TEACHING
ENGLISH
LANGUAGE
LEARNERS
ACROSS THE
CURRICULUM

Teaching English Language Learners through Technology



Tony Erben Ruth Ban Martha Castañeda

Teaching English Language Learners through Technology

Today's classrooms increasingly include students for whom English is a second language. *Teaching English Language Learners through Technology* explores the use of computers and technology as pedagogical tools to aid in the appropriate instruction of English language learners (ELLs) across all content areas. The authors identify various technologies and software programs regularly used in the classroom for all students that can also specifically aid ELLs. *Teaching English Language Learners through Technology* provides successful strategies for varying levels of access—whether teachers have one computer in their classroom, have multiple computers, or can only occasionally use a computer lab. A fully annotated list of web and print resources completes the volume, making this a valuable reference to help teachers harness the power of computer-assisted technologies in meeting the challenges of including all learners in effective instruction.

Special Features:

- "Implications for the Classroom" provides teachers with useful tools for creating balanced and inclusive lesson plans
- "Teaching Tips" offer teachers additional print and online resources
- Engaging vignettes vividly illustrate real-life interactions of teachers and ELLs in the classroom
- Graphs, tables, and charts provide additional access points to the text in clear, meaningful ways

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Teaching English Language Learners through Technology

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To all people who live in a new country and to our spouses, Silvina, Hugo, and Daryl

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Abbreviations

BICS basic interpersonal communication skills
CALL computer-assisted language learning
CALP cognitive academic language proficiency
CMC computer-mediated communication

CP constructivist principles
DI differentiated instruction
ELL English language learner
ESL English as a second language

ESOL English to speakers of other languages

IT instructional technology

KWL what you Know, what you Want to know, what you have Learned

L1 first language
L2 second language
PBL project-based learning
SCT sociocultural theory

SLA second language acquisition SWBAT students will be able to . . . VoIP Voice over Internet Protocol VLE virtual learning environment

www World Wide Web

Series Introduction

No educational issue has proven more controversial than how to teach linguistically diverse students. Intertwined issues of ethnic and cultural differences are often compounded. What is more, at the time of writing, December 2007, how immigrants and their heritages *ought* to fit with the dominant culture is the subject of rancorous debate in the United States and a number of other nations.

However thorny these issues may be to some, both legally and ethically, schools need to accommodate the millions of English language learners (ELLs) who need to be educated. Although the number of ELLs in the United States has burgeoned in recent decades, school programs generally remain organized via traditional subjects, which are delivered in English. Many ELLs are insufficiently fluent in academic English, however, to succeed in these programs. Since policymakers have increasingly insisted that ELLs, regardless of their fluency in English, be mainstreamed into standard courses with all other students, both classroom enactment of the curriculum and teacher education need considerable rethinking.

Language scholars have generally taken the lead in this rethinking. As is evident in Part 1 of the volumes in this series, language scholars have developed a substantial body of research to inform the mainstreaming of ELLs. The primary interest of these language scholars, however, is almost by definition the processes and principles of second language acquisition. Until recently, subject matter has typically been a secondary consideration, used to illustrate language concerns. Perhaps not surprisingly, content-area teachers sometimes have seen this as reducing their subjects to little more than isolated bits of information, such as a list of explorers and dates in history or sundry geological formations in science.

In contrast, secondary school teachers see their charge as effectively conveying a principled understanding of, and interest in, a subject. They look for relationships, seek to develop concepts, search for powerful examples and analogies, and try to explicate principles. By the same token,

they strive to make meaningful connections among the subject matter, students' experience, and life outside of school. In our observations, teacher education programs bifurcate courses on content-area methods and (if there are any) courses designed to instill principles of teaching ELLs. One result of this bifurcation seems to be that prospective and in-service teachers are daunted by the challenge of using language principles to inform their teaching of subject matter.

For example, Gloria Ladson-Billings (2001) has experimented with how to prepare new teachers for diverse classrooms through a teacher education program focused on "diversity, equity, and social justice" (p. xiii). Teachers in her program are expected, for instance, to confront rather than become resigned to low academic expectations for children in urban schools. From Ladson-Billings's perspective, "no matter what else the schools find themselves doing, promoting students' academic achievement is among their primary functions" (p. 56).

The authors in this series extend this perspective to teaching ELLs in the content areas. For example, how might ELLs be included in a literature lesson on Hardy's use of landscape imagery in *The Mayor of Casterbridge*, or an economics lesson on the principle of comparative advantage, or a biology lesson on the ecosystem of a pond? Such topics, experienced educators quickly recognize, are often difficult for native speakers of English. How can teachers break down these subjects into topics in a way that is educationally significant for ELLs?

The purpose of this series is to assist current and prospective educators to plan and implement lessons that do justice to the goals of the curriculum and make sense to and interest ELLs. If the needs of diverse learners are to be met, Ladson-Billings (2001) underscores that innovation is demanded, not that teachers merely pine for how things once were. The most obvious innovation in this series is to bring language scholars and specialists in the methods of teaching particular school subjects together. Although this approach is scarcely unique, it remains relatively uncommon. Combining the two groups brings more to addressing the problems of instruction than could be obtained by the two groups working separately. Even so, these volumes hardly tell the reader "everything there is to know" about the problems addressed. But we do know that our teacher education students report that even modest training to teach ELLs can make a significant difference in the classroom. We hope this series extends those successes to all the content areas of the curriculum.

Introduction

A potted history of educational technology would reveal that teaching in the 1980s meant being at the cusp of a quiet revolution. In August 1981, IBM released the first personal computer (PC). This particular PC was equipped with anywhere from 16 kilobytes to 256 kilobytes of memory, one or two floppy disk drives and an optional color monitor. In September 1982, the Commodor 64 computer was released for a grand price of \$595, replete with 64K of RAM, a cartridge and serial peripheral ports, two joysticks, three channels of sound and a 16-color matrix. Then in November 1985, Microsoft released Microsoft Windows. Four years later, email became commercialized and at the turn of the decade, Berners-Lee had built all the tools necessary for a working World Wide Web with the first web browser, the first web server and the first web page in 1990.

As a teacher at the time, I recall seeing my first PC. It was 1986. I remember needing to run off a test on a ditto machine—you may remember these being called spirit duplicators—and thinking how simultaneously impressed and anxious I was. At that moment, I had a flood of thoughts, enflamed by a vivid imagination and having seen too many science fiction movies, all about how this supposedly intelligent machine would one day take over my job. Two decades later, and it still hasn't happened; however, it would certainly be feasible to say that, in the intervening years, computers have definitely transformed, and continue to revolutionize, how education is carried out.

