to micro, from planned to improvised, and from structure to process (Gibbons, 2003; van Lier, 1996). As we all know, plans have a way of changing as they are being carried out. In particular, pedagogical action is always a blend of the planned and the improvised, the predicted and the unpredictable, routine and innovation.

So, even though the three scales suggest a top-down structure, there is also bottom-up change that can affect and transform the scaffolding at the top. As

scaffolding is premised upon the notion of handing over (by the teacher) and taking over (by the student), assistance provided should always be only 'just enough' and 'just in time'. As the students are able to do more and gradually come to be more in charge of their own learning, the upper-level (macro) scaffolds are changed, transformed, restructured or dismantled.

Features of pedagogical scaffolding

All three scales of pedagogical scaffolding have six central features, according to van Lier (2004). As in any type of scaffolding, they are contingent, collaborative and interactive. However, in an educational setting, these features are further refined and features specific to schooling are added:

Continuity

Tasks are repeated, with variations and connected to one another (e.g. as part of projects).

Contextual support

Exploration is encouraged in a safe, supportive environment; access to means and goals is promoted in a variety of ways.

Intersubjectivity

Mutual engagement and rapport are established; there is encouragement and nonthreatening participation in a shared community of practice.

Contingency

Task procedures are adjusted depending on actions of learners; contributions and utterances are oriented towards each other and may be co-constructed (or, see below, vertically constructed).

Handover/takeover

There is an increasing role for the learner as skills and confidence increase; the teacher watches carefully for the learner's readiness to take over increasing parts of the action.

Flow

Skills and challenges are in balance; participants are focused on the task and are 'in tune' with each other.

Scaffolded interaction differentiated from IRF

Often the scaffolding process arises in a context of spoken interaction, when the utterance of one participant is completed or taken further by the utterance of another participant. Bruner has called this kind of collaborative talk 'ratchet-like' (cited in Cazden, 1992: 103). Scollon, in an investigation of mother-child discourse, has labelled it 'vertical construction', as the utterances are produced interactively and, once transcribed, are read down the page (Scollon, 1976).

In classroom settings, it is important to understand the difference between spoken interaction that scaffolds student learning and interaction that imposes a 'recitation script', as Tharp and Gallimore (1988) call it. Most teacher-student talk is of the scripted type (Wells, 1999) and is commonly known as

Initiation-Response-Feedback (IRF). The two examples below demonstrate these two kinds of teacher–student spoken interactions that might occur in a classroom of English Language Learners. If we juxtapose the three utterances on the left (Gibbons, 2002) with three utterances from the longer extract on the right (Walqui, 2001), we can see superficial similarities (e.g. both sequences consist of a teacher question, student response and teacher follow-up), but also fundamental differences, as the glosses below the utterances indicate.

Initiation-Response-Feedback

T: What season comes after fall?
The teacher knows the answer and is checking to see whether the student does.

S: Winter.

T: Good girl.
The teacher evaluates and approves the student's answer

Scaffolded teacher–student talk

S: It's like everybody should get the same rights and protection, no matter, like, race, religion.

T: Yeah. Everybody.

The teacher acknowledges the student's response and waits.

S: No matter if they are a citizen or illegal, they should get the same protection.

T: I agree with you, but why do you say that with confidence?

The teacher is asking the student to justify or elaborate her thinking

S: Because it says that.

T: Because it says that?

The teacher acknowledges the student's response and continues to wait for justification or elaboration.

S: Also because it [the 14th Amendment] says it should not deny any person of the right to life, liberty and property without due process.

The student draws on evidence for her thinking.

T: Okay, not any citizen?

The teacher highlights a key aspect of the 14th Amendment.

S: Any person.

The student consolidates her understanding.

T: Okay, so is the 14th Amendment helpful to you?

The teacher connects the student's learning to her experience, as an immigrant.

During IRF, as in the example above, the teacher wants students to demonstrate that they know a particular word, to practise pronouncing words or phrases, or to display knowledge of facts. In scaffolded talk, as illustrated, the teacher is intent on letting the students speak for themselves and encourages them to be precise and to present a clear argument. Such interactions scaffold students' discipline and language learning simultaneously.