Back in 1986, I didn't consider myself technologically minded, but that did not mean I didn't use an array of electronic machines. I had an overhead projector (OHP) in my classroom, as well as a slide projector, a reel-to-reel tape recorder and, as already mentioned, access to a ditto machine, and a film projector if I wanted to show a movie or documentary. All of these have in some way been superseded by computer technologies. Nowadays, I have a document camera instead of my old OHP, an interactive whiteboard that has replaced my blackboard, and an LCD projector that projects any sound, video or word file from my laptop computer and acts as my modern-day substitute for my old audio-visual equipment. I consider myself a technologically

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lucky teacher. Not a day goes by when I do not in some way use technology to support my teaching and my students' learning.

With my colleagues, Drs. Ban and Castañeda, I am certainly aware of the thousands of instructionally rich opportunities that using contemporary technologies affords. We are also aware of the thousands of potentially missed opportunities not using technology brings. So with this in mind, we introduce you to this book in order to share our experiences and to help you avoid some of the pitfalls that using instructional technology can entail. However, while centered on instructional technology, this book is meaningless unless it is contextualized in real classrooms and equally anchored within meaningful curriculum. So we have chosen to write a book about how the wonders of technology can best serve one of the most underserved groups in our school system—English language learners (ELLs).

Let us start by drawing connections to the classroom. The following vignette offers an initial segue into how instructional technology can support teachers in their ongoing efforts to teach culturally and linguistically diverse student populations. The story is true—only names and locations have changed.

Vignette

When I was a teacher in a secondary school, the day was broken up into eight periods of 45 minutes, a recess of 10 minutes and a lunchtime lasting 30 minutes. During recess and lunchtime, many of the teachers would meet in the teachers' lounge to sit and talk to their fellow teachers. Sometimes the conversation would be about private matters, sometimes about social matters, and at yet other times about school-related business.

The school was an inner-city high school, comprising 45 percent students from non-English-speaking homes. None of the classes were very homogeneous and every teacher could expect to have students sitting in front of them who came from any variety of first language backgrounds. In addition, the English language learners (ELLs) were at all different levels in their grasp of English. The school had one ESOL (English to speakers of other languages) teacher. She was good, but the job was just too overwhelming for her to make more than just a small difference in the linguistic lives of 45 percent of the 1,550 student population. All of the teachers unconsciously knew that what we did in our own classrooms would "make it or break it" for the school's ELLs. Some of the faculty had enough experience working with diverse populations to know how to embed English lessons within content-area teaching. Many others, though, fluffed their way through the day, hoping that the ELLs in the class would have at least "cottoned on" to something they had taught during the day.

One rainy autumn day sitting in the teachers' lounge, I was eating my lunch with my cup of coffee in hand, half listening to a conversation of two teachers sitting nearby elaborating on the benefits of one classroom management strategy over the other, when one of the social studies teachers burst through the door with a torrent of tears streaming down her face. Ms Barbara was a perfectionist to put it mildly. She knew everything there was to know about the world. All the faculty wanted her on their team during the school's Trivial Pursuit fundraising night! However, after five years of teaching, a master's degree and being president of the state's social studies association, she loudly professed to the other faculty in the teacher's lounge, "I give up. Everything I've tried doesn't work. All my ELLs are failing and my mainstream kids are switching off. I feel like I am planning for 30 individualized lessons, rather than one lesson for 30 kids. I suppose I should just go back to social work. Maybe I am just not cut out for teaching."

It is funny how one isolated incident can act as a catalyst for far-reaching change. You see, it just so happened that, on that particular day, the principal of the school had decided to come to

the teachers' lounge to have lunch. After listening to the sobbing Ms Barbara, he asked the rest of the teachers in the lounge if we all felt the same way. Some said yes, some no, and some were reticent to admit to anything either way. Our principal, well known in the school district as a mover and shaker, promptly said that the next school professional day was going to be spent on in-servicing the whole faculty on infusing English into all curriculum areas to help the ELL population pass the school certificate exams.

When the day of the professional development came, the planning committee had structured the day into vignettes. In other words, since we never made a point of visiting and observing other teachers in their classrooms, every teacher was to share their tale. Teaching ELLs was our focus and the intent was to present and listen to our colleagues share what we did on a daily basis that helped our ELLs improve. Many thought that the day was going to be a waste, until Ms Silvia stood up to speak.

Ms Silvia was an earth science teacher with 11 years of experience teaching in inner-city high schools. She was a big fan of technology and, while the school wasn't exactly technology rich, most teachers had at least two computers in their classrooms with internet connection. She started by describing her grade 9 earth science class: 27 students, nine of whom were ELLs, including three Native Americans, and the rest were native English speakers. She continued by outlining how she managed her classroom space: the two computers were placed in each of the back corners of the classroom and on one side of the classroom she had a bookshelf stacked with all types of books, magazines, and accelerated reading materials. A round carpet with two chairs in front of the shelf delineated a classroom reading circle. On the opposite side of the classroom, a long side cabinet marked the project area. Ms Silvia explained that she collected all manner of useful materials and then stored them in the cabinet for future project use. At the front of the classroom she had on her own desk her homework, extra activities, and games trays. Lastly, an overhead projector, a cassette recorder, and a video/TV monitor, all with earphones, occupied the front corner of the classroom. Apart from the computers, she explained that parents had donated the electronic equipment.

Ms Silvia then outlined a lesson she had taught the previous week. The aim of the lesson was to get students to think about the reasons why attitudes toward fossil fuel use and alternative energy sources may change over the next 50 years and how changing attitudes toward fossil fuel use and alternative energy sources may affect car technology. For homework, Ms Sylvia had got the students to write down three things they knew about fossil fuel use and alternative energy. She used to have the students write on index cards, but now she used www.surveymonkey.com, an online tool to carry out quick and easy surveys. She did this every lesson, since it provided her with upto-date feedback on how much the students internalized, as well as on the English language needs of her ELLs. Based on students' readiness for learning, interest, and learning profile, she divided the class into groups. Thus in the context of what the students wrote the size and membership of groups always changed.

Ms Sylvia explained that the driving key to all her lessons was that, although the focus of learning was the same, she created different routes of access and varying degrees of difficulty for her students. For this particular lesson she was describing, she explained that she started by showing a short video clip on energy consumption. She found the online TV clip, like so many other current affair clips, at Frontline (www.pbs.org/frontlineworld/educators/index.html). While the students were viewing the clip, she had two of the students who had showed they already possessed an in-depth knowledge on the topic work on the computers. One created a vocabulary word map. Sometimes she used an online graphic organizer tool found at www.region15.org/curriculum/graphicorg.html. This was a good site as it provided graphic organizers in English and in Spanish that could be printed off as well as manipulated online. However, mostly she used Kidspiration at www.inspiration.com/productinfo/kidspiration/index.cfm. The other student went to www.quia.

com/ to create a vocabulary extension game using one of the site's online activity builders. Again, sometimes she used Quia, and sometimes she used Hot Potatoes at http://hotpot.uvic.ca/. While the two students were busy creating their vocabulary task, Ms Sylvia, on the other hand, used the time to create a word map on the whiteboard, using words from the video clip. While all this was going on, she used the overhead projector to project guiding questions on the screen in preparation for the next segment of the lesson.

She then divided the class into seven groups of approximately four students. Each group, while working toward the same goal, was engaged in slightly different activities. One group used the classroom library to research, one group used the project table to brainstorm their ideas, two other groups each used one of the computers, a fifth group used the TV to preview another broadcast, a sixth group worked with a bookquest (a webquest, but in which students look through books to glean and synthesize information), and the seventh group worked through a worksheet activity put together by the teacher. Ms Sylvia explained that each group, based on their surveymonkey.com results, were organized according to their readiness to learn and engage with this topic. In other words, students who showed more acumen were slotted together, whereas the ELLs who needed help with their English in order to get their heads around the content were also slotted together, and so on. The ELLs were placed in two groups at the computers and had to work through the vocabulary extension activities created previously by the more knowledgeable students. Once the ELLs completed the vocabulary tasks, they were rotated to the other computer so as to further reinforce their subject language knowledge related to the topic at hand. As the ELLs gained confidence in the language of this topic, all groups were rotated (though at different rates—in other words, some groups finished their task earlier than others and these groups were switched, leaving the slower groups to continue working on their group tasks) to enable work on another work-station. In this way all students worked toward the one learning objective but at their own pace. When other groups reached the computer work-stations, Ms Sylvia had the native English speakers work on a previously constructed more cognitively demanding quia.com activity and an actual webquest rather than the vocabulary activities constructed for the ELLs.

Finally, the students were given a variety of options in preparing a report in the next lesson. The nature of the report was framed by the work-stations they had engaged with. In the next lesson, membership in the groups was changed so that ELLs were mixed with the native speakers of English. Ms Sylvia explained how she gave the students a handout containing phrases that would help them put together the report. She finished by explaining to the faculty that she uses variations of this approach with all her classes and she finds that the students are always engaged and that not only do her ELLs learn the content successfully but they always learn English as well in her earth science classes.

After the presentation Ms Sylvia was overwhelmed with questions, thanks, words of encouragement, and requests from other faculty to visit her classroom.

The case of Ms Sylvia exemplifies a number of attributes that are worthy of further comment. These attributes pull at the heart of the intent of this book and that is that good education is no longer about "teaching to the mainstream" or "lecturing to the masses" but, to truly reach the students in our heterogeneous classes of the twenty-first century, teachers need to move beyond the artful application of "good strategies" to a more reflective and purposeful posture in the management of instruction. Ms Sylvia, probably on a pedagogic continuum from *intuitive application* to *calculated stratagem*, applied a range of differentiated teaching techniques, second language acquisition principles, and pedagogical concepts for technology integration. Although these techniques, principles and concepts will be elaborated on throughout this book, it behooves us as authors to flag them here as instructional beacons that will light our journey as we learn about how to use technology in helping ELLs learn curriculum content matter.

Dr. Carol A. Tomlinson, a 20-year veteran of the classroom and now Associate Professor of Education, has written extensively about the benefits of differentiated instruction and its beneficial effects on learning in mixed-ability classrooms. She says that differentiation

is the realization that all learners vary in their readiness, interests, and learning profiles. Jumping off from this point, teachers can set up classrooms where everybody works toward essential understandings and skills, but use different content, processes, and products to get there. Differentiation is all about options, and not about being punitive by just piling on additional work for the more able.¹

Looking at Ms Sylvia's lesson above, one can see that the bulk of her work is in upfront planning. The result was the creation of a tiered lesson—one in which there was a set learning outcome for all but students were given multiple learning pathways to explore.

But how is this important for teaching ELLs? The answers lies in the capacity of technology to facilitate any implementation of differentiated instruction, in ways that help teachers provide lasting equitable education to ELLs. For example, looking more closely at Ms Sylvia's lesson, one sees that she differentiated her curriculum in three areas:

- Content: by giving her ELLs multiple options for taking in information (video orientation to
 foster visual and listening comprehension, word maps to reinforce and learn new vocabulary, follow-on online semantic mapping exercise using Kidspiration, and online vocabulary
 extension activity using quia.com), the ELLs have the opportunity to build their knowledge
 of English, in this case vocabulary building, around the subject matter, so that they can eventually be able to interact with monolingual English speakers in the class about the topic at
 hand.
- 2. Process: in organizing her lesson in the manner described above, Ms Sylvia generated multiple options for students to make sense of the lesson's ideas. For example, by crafting learning centers, students can explore topics and/or practice skills matched to their readiness to learn, their learning style, and their interest. By establishing flexible groupings, Ms Sylvia creates opportunities for all her students to interact with each other. In the case of her ELLs, they start off the lesson in a group comprising only ELLs (Ms Sylvia formed two groups in the above lesson, one for the lower proficient ELLs and one for the higher proficient ELLs) and then have the opportunity to work through all the work-stations at their own pace. In other lessons, the ELLs are mixed with monolingual English speakers to promote their English speaking skills, and in yet other lessons the class is grouped according to cognitive ability. Also, curriculum compacting (in other words, fashioning curriculum delivery so that, when the quick learners finish earlier than the other students, they have interesting activities to move on to) allows the slower learners, usually ELLs because of their English, to spend more time practicing their English skills in ways that do not hold up the rest of the class from learning.
- 3. Product: by allowing her class to engage with the curriculum matter through learning centers, tiered activities, curriculum compacting, adjustable questioning, flexible grouping, and multiple modalities, Ms Sylvia laid the groundwork for her students to have multiple options for expressing what they know. Consequently, for the ELLs in her class this meant that they could write a report using the English vocabulary and phrases they had learned through the whole language experiences as well as the drill and practice exercises fostered through the learning centers and so be graded in terms of their own individualized performance and not compared with the English output of native speakers of English.

From a linguistic perspective, Ms Sylvia had also initiated practices that facilitate second language acquisition processes. At this point, we want to introduce our five principles for creating effective second language learning environments. These research-based hypotheses allude to linguistic practices that are necessary to help a second language learner's development and are adapted from Chapelle's (2001) as well as Ellis's (2005) works. Drawing on Ms Sylvia's example, Table 0.1 outlines the five principles and the corresponding pedagogic activities that were beneficial for the ELLs in her classroom.

We shall revisit these five principles throughout the book and unpack the myriad of ways in which these principles can be realized through technology.