Beyond the expert–novice context

So far we have discussed the ZPD and scaffolding from the perspective of a more knowledgeable person (a teacher or parent) interacting with a less knowledgeable person (a student or child). However, in the work of several researchers (Donato, 1994; Gibbons, 2002; Mercer, 1995; Rogoff, 1995), the idea of scaffolding has been expanded to include not only an expert–novice relationship, but also a relationship of equal knowledge, such as in a group of learners working on a shared task. Such scaffolding can be called 'collective scaffolding' (Donato, 1994; Moll, 1990), and researchers have shown that students working in groups can produce results that none of them would have been capable of producing on their own. In such circumstances learners create zones of proximal development for each other and engage in mutual scaffolding. As an example, Gibbons (2002: 19) reports a small group's process of planning how to report a science experiment. One participant, Emily, is a fully bilingual speaker of Chinese and English and the others are English Language Learners. The following is a brief extract of the interaction, and we can see how it illustrates both the vertical construction and the collective scaffolding that we have described:

Milad: It stuck together because. . .

Maroun: And it stuck together because it was. . .

Emily: It was on a different side.

Gina: It was on a different side and the other one's and. . .

Emily: And the poles are different.

Gina: And the poles are different.

Milad: And em. . .when we put on the first side it stuck together. . .

At the end of this group activity, one of the learners, Gina, is chosen to report the group's findings to the whole class. Gibbons reports that Gina's performance was more fluent than it was likely to have been 'without the initial talk in a group' (Gibbons, 2002: 20). Gibbons also points out that the spoken language used in the group report begins 'to sound more like "written" language' (p. 20). The suggestion is that scaffolded interaction among peers connects conversational language to academic discourse, both written and spoken.

In addition to the two contexts of scaffolding discussed so far, the expert–novice context and the collective scaffolding context, van Lier (1996) suggests two further contexts in which students can work within their ZPD.

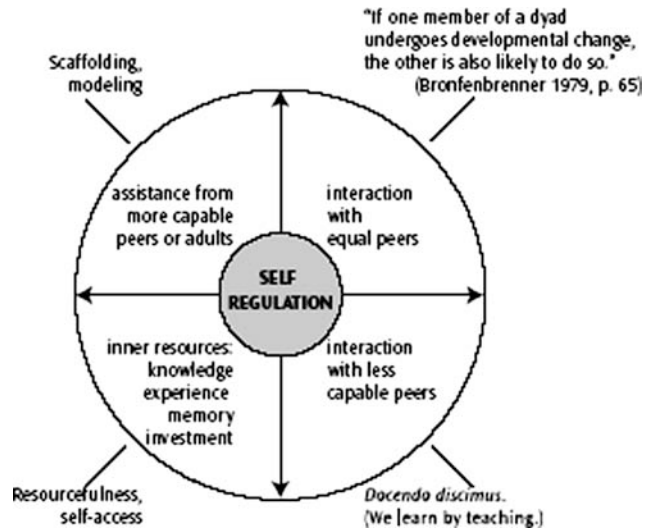


Figure 1 Expanded ZPD (van Lier, 2004)

They can work with someone who is at a lower level of understanding, and the need to teach the other person is an opportunity to verbalise, clarify and extend their own knowledge of the subject matter. Finally, they can draw on their own resources – the models remembered from their teachers and peers and other resources in their environment – to supplement the shortcomings of their own knowledge and skills. Thus, the student has available at least the following four sources of scaffolding:

- (1) being assisted by an expert, when the learner receives guidance, advice and modelling;
- (2) collaborating with other learners, when learning is constructed together;
- (3) assisting a lower-level learner, when both have opportunities to learn; and
- (4) working alone, when internalised practices and strategies, inner speech, inner resources and experimentation are used.

In all four participation contexts, the learner has opportunities to learn, but of different kinds. When assisted by a more capable other, a learner can experience models of successful learning or participate in more complex social activities, as suggested in Vygotsky's original ZPD (see also Lave & Wenger, 1991). When working together with other learners, discovery and joint construction occur; when one learner discovers something new, the partner will experience this discovery too. When teaching a less accomplished peer, a learner needs to organise her thoughts and actions and achieve maximum clarity of expression. We learn by teaching, as the ancient saying goes. Finally, a learner can internalise teaching and learning strategies, rely on inner resources, and experiment and try new angles, in a self-directed way.