Lastly, what strategies for using technology did Ms Sylvia access? The National Educational Technology Standards for Teachers (ISTE NETS, see http://cnets.iste.org/teachers/index.html) define the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings. In this book, we shall use these standards as the framework to make sense of the technology-framed activities we propose to use with ELLs. All in all there are six technology standards (see Appendix A) and 21 performance indicators (see Appendix B). In a nutshell, Ms Sylvia met five of the six standards: I, II, III, IV, and V; as well as six of the 21 performance indicators: 1, 3, 4, 5, 7, and 10. She used her two computers to help create two of her learning centers; she began the class with an orientating video on the topic at hand and reinforced students' comprehension with the accompanying use of an overhead projector. Furthermore, while students were occupied within their work-stations, she had one group look at another video, which was downloaded from a podcast site, another two groups accessed instructional websites to work through pedagogically sound teacher/student-generated materials, and yet a fourth group worked from materials downloaded from the web (see Table 0.2 for overview).

Ms Sylvia did not use the tape recorder or CD player during the lesson she described, but suffice to say that all technology equipment located in her classroom got fair and frequent use. Lastly, technology does not solely revolve around a computer. Older devices such as TV, video recorders, audio cassettes, CD players, and overhead projectors all play a small but very important pedagogical part in a teacher's effort to infuse technology into the classroom. How these older technological tools and the amazing array of new technological tools that a computer offers can help in the teaching of English language learners will be unpacked in Part 3 of this book.

Who Can Benefit from this Book?

A book for educators on teaching ELLs through technology is desperately needed. Although there are many excellent generic ELL books, they are often more appropriate for ESOL teachers than for content-area teachers who have ELLs in their classrooms and want to use technology. This book (part of the Teaching English Language Learners Across the Curriculum series) provides content-area teachers with practical, teacher-friendly strategies and techniques for using various technologies and software programs readily available to the public which can enhance the learning potential not only of ELLs, but of all students. Teaching ELLs Through Technology is, specifically, useful for:

- preservice content-area teachers who want to become better prepared to meet the challenges of their future classrooms;
- practicing content-area teachers who would like a "refresher" or perhaps never received ELL training in their teacher preparation program;
- ESOL aides and support staff who would like to learn more about issues, strategies, and content related to social studies education;

- content-area teacher educators who would like to address how to use technology for ELL instruction in their methods courses;
- ESOL teacher educators who would like to infuse their methods courses with technologyspecific information and strategies;
- district curriculum supervisors who are responsible for curriculum development, modification, and teacher training;
- administrators such as school principals and assistant principals who would like to improve the quality of instruction for ELLs in their schools and offer support for teachers.

How to Use this Book

The central purpose of this book is to provide content-area teachers with a guide on how to infuse technology into the classroom, thereby supporting instruction in ways that can be extremely effective with ELLs. The book is aimed at middle and high school.

Following this introduction, Part 1 of this book presents an overview of theory and research on ESOL teaching and learning. Part 1 reviews research with an eye to providing guidance for the informed use of instructional strategies in the teaching of ELLs. It provides a description of who the English language learner is and what one can expect an ELL can do with their English at the four stages of English language development.

Part 2, which contains chapters 2.1, 2.2, 2.3, 2.4 and 2.5, forms a transition between the parts before and after. Chapter 2.1 introduces us to the work of Vygotsky and how his learning theories lay the foundation of such educational approaches as differentiated instruction (DI), project-based learning (PBL), and constructivist pedagogy (CP). Chapter 2.2 lays out our sense of what instructional approaches support the seamless integration of technology into a classroom. This includes a discussion about the merits of differentiated instruction, project-based learning, and constructivist learning principles. Chapters 2.3 and 2.4 overview what a desirable instructional program using technology looks like. Once again our intention is not to be comprehensive but to suggest some salient themes and trust the reader to generalize. These themes are built on in chapter 2.5, in which we look at the computer-assisted language learning research base and what teachers can glean from such research to inform their classroom practices with ELLs. We try to identify where this work parallels research treated in Part 1 as well as what appears to be specific about using technology across the curriculum.

Part 3 contains chapters 3.1 to 3.7. Part 3, we feel, comprises the main pedagogical content of this book, although all parts allude to instruction and best practice. Indeed, the many Teaching Tip boxes throughout the book allow us to make constant connections with praxis. In Part 3, we asked ourselves how can technology be best used to facilitate the English language development of ELLs? Our first step was to use our five principles for creating effective second language learning environments as signposts to guide our decision-making processes linking pedagogical practice and technology usage. Chapter 3.2 describes the advantages of using e-creation tools and self-made computer-based resources such as web publishing, PowerPoint, e-portfolios, desktop publishing, exercise builders, movie makers, and podcasting. In this part we show how such tools allow ELLs to play with language and through such play meet Principle 5: Construct activities that maximize opportunities for ELLs to interact with others in English. In chapter 3.3 we turn to communicative-facilitative e-tools such as email, instant messaging, listservs, discussion boards, Voice over Internet Protocol, and creating sound files. In this part we show how communicativefacilitative e-tools can help ELLs produce language in the content classroom allowing teachers to meet Principle 3: Give ELLs classroom time to productively use their English. Chapter 3.4 illustrates the use of writing/reading-facilitative e-tools such as writeboard, wikis, webquests, e-books, and

TABLE 0.1. Five principles for creating effective second language learning environments and corresponding pedagogic activities

#1: Give ELLs many opportunities to read, to write, to listen to, and to discuss oral and written English texts expressed in a variety of ways

#2: Draw attention to patterns of English language structure

#3: Give ELLs classroom time to use their English productively

#4: Give ELLs opportunities to notice their errors and to correct their English

#5: Construct activities that maximize opportunities for ELLs to interact with others in English

wing of the Australian Broadcasting Commission (http://australianetwork.com/learnenglish/). It gives vibrant daily intelligences. A great site to find a variety of curricula-related videos is English Bites from Nexus, the educational content about life 'down under' with a whole assortment of activities to complete as you watch streamed media opportunity to listen to a wide variety of Englishes used in a wide variety of ways. Providing ELLs the chance to visualize curriculum content through videos reinforces the visual and audio intelligences of Gardner's Multiple Second video work-station: It is always important to create a language-rich classroom and afford ELLs the direct from Australia

Worksheet work-station: Using language focused worksheets helps an ELL reinforce and internalize English vocabulary and grammar rules. An exceptional website to use can be found at www.getworksheets.com/ samples/worksheets/index.html

Here a teacher can create a wide variety of worksheets for all curriculum areas as well as download worksheets made by other teachers

while simultaneously getting valuable corrective feedback to improve their English. Quia offers activity generators Semantic webbing activity work-station: By allowing her ELLs to work on a semantic webbing activity, Ms Sylvia gave her ELLs pedagogical space to increase their vocabulary. In this way, they had the opportunity to use new oriented, curricula focused activities created through www.quia.com offers ELLs the chance to learn English Quia.com work-station: Without feedback, ELLs would be doomed to repeat their mistakes. Feedback is an important mechanism in order for ELLs to continually improve their English. Strategically created languagewords to express themselves with others in the classroom when they interacted on the topic of the day as well as access to a database of hundreds of activities made by other teachers.

synthesis information in predefined ways. A "quest" activity always steers students toward a product. For the ELLs in Ms Sylvia's class, the product was writing in their own words what they had learned and getting the Bookquest work-station: Like a webquest, a bookquest is an inquiry-based activity that guides students to monolinguals in the group to go over the language errors they had made in the written product

on a "responsibility" role, find information, and share this with their group. In doing this, the ELLs in the group are through peer- and self-evaluation. For Ms Sylvia's ELLs this meant that they were provided with guided language Library research work-station: This activity was a jigsaw task. The goal was for each student in the group to take obliged to use their language skills to interact with the monolinguals but, conversely, the native English speakers customizable project checklists for written reports, multimedia projects, oral presentations, and science projects. The use of these checklists keeps students on track and allows them to take responsibility for their own learning are obliged to modify and adapt their spoken English so as to be communicatively effective with the ELLs. Project work-station: Ms Sylvia went to http://pblchecklist.4teachers.org/, which creates age-appropriate, cues on how best to use English to interact with their peers

TABLE 0.2. Ms Sylvia's instructional strategies matched with language macroskill and technology

Instructional strategy	Reading	Seeing	Listening Saying	Saying	Doing	Further examples of appropriate technology
Presentation	>	^	>			Video, TV
Demonstration	>	>	>	>		PowerPoint, overhead projector
Discussion	>	>	>	>	>	Email, chat, IM
Group inquiry	>	>	>	>	>	Internet, LCD projector
Problem solving	>	>	>	>	>	Online tools, blogs, wikis, podcasts
Cooperative learning	>	>	>	>	>	Social networks, 4teachers.com
Instructional games		>	>	>		Quia, Hot Potatoes
Simulation		>	>			Sims, Second Life

Teaching Tip: Adapted from Integrating Technology into Teaching (Recesso & Orrill, 2008) pp. 82–83, this chart offers a useful guide to make sense of Ms Sylvia's technology ogy use, but also a practical instructional planning scaffold when attempting to integrate technology into the classroom and simultaneously take account of ELLs' language needs. web searching. This part deals with issues of getting ELLs to improve their literacy skills and chapter 3.5 focuses on getting ELLs to improve their comprehension skills through listening-facilitative e-tools such as vidcasts, audioblogs, online radios, podcasts, and webcasts. Jointly, chapters 3.4 and 3.5 accomplish the spirit of Principle 1: *Give ELLs many opportunities to read, to write, to listen to, and to discuss oral and written English texts expressed in a variety of ways.*

Penultimately, chapter 3.6 helps realize Principle 4: Give ELLs opportunities to notice their errors and to correct their English. It is devoted to showing how technology can help assess, evaluate, and grade an ELL's learning progress in ways that direct ELLs' attention to their linguistic errors and help them to correct such errors. Chapter 3.7 provides a definitive account of the ways in which a teacher can manage the technologies that have been highlighted above through virtual learning environments (VLE) such as Nicenet. First, such VLEs can act as repositories of links to e-tool sites and storehouses of online curriculum materials as well as databases of student performance outcomes and products. Second, VLEs can be individualized so that a teacher can provide personalized and level appropriate instructional help to any student. In the case of ELLs, VLEs provide a teacher with a virtual place to build an online resource library of English language, English grammar, English vocabulary and English pronunciation activities (see exercise builders in chapter 3.2) customized for the different proficiency levels of the ELLs in any given classroom. Lastly, such course management devices are efficient tools to augment home-school communication efforts. In the case of ELLs, such efforts are of extreme importance in a context where non-English speaking parents often fall short of coming to grips with school cultures, their rights, and their responsibilities. Thus we show how the e-tools introduced in chapter 3.7 help to realize Principle 2: Draw attention to patterns of English language structure.

The three chapters in Part 4 provide directions to resources for teachers and ELL students. Although we identify methods articles, websites, curriculum materials, and the like throughout Part 3, Part 4 summarizes these as well as including additional sources.

Because all classrooms are different in terms of their student make-up and their technology setup, our special focus will be the informed use of various technologies and software programs that can specifically aid (a) ELLs who are at differing levels of English language proficiency as well as (b) teachers who teach in a one computer classroom, have access to multiple computers, and/or have the ability to go into a computer lab at their school.

Finally, this book is written in the spirit of experimentation. Readers looking for a tightly scripted set of methods may be disappointed. Rather we agree with Nel Noddings (2006: 284) when she warns against too much prescription of methods in teaching education and urges instead: "try things out, reflect, hypothesize, test, play with things." Ultimately, curriculum educators must still answer the primary educational question for their own subject: what is worth teaching and how can one best teach it to reach *all* students.

Part 1
Your
English
Language
Learner
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1.1 **Orientation**

English language learners (ELLs) represent the fastest growing group throughout all levels of schooling in the United States. For example, between the 1990–1991 school year and the 2000–2001 school year, the ELL population grew approximately 105 percent nationally, while the general school population grew only 12 percent (Kindler, 2002). In several states (including Texas, California, New Mexico, Florida, Arizona, North Carolina, and New York), the percentage of ELLs within school districts ranges anywhere between 10 and 50 percent of the school population. In sum, there are over 10 million ELLs in U.S. schools today. According to the U.S. Department of Education, one out of seven students in our nation's classrooms speaks a language other than English at home. Although many of these students are heritage language learners and are proficient in English, many others are recent immigrants with barely a working knowledge of the language let alone a command of academic English. Meeting the needs of such students can be particularly challenging for all teachers given the often text-dependent nature of content areas. The language of the curriculum is often abstract and includes complex concepts calling for higher-order thinking skills. Additionally, many ELLs do not have a working knowledge of American culture that can serve as a schema for new learning.

But let's now look at these English language learners. Who are they and how do they come to be in our classrooms?