Figure 1 shows these four potential contexts of learning as aspects of an expanded ZPD.

Scaffolding Instruction for English Language Learners in Secondary Schools

English learners benefit from the same good teaching as all learners do, but they need even more of it as they are working to accomplish English learning and content area learning simultaneously. A number of scaffolding approaches, both general and specific, are especially appropriate for these students engaged in 'double duty.'

General approaches for scaffolding English Language Learners' learning

Careful teaching first prepares students, by focusing their attention on key processes and ideas, before engaging them in interactive tasks to practice using these processes and concepts. Cyclical curricula (i.e. curricula that are not based on a linear progression of items but, rather, on the cyclical reintroduction of concepts at higher levels of complexity and inter-relatedness) lead to a natural growth in the understanding of ideas and to self-correction of misunderstandings. Frequently, however, a concern for immediate comprehension overtakes what we know about the best ways to promote learning. Howard Gardner (1989: 158–159), speaking of education in general, puts it as follows:

First of all, when you are trying to present new materials, you cannot expect them to be grasped immediately. (If they are, in fact, the understanding had probably been present all along.) One must approach the issues in many different ways over a significant period of time if there is to be any hope of assimilation.

Teachers must explain how students learn – to students! Too often students are the last to know. For English learners, this is especially damaging. They need to understand that their feelings of vagueness and frustration are valid. At the same time, teachers should carefully prepare learners by setting up tasks that will prepare them to be successful at what will be required of them. Tasks involving complex language are prime candidates for scaffolding. Without such support, English learners might very well not succeed.

Because scaffolds are by definition temporary, as the teacher observes that students are capable of handling more on their own, she gradually hands over responsibility to them. This 'kid-watching', to use Yetta Goodman's apt expression (Goodman, 1978), implies that the teacher carefully monitors the learner's growing understanding and developing academic skills – providing scaffolds and challenges as the need arises.

Rather than simplifying the tasks or the language, teaching subject matter content to English learners requires amplifying and enriching the linguistic and extralinguistic context, so that students do not get just one opportunity to come to terms with the concepts involved, but in fact may construct their understanding on the basis of multiple clues and perspectives encountered in a variety of class activities. As Gibbons (2003) puts it, the teacher provides message 'abundancy', also referred to as message 'redundancy'. The following vignette from a project-based unit on linguistics is a good example of message abundancy:

The teacher is going over a class assignment in which his English learner students need to write a series of five letters to an acquaintance. Students first read the assignment to themselves. Then the teacher explains the task, providing students with several ways to understand an important word he has introduced:

T: You can use your native language to write your letters, but there is a caveat . . . a stipulation . . .there is something you have to do. You need to summarize your ideas in a paragraph in English. (DeFazio, 2001)

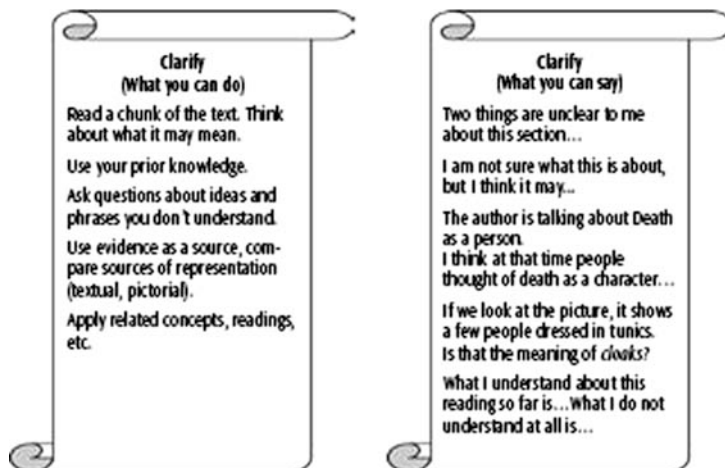
Message abundancy here is expressed by the written assignment, by the teacher's review of the assignment, by his providing a paraphrase of the particular vocabulary that may be very difficult for students to understand and (as is evident on the video recording of this event) by his verbal emphasis and body language as he elaborates.

Types of instructional scaffolding to use with English learners

Assisting English learners' performance in the English as a second language class or in subject matter classes taught in English can be done in many different ways. Six main types of instructional scaffolding are especially salient: modelling, bridging, contextualisation, building schema, re-presenting text and developing metacognition.