ELL is the term used for any student in an American school setting whose native language is not English. Their English ability lies anywhere on a continuum from knowing only a few words to being able to get by using everyday English, but still in need of acquiring more English so that they can succeed educationally at school. All students enrolled in an American school, including ELLs, have the right to an equitable and quality education. Traditionally, many ELLs are placed in stand-alone English to speakers of other languages (ESOL) classes and learn English until they are deemed capable of following the regular curriculum in English. However, with the

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introduction of federal and state legislation such as No Child Left Behind (2002), Proposition 227 in California, and other English-only legislation in other states, many school systems now require ELLs to receive their English instruction not through stand-alone ESOL classes, but directly through their curriculum content classes.1 Today "mainstreaming" is the most frequently used method of language instruction for ELL students in U.S. schools. Mainstreaming involves placing ELLs in content-area classrooms where the curriculum is delivered through English; curricula and instruction are typically not modified in these classrooms for non-native English speakers (Carrasquillo & Rodriguez, 2002). According to Meltzer and Hamann (2005), placement of ELLs in mainstream classes occurs for a number of reasons including assumptions by non-educators about what ELLs need, the scarcity of ESOL-trained teachers relative to demand, the growth of ELL populations, the dispersal of ELLs into more districts across the country, and restrictions in a growing number of states regarding the time ELLs can stay in ESOL programs. They predict that, unless these conditions change, ELLs will spend their time in school (1) with teachers not adequately trained to work with ELLs, (2) with teachers who do not see it as a priority to meet the needs of their ELLs, and (3) with curricula and classroom practices that are not designed to target ELL needs (Coady et al., 2003). As we shall later see, of all possible instructional options to help ELLs learn English, placing an ELL in a mainstreamed English-medium classroom where no accommodations are made by the teacher is the least effective approach. It may even be detrimental to the educational progress of ELLs.

This then raises the question of whether or not the thousands of curriculum content teachers across the United States, who now have the collective lion's share of responsibility in providing English language instruction to ELLs, have had preservice or in-service education to modify, adapt, and make the appropriate pedagogical accommodations within their lessons for this special group of students. This is important: ELLs should remain included in the cycle of everyday learning and make academic progress commensurate with grade-level expectations. It is also important that teachers feel competent and effective in their professional duties.

The aim of Part 1 of this book is to provide you the reader with an overview of the linguistic mechanics of second language development. Specifically, as teachers you will learn what to expect in the language abilities of ELLs as their proficiency in English develops over time. Although the rate of language development among ELLs depends on the particular instructional and social circumstances of each ELL, general patterns and expectations will be discussed. We will also outline for teachers the learning outcomes that ELLs typically accomplish in differing ESOL programs and the importance of the maintenance of first language development. School systems differ across the United States in the ways in which they try to deal with ELL populations. Therefore, we describe the pedagogical pros and cons of an array of ESOL programs as well as clarify terminology used in the field. Part 1 will also profile various ELL populations that enter U.S. schools (e.g. refugees vs. migrants, special needs) and share how teachers can make their pedagogy more culturally responsive. Finally, we will also survey what teachers can expect from the cultural practices that ELLs may engage in in the classroom as well as present a myriad of ways in which both school systems and teachers can better foster home–school communication links.

1.2 The Process of English Language Learning and What to Expect

It is generally accepted that anybody who endeavors to learn a second language will go through specific stages of language development. According to some second language acquisition theorists (e.g. Pienemann, 2007), the way in which language is produced under natural time constraints is very regular and systematic. For example, just as a baby needs to learn how to crawl before it can walk, so too a second language learner will produce language structures only in a predetermined psychological order of complexity. What this means is that an ELL will utter "homework do" before being able to utter "tonight I homework do" before ultimately being able to produce a target-like structure such as "I will do my homework tonight." Of course, with regard to being communicatively effective, the first example is as successful as the last example. The main difference is that one is less English-like than the other. Pienemann's work has centered on one subsystem of language, namely morphosyntactic structures. It gives us an interesting glimpse into how an ELL's language may progress (see Table 1.1).

Researchers such as Pienemann (1989; 2007) and Krashen (1981) assert that there is an immutable language acquisition order and, regardless of what the teacher tries to teach to the ELL in terms of English skills, the learner will acquire new language structures only when (s)he is cognitively and psychologically ready to do so.

What can a teacher do if an ELL will only learn English in a set path? Much research has been conducted over the past 20 years on this very question and the upshot is that, although teachers cannot change the route of development for ELLs, they *can* very much affect the rate of development. The way in which teachers can stimulate the language development of ELLs is by providing what is known as an acquisition-rich classroom. Ellis (2005), among others, provides useful research generalizations that constitute a broad basis for "evidence-based practice." Rather

TABLE 1.1. Generalized patterns of ESOL development stages

Stage	Main features	Example
1	Single words; formulas	My name is How are you
2	Subject-Verb object word order; plural marking	I see school I buy books
3	"Do"-fronting; adverb preposing; negation + verb	Do you understand me? Yesterday I go to school. She no coming today.
4	Pseudo-inversion; yes/no inversion; verb + to + verb	Where is my purse? Have you a car? I want to go.
5	3rd person –s; do-2nd position	He works in a factory. He did not understand.
6	Question-tag; adverb-verb phrase	He's Polish, isn't he? I can always go.

Source: Pienemann (1988).

than repeat them verbatim here, we have synthesized them into *five principles for creating effective* second language learning environments. They are presented and summarized below.

Principle 1: Give ELLs Many Opportunities to Read, to Write, to Listen to, and to Discuss Oral and Written English Texts Expressed in a Variety of Ways

Camilla had only recently arrived at the school. She was a good student and was making steady progress. She had learned some English in Argentina and used every opportunity to learn new words at school. Just before Thanksgiving her science teacher commenced a new unit of work on the periodic table and elements. During the introductory lesson, the teacher projected a periodic table on the whiteboard. She began asking the students some probing questions about the table. One of her first questions was directed to Camilla. The teacher asked, "Camilla, tell me what you see on the right hand side of the table." Camilla answered, "I see books, Bunsen burner, also pencils."

Of course the teacher was referring not to the table standing in front of the whiteboard, but to the table projected onto the whiteboard. Though a simple mistake, the example above is illustrative of the fact that Camilla has yet to develop academic literacy.

In 2001, Meltzer defined academic literacy as the ability of a person to "use reading, writing, speaking, listening and thinking to learn what they want/need to learn AND [to] communicate/demonstrate that learning to others who need/want to know" (p. 16). The definition is useful in that it rejects literacy as something static and implies agency on the part of a learner who develops an ability to successfully put her/his knowledge and skills to use in new situations. Being proficient in academic literacy requires knowledge of a type of language used predominantly in classrooms

and tied very much to learning. However, even though it is extremely important for ELLs to master, not many content teachers take the time to provide explicit instruction in it. Moreover, many content teachers do not necessarily know the discipline-specific discourse features or text structures of their own subject areas.