Modelling

Students need to be given clear examples of what is requested of them for imitation. When introducing a new task or working format, it is indispensable that the learners be able to see or hear what a developing product looks like. From that point of view, walking students through an interaction or first doing it together as a class activity is a necessary step. As one 10th grade student noted:



(Walqui, 2003)

Figure 2 Clarifying bookmark

In my chemistry class I can always do well because the teacher first demonstrates an experiment, and then we try a similar one. Then he asks us to write down the procedure and the conclusions in groups of two or four. I can do it. I can even use the new words because I know what they mean. (Walqui, 2000: 94)

Teachers of English learners should seriously consider keeping (photocopying) examples of student work for demonstration purposes. Such examples may serve not only to set performance guidelines or standards, but also to encourage and stimulate students by the evidence of past students' progress in the accomplishment of similar tasks.

In addition to modelling tasks and activities and sharing examples of student work, it is important to model appropriate language use for the performance of specific academic functions, such as describing, comparing, summarising, evaluating and so on. The bookmark shown in Figure 2 (front and back), for example, can be used by students to support their ability to work with peers in discussing a text. The bookmark structures for students a way to practice the clarification of concepts and language as they interact in dyads. One side of the bookmark makes explicit to students what they should do as they clarify ideas or seek clarification for them. The other side provides students with some concrete examples of phrases they may use as they engage in clarification activities.

Bridging

Students will only be able to learn new concepts and language if these are firmly built on previous knowledge and understandings. Comprehension is widely understood to require 'the weaving of new information into existing mental structures' (Tharp & Gallimore, 1988: 108). As students start realising that their everyday knowledge is not only valued in class but, in fact, desired, a sense of wellness is achieved that promotes further development. This does not always come easily.

A common bridging approach is to activate students' prior knowledge. Anticipatory guides are a way to do this so that students produce written as well as spoken language. At the beginning of a new topic the teacher may ask her class to collaborate to fill out a two-column anticipatory guide, with one column for what students know about a topic and the other for questions about the topic that they are interested in answering. If students are not used to this, if they are used to a teacher monologue or a recitation script, they may be surprised and confused at first. The teacher will almost be able to hear the words going through their minds: 'Listen, if we knew that, we wouldn't be in this class. You are teacher, you tell us'. As they progress, students learn that they do, in fact, know quite a bit and can predict or infer even more. Once the class as a whole has modelled for themselves how to complete such charts, pairs or small groups can easily fill them out for other topics as may be introduced.

When initially introducing two-column anticipatory guides, it may be wise to ignore students' nominations of erroneous information. As students are first learning to trust what a surprising amount they already know, it is probably the wrong time to point out mistakes. However, it becomes important to

Read the following statements and first decide whether you agree with them or not. After reading the article, decide whether the text supports your opinions. If it does not, explain why not using your own words. Save questions that remain unanswered for the conclusion of this unit.

	OPINION		FINDING		EVIDENCE: EXPLAIN USING YOUR OWN WORDS
	AGREE	DISAGREE	AGREE	DISAGREE	
1. Religion was not important at all to people's lives during the Middle Ages.					
2. During the Middle Ages people of all classes went on pilgrimages — a kind of group tour — for religious purposes.					
3. Medieval women were free to do what they thought was best for them. Men respected their decisions.					
4. There was corruption in the church during the Middle Ages. For example, pardons for sins were sold to people.					
5. A medieval knight had to be chivalrous above all. That means he had to respect an honorable code of behavior.					

(Walqui 2003)

Figure 3 Extended Anticipatory Guide: Pilgrimages as Representation of Mediaeval Life

address misinformation and incorrect connections if it appears they will be stumbling blocks later on.

Extended anticipatory guides, such as the one in Figure 3, allow the teacher more control in focusing students on the most important aspects of an assignment while at the same time engaging their prior knowledge. In the example, the teacher prepares students for a unit on mediaeval pilgrimages by using statements that incorporate crucial terms – which she will clarify – and getting students to start thinking about the topic. Having read the relevant text, students will revisit their original impressions and explain why their original responses were supported by the text or not.