Currently, there is much research to suggest that both the discussion of texts and the production of texts are important practices in the development of content-area literacy and learning. For ELLs this means that opportunities to create, discuss, share, revise, and edit a variety of texts will help them develop content-area understanding and also recognition and familiarity with the types of texts found in particular content areas (Boscolo & Mason, 2001). Classroom practices that are found to improve academic literacy development include teachers improving reading comprehension through modeling, explicit strategy instruction in context, spending more time giving reading and writing instruction as well as having students spend more time with reading and writing assignments, providing more time for ELLs to talk explicitly about texts as they are trying to process and/or create them, and helping to develop critical thinking skills as well as being responsive to individual learner needs (Meltzer & Hamann, 2005).

The importance of classroom talk in conjunction with learning from and creating texts cannot be underestimated in the development of academic literacy in ELLs. In the case above, rather than smiling at the error and moving on with the lesson, the teacher could have further developed Camilla's vocabulary knowledge by easily taking a two-minute digression from the lesson to brainstorm with the class all the ways the word *table* can be used at school—in math, social studies, language arts, etc.

Principle 2: Draw Attention to Patterns of English Language Structure

In order to ride a bike well, a child needs to actually practice riding the bike. Sometimes, training wheels are fitted to the back of the bike to help the younger child maintain his/her balance. In time, the training wheels are taken away as the child gains more confidence. As this process unfolds, parents also teach kids the rules of the road: how to read road signs, to be attentive to cars, to ride defensively, etc. Although knowing the rules of the road won't help a child learn to ride the bike better in a physical sense, it will help the child avoid being involved in a road accident. Knowing the rules of the road—when and where to ride a bike, etc.—will make the child a more accomplished bike rider. Why use this example? Well, it is a good metaphor to explain that language learning needs to unfold in the same way. An ELL, without much formal schooling, will develop the means to communicate in English. However, it will most likely be only very basic English. Unfortunately, tens of thousands of adult ELLs across this country never progress past this stage. School-age ELLs have an opportunity to move beyond a basic command of English—to become accomplished communicators in English. However, this won't happen on its own. To do so requires the ELL to get actively involved in classroom activities, ones in which an ELL is required to practice speaking.

As mentioned above, early research into naturalistic second language acquisition has evidenced that learners follow a "natural" order and sequence of acquisition. What this means is that grammatical structures emerge in the communicative utterances of second language learners in a relatively fixed, regular, systematic, and universal order. The ways in which teachers can take advantage of this "built-in syllabus" are to implement an activity-centered approach that sets out to provide ELLs with language-rich instructional opportunities and offer ELLs explicit exposure and instruction related to language structures that they are trying to utter but with which they still have trouble.

Principle 3: Give ELLs Classroom Time to Use their English Productively

A theoretical approach within the field of second language acquisition (SLA) called the interaction hypothesis and developed primarily by Long (1996; 2006) posits that acquisition is facilitated through interaction when second language learners are engaged in negotiating for meaning. What this means is that, when ELLs are engaged in talk, they make communication modifications that help language become more comprehensible, they more readily solicit corrective feedback, and they adjust their own use of English.

The discrepancy in the rate of acquisition shown by ELLs can be attributed to the amount and the quality of input they receive as well as the opportunities they have for output. Output means having opportunities to use language. Second language acquisition researchers agree that the opportunity for output plays an important part in facilitating second language development. Skehan (1998) drawing on Swain (1995) summarizes the contributions that output can make: (1) by using language with others, ELLs will obtain a richer language contribution from those around them, (2) ELLs will be forced to pay attention to the structure of language they listen to, (3) ELLs will be able to test out their language assumptions and confirm them through the types of language input they receive, (4) ELLs can better internalize their current language knowledge, (5) by engaging in interaction, ELLs can work towards better discourse fluency, and (6) ELLs will be able to find space to develop their own linguistic style and voice.

It behooves teachers to plan for and incorporate ELLs in all language activities in the classroom. Of course an ELL will engage with an activity based on the level of proficiency (s)he has at any given time and the teacher should take this into account when planning for instruction. Under no circumstances should ELLs be left at the "back of the classroom" to linguistically or pedagogically fend for themselves.

Principle 4: Give ELLs Opportunities to Notice their Errors and to Correct their English

Throughout the day, teachers prepare activities for students that have the sole intent of getting them to learn subject matter. Less often do teachers think about the language learning potential that the same activity may generate. This can be applied to ELLs: Teachers encourage them to notice their errors, to reflect on how they use English, and to think about how English works, which plays a very important role in their language development. In a series of seminal studies, Lyster and his colleagues (Lyster, 1998; 2001; 2004; 2007; Lyster & Ranta, 1997; Lyster & Mori, 2006) outline six feedback moves that teachers can use to direct ELLs' attention to their language output and in doing so help them correct their English.

Example 1

Student: "The heart hits blood to se body. . ." *Teacher:* "The heart pumps blood to the body."

In the above example, an ELL's utterance is incorrect, and the teacher provides the correct form. Often teachers gloss over explicitly correcting an ELL's language for fear of singling out the student in class. However, *explicit correction* is a very easy way to help ELLs notice the way they use language.

Example 2

Student: "I can experimenting with Bunsen burner."

Teacher: "What? Can you say that again?"

By using phrases such as "Excuse me?", "I don't understand," or "Can you repeat that?", the teacher shows that the communication has not been understood or that the ELL's utterance contained some kind of error. *Requesting clarification* indicates to the ELL that a repetition or reformulation of the utterance is required.

Example 3

Student: "After today I go to sport."

Teacher: "So, tomorrow you are going to play sports?" *Student:* "Yes, tomorrow I am going to play sport."

Without directly showing that the student's utterance was incorrect, the teacher implicitly *recasts* the ELL's error, or provides the correction.

Example 4

Teacher: "Is that how it is said?" or "Is that English?" or "Does that sound right to you?"

Without providing the correct form, the teacher provides a *metalinguistic clue*. This may take the form of asking a question or making a comment related to the formation of the ELL's utterance.

Example 5

Teacher: "So, then it will be a . . ." (with long stress on "a")

The teacher directly gets the correct form from the ELL by pausing to allow the student to complete the teacher's utterance. *Elicitation* questions differ from questions that are defined as metalinguistic clues in that they require more than a yes/no response.

Example 6

Student: The two boy go to town tomorrow."

Teacher: "The two boys go to town tomorrow." (with teacher making a prolonged stress on "boy"

Repetitions are probably one of the most frequent forms of error correction carried out by teachers. Here a teacher repeats the ELL's error and adjusts intonation to draw an ELL's attention to it.

Using these corrective feedback strategies helps to raise an ELL's awareness and understanding of language conventions used in and across content areas.