Another important aspect of bridging is establishing a personal link between the student and the subject matter, showing how new material is relevant to the student's life, as an individual, here and now. Other ways of bridging include asking students to share personal experiences related to the theme that will be introduced in the lesson or assigned reading. For example, as a way of preparing students to read Francisco Jimenez's short story, 'The Circuit', students are asked to think about the following questions, jot down their answers, and share them with a partner:

Have you ever had to leave behind someone or something that you loved? What happened?

How did the experience make you feel?

Contextualising

Many educational researchers have pointed out differences between everyday language and academic language (e.g. Bernstein, 1971; Cummins & Swain, 1986; Heath, 1983). Because everyday language is embedded in rich context and is situation-dependent, learners can rely on nonlinguistic information to compensate for possible linguistic shortcomings. Academic language, on the other hand, is decontextualised and situation-independent; in order to comprehend such language the learner must rely on language alone (Cloran, 1999).

One of the greatest problems English learners face in content area classes is reading the textbooks. Not only is the language academic, but it is usually very dry and dense, with few or no relevant illustrations, and presented in a linear rather than cyclical way. Embedding this language in a sensory context by using manipulatives, pictures, a few minutes of a film (without sound) and other types of realia (authentic objects and sources of information) can make language accessible and engaging for students, as this eighth-grade English Language Learner indicates:

I couldn't make any sense of what happened in the Middle Ages and the lives people led. I could understand 'castle' and imagined a beautiful castle in my dreams. When the teacher showed us a four-minute clip of an old film, it all clicked, and I could make sense of all those other words – knights and vassals and all that. (Walqui, 2000: 94)

Teachers may also provide verbal contextualisations by creating analogies based on students' experiences. Effective teachers continually search for metaphors and analogies that bring complex ideas closer to the students' world experience.

Schema building

Schema, or clusters of meaning that are interconnected, are how we organise knowledge and understanding. If building understanding is a matter of weaving new information into pre-existing structures of meaning, then it becomes indispensable for teachers to help English Language Learners see these connections, through a variety of activities.

In preparation for a reading assignment, for example, a teacher may ask students to preview the text, noting heads and subheads, illustrations and their captions, titles of charts, etc. In this way, students begin their reading with a general sense of the topic and its organisation, with their schema already activated and ready to accept new connections.

Similarly, in preparation for a mini-lecture, a teacher may present an advance organiser and walk students through the most important pieces of information that will be discussed. The use of this organiser will serve several purposes: it will promote schema building in anticipation of the topic being introduced, it will focus the learners' attention on important aspects of the information to come, and if it is in graphic form for note-taking purposes, it

	FIELD WORK IN CALIFORNIA, NOW	FACTORY WORK IN LEEDS, 1835
What is a typical day for a worker?		
Working conditions (who works, schedule, benefits, breaks, etc.)		
What improvements in working conditions do the workers want?		

(Walqui, 2003)

Figure 4 Compare and contrast matrix

will alleviate students' anxiety by letting them know beforehand what information they should be able to understand.

Students in general, and English learners in particular, need to be able to process information from the top down – having a general knowledge of the broad picture before studying the details – as well as from the bottom up, using vocabulary, syntax, rhetorical devices, etc. (Carrell, 1984). Furthermore, by presenting in advance the skeleton of a lesson, we can lower the students' apprehension and help them tolerate ambiguity, which as Rubin (1975) has argued, is one of the most important features of the good language learner.

The compare/contrast matrix in Figure 4 illustrates how a teacher initially bridges to students' prior knowledge and interests in preparation for building their schema about the target content. The students live in the agricultural valley of Salinas in California, know a lot about fieldwork, and can readily complete the first column of the advance organiser. The teacher has prepared students to use the information they know, their schema about field work, to foster an understanding of new concepts, in this case, relating to the Industrial Revolution. As a follow-up to this activity, students will be reading a primary source that discusses the daily routines of factory workers in England during the first Industrial Revolution.

Re-presenting text

One way in which teachers invite students to begin the appropriation of new language is by engaging them in activities that require the transformation of linguistic constructions they found modelled in one genre into forms used in another genre. It has been argued (see, for example, Moffet, 1983) that there is a progression in the ability of language users to use different genres within academic discourses. In terms of language use, this continuum starts with asking students to say what is happening (as in drama or dialogue), then what has happened (narratives, reports), then what happens (generalisations in exposition) and, finally, what may happen (tautologic transformations, theorising). In this fashion, students can access content presented in more difficult genres by the act of transforming it into different genres, especially

those that are more easily produced. Short stories or historical essays, for example, can be transformed into dramas or personal narratives.

This kind of language learning often engages students in the accomplishment of tasks that are interesting and meaningful for them, where the emphasis is placed on the communication that is being carried out rather than on its formal aspects, and where the resulting learning is powerful.

For example, if students have read a journalistic article about the challenges for immigrants in the USA, they may not have understood a lot of new vocabulary yet understood the main issues or events described. In this case, the teacher wants students to revisit the text, but with a purpose other than attending to the new terminology. The task is for students to re-present the article as a play. The teacher presents small groups each with a scenario that corresponds to a section, or moment, in the text. Each group then collaborates to create a dialogue with as many characters in it as there are group members. To accomplish the task students have to go back to the text, reread it, and discuss the situation, issues and people involved to decide what those people, as characters in a dialogue, would say to each other. As the team collaborates on a dialogue, each person makes a personal copy of the script, with the least experienced students in the team assisted by their more capable peers. Groups proofread their scripts and rehearse their re-presentation. Depending on the number of groups/moments, one or two complete presentations of the 'play', or re-presentations of the article, are performed in front of class (the number of performances depends on how many groups/moments have been assigned). At the end of the session, students will not only have understood much better the human dilemmas inherent in the situations described in the article, but they will have used new language, written it, and even practised and performed it.

The opportunities for every student in class to do all this have been maximised, and all students will have engaged in instructional conversations as the teacher monitored activities throughout the class. The less proficient students are not excluded since, aided by their more proficient peers, they have essential tasks to perform, tasks that are just as demanding for them as the more complex tasks are for the more advanced English Language Learners. In other words, every student performs at the limit of his or her ability.

In the following excerpt, four students collaborated on the first moment of the class re-presentation of their reading in language arts of *Hamlet* (incorporating as well their study of the US judicial system in social studies). Student 1 is a relatively new English Language Learner, so his role is the simple one of court clerk. At the same time, Student 1 has written and rehearsed with his group members the full script.

S1: Good morning ladies and gentleman, I will ask you to stand up because your honor is about to enter this court.

S2: You may be seated. We're here today to hear the testimony of the defense and prosecution. The prosecution will present the case of King Hamlet, who is accusing King Claudius and Queen Gertrude of the crown of betrayal. I now call on the prosecution to make your opening statements.

S3: Dear jury. We come here to prosecute King Claudius, twisted and very unusual with no limits; an ambitious man. Someone who sacrificed his own brother, his own cousin and people around him, to get what he wants. Somebody who will not turn off any evil behavior to get what he wants. Somebody with no morality and now twisted in his eyes, kill, and kill with full awareness of his behavior. Somebody that made six people dead in his own kingdom and house, because of his twisted and very sick ambition. Somebody that took his brothers wife the day after his brothers funeral and spy and contribute to his own cousin's death, and that of six other people. Now we gather here to bring him to justice.

S2: I now call on the defense to make his opening statements.

S4: Today I'll be defending my client King Claudius. I'll be defending him to show you people of the jury that every single charge against my client, King Claudius, is not worthy of hearing because King Hamlet is mentally ill. I'll also be showing you that the marriage between King Claudius and Queen Gertrude is pure and sincere and based in love. Today in this courtroom, I'm going to show you the innocence [of Claudius] and mentally illness of King Hamlet.

S2: Prosecution, you may now begin to present your witness.

S3: We call first to bring King Claudius to the stand. . .

(Heisler, 2001)

Other types of text re-presentations include transforming a poem into a narrative, changing a third-person historical narrative into an eyewitness account, asking students to transform scientific texts into letters, producing co-operative posters of a story with a quote, etc.

Developing metacognition

Metacognition has been defined as 'the ability to monitor one's current level of understanding and decide when it is not adequate.' (Bransford *et al.*, 1999: 35). It refers to the ways in which students manage their thinking, and it includes at least the following four aspects:

- (1) consciously applying learned strategies while engaging in activity;
- (2) knowledge and awareness of strategic options a learner has and the ability to choose the most effective one for the particular activity at hand;
- (3) monitoring, evaluating and adjusting performance during activity; and
- (4) planning for future performance based on evaluation of past performance.

Successful subject matter classes for ELLs foster metacognition and, along with it, learner autonomy – through the explicit teaching of strategies, plans of attack that enable learners to successfully approach academic tasks. Metacognitive strategies are derived from studies of how experts carry out specific tasks. The development of Reciprocal Teaching, for example, was based on Brown's research (1980) on how successful readers tackle complex text. In collaboration with Palincsar, then an elementary school teacher, they translated these findings into pedagogical strategies and taught children to deliberately follow the processing activities: read, summarise, ask questions,

predict. Reciprocal teaching (Brown & Palincsar, 1985), think-alouds and self-assessment activities with rubrics are examples of such strategies. As with other kinds of interactions in the class, metacognitive strategies need to be modelled and practised as a whole class before students attempt them in pairs or small groups. As students begin their independent use of the strategies, the teacher continues to carefully monitor the implementation.

In the case of reciprocal teaching, for example, once students become comfortable with this strategy, the teacher will be able to see students successfully engaged in all steps of the process: pairs or groups of students independently reading a text, questioning each other, discussing questions that go well beyond recall and trying together to solve problems related to the understanding of the text. To get to this point, the teacher will have been very deliberate in introducing each step, having students practice each step and having students explain each step.

One technique in introducing learning routines is the simple use of posters: a poster that lists the steps of the routine being practised and another that is an ever-growing list of all the routines the class has mastered. With the first poster, numbered steps for students to refer to, the teacher can focus on monitoring student learning rather than answering procedural questions. With the other poster, a list of all the learning strategies students now have available to them, students have a visual reminder of what they can already do and even explain. What these posters also represent is a very convenient way to orient new students to class activities. The posters signify that any student is able to introduce a newcomer to the class to any activity, thus gaining confidence in his own abilities while helping out a fellow student (and the teacher).

Conclusion

Scaffolding makes it possible to provide academically challenging instruction for ELLs in secondary schools. It supports the idea that the only good teaching is that which is ahead of development. A number of practical strategies and tasks can be used to provide rigorous, deep, challenging and responsible education to students who need to develop conceptually, academically and linguistically.

ELLs whose teachers invite them to engage in high-challenge academic tasks in English may initially complain. As they realise, however, that their teachers also provide them with high levels of support, and become increasingly aware of their progress and the tools needed to attain it, they will build up confidence in themselves and their own abilities.

Academic instruction for English Language Learners can break traditional moulds to provide a rich, stimulating, highly interactive curriculum for language minority students. It is not, however, easily done. Teachers need to be well versed in their subject matter to be able to provide students with as many scaffolds as are needed to assist their learning. They also need to become involved in professional growth and form partnerships to discuss, peer-coach and advance theoretical understandings of their practice. The very best classes for English Language Learners will not only improve students' performance, but will also create more successful, aware, self-assured and articulate

teachers. Needless to say, for this to happen, districts and schools must support the growth of teacher expertise in teaching ELLs.

Finally, I would like to address a frequently asked question about pedagogical scaffolding for English Language Learners: what's new in scaffolding instruction for academic language development? Isn't it simply good teaching? It is true that many of the strategies involved have long been recognised as excellent pedagogy. What's different is that for our English learners we need to use them more extensively, continuously building scaffolds as the need arises, and we need to communicate their purpose and uses to students. While for the native speaker two tasks may be sufficient to understand and practise a concept, the English Language Learner may need four or five different tasks to achieve similar competence. It will take teachers of English Language Learners longer to teach their units, and they may not be able to teach as much in terms of detailed content. But as Ted Sizer (1991) has argued, in education less can be more. The way to get that 'more' is for the 'less' to be amplified, for 'message abundance' (Gibbons, 2003) to surround, engage and support learners. In this way, English Language Learners in a secondary content class can reap just as much academic profit from the mainstream subject matter as their native-speaker counterparts. Material is redistributed, different elements are emphasised, but the increased depth of learning that results from a scaffolded approach more than compensates for whatever elements are left out. We may have 'covered' less, but in the end we will have 'uncovered' more.

Correspondence

Any correspondence should be directed to Aída Walqui (awalqui@wested.org).

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