Principle 5: Construct Activities that Maximize Opportunities for ELLs to Interact with Others in English

One day, when we had visitors from up north, our daughter came home very excited and said that the teacher had announced that the class would be learning Spanish from the beginning of the month. Our friend, ever the pessimist, said, "I learned Spanish for four years at high school, and look at me now, I can't even string a sentence together in Spanish." What comes to mind is the old saying, "use it or lose it." Of course, my friend and I remember our foreign language learning days being spent listening to the teacher, usually in English. We were lucky if we even got the chance to say anything in Spanish. Since we never used Spanish in class, our hopes of retaining any Spanish diminished with each passing year since graduation. My daughter's 20-year-old brother, on the other hand, had the same Spanish teacher that my daughter will have. He remembers a lot of his Spanish, but also that his Spanish classes were very engaging. A lesson would never pass in which he didn't speak, listen to, read, and write in Spanish. He was always involved in some learning activity and he always expressed how great it was to converse during the class with his friends in Spanish by way of the activities that the teacher had planned.

I use this analogy as it applies to ELLs as well. In order for ELLs to progress with their English language development, a teacher needs to vary the types of instructional tasks that the ELL will engage in. Student involvement during instruction is the key to academic success whereas constant passive learning, mostly through lecture-driven lessons, will greatly impede any language learning efforts by an ELL.

Our five principles provide a framework with which to construct a curriculum that is sensitive to the language developmental needs of ELLs. However, to further solidify our understanding of an ELL's language progress, it is necessary to have a clear picture of what ELLs can do with their language at different levels of proficiency and what implications this has for instruction. Although many taxonomies exist that seek to categorize the developmental stages of second language learners, many education systems throughout the United States have adopted a four-tier description.

The four stages are called Preproduction, Early Production, Speech Emergence, and Intermediate Fluency (Krashen & Terrell, 1983).

The **preproduction stage** applies to ELLs who are unfamiliar with English. They may have had anything from one day to three months of exposure to English. ELLs at this level are trying to absorb the language, and they can find this process overwhelming. In a school context, they are often linguistically overloaded, and get tired quickly because of the need for constant and intense concentration. An ELL's language skills are at the receptive level, and they enter a "silent period" of listening. ELLs at this stage are able to comprehend more English than they can produce. Their attention is focused on developing everyday social English. At the preproduction stage, an ELL can engage in nonverbal responses; follow simple commands; point and respond with movement; and utter simple formulaic structures in English such as "yes," "no," "thank you," or use names. ELLs may develop a receptive vocabulary of up to 500 words.

By the time an ELL enters the **early production stage**, (s)he will have had many opportunities to encounter meaningful and comprehensible English. They will begin to respond with one- or two-word answers or short utterances. ELLs may now have internalized up to 1,000 words in their receptive vocabulary and anything from 100 to 500 words in their active vocabulary. In order for ELLs to begin to speak, teachers should create a low-anxiety environment in their classrooms.

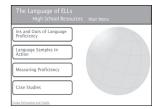
At this stage, ELLs are experimenting and taking risks with English. Errors in grammar and pronunciation are to be expected. Pragmatic errors are also common. Teachers need to model/demonstrate with correct language responses in context. Redundancies, repetitions, circumlocutions, and language enhancement strategies are important for teachers to use when interacting with ELLs at this level.

At the **speech emergence stage**, an ELL will begin to use the language to interact more freely. At this stage, ELLs have a 7,000-word receptive vocabulary. They may have an active vocabulary of up to 2,000 words. By this time, ELLs may have had between one and three years' exposure to English. It is possible that they have a receptive understanding of academic English; however, in order to make content-area subject matter comprehensible, teachers are advised to make great use of advance organizers. Teachers should make explicit attempts to modify the delivery of subject matter, to model language use, and to teach metacognitive strategies in order to help ELLs predict, describe, demonstrate, and problem solve. Because awareness of English is growing, it is also important for teachers to provide ELLs at this stage with opportunities to work in structured small groups so that they can reflect and experiment with their language output.

At the stage of **intermediate fluency**, ELLs may demonstrate near-native or native-like fluency in everyday social English, but not in academic English. Often teachers become acutely aware that, even though an ELL can speak English fluently in social settings (the playground, at sport functions, etc.), they will experience difficulties in understanding and verbalizing cognitively demanding, abstract concepts taught and discussed in the classroom. At this stage ELLs may have developed up to a 12,000-word receptive vocabulary and a 4,000-word active vocabulary. Teachers of ELLs at the intermediate fluency level need to proactively provide relevant content-based literacy experiences such as brainstorming, clustering, synthesizing, categorizing, charting, evaluating, journaling, or log writing, including essay writing and peer critiquing, in order to foster academic proficiency in English.

At the University of South Florida, we have developed online ELL databases that have been created to provide pre- and in-service teachers with annotated audio and video samples of language use by ELLs who are at each of the four different levels of language proficiency. The video and audio files act as instructional tools that allow teachers to familiarize themselves with the language ability (speaking, reading, writing) of ELLs who are at different stages of development. For example, teachers may have ELLs in classes and not be sure of their level of English language development, nor be sure what to expect the ELL to be able to do with English in terms of production and comprehension. This naturally impacts how a teacher may plan for instruction. By looking through the databases, a teacher can listen to and watch representations of ELL language production abilities at all four levels (preproduction, early production, speech emergence, and intermediate fluency). In addition, the databases feature interviews with expert ESOL teachers, examples of tests used to evaluate the proficiency levels of ELLs, and selected readings and lesson plans written for ELLs at different levels of proficiency. Lastly, they provide case studies that troubleshoot pedagogical problem areas when teaching ELLs.

There are three databases: one that features ELLs at the elementary school level, one featuring ELLs at the middle school level, and one featuring ELLs at high school.







The three ELL databases can be found at:

- http://esol.coedu.usf.edu/elementary/index.htm (elementary school language samples);
- http://esol.coedu.usf.edu/middleschool/index.htm (middle school language samples);
- http://esol.coedu.usf.edu/highschool/index.htm (high school language samples).

It is important to remember that a lack of language ability does not mean a lack of concept development or a lack of ability to learn. Teachers should continue to ask inferential and higher-order questions (questions requiring reasoning ability, hypothesizing, inferring, analyzing, justifying, and predicting) that challenge an ELL to think.

Teaching Help

For two good websites that outline ways to enhance questioning using Bloom's taxonomy, see www.teachers.ash.org.au/researchskills/dalton.htm (Dalton & Smith, 1986) and www.nwlink.com/~donclark/hrd/bloom.html (Clark, 1999). The latter gives a further detailed breakdown of Bloom's learning domains in terms of cognitive, affective, and psychomotor key words and how these can be used to foster an ELL's language learning.

Zehler (1994) provides a list of further strategies that teachers can use to engage ELLs at every stage. These include:

- asking questions that require new or extended responses;
- creating opportunities for sustained dialogue and substantive language use;
- providing opportunities for language use in multiple settings;
- restating complex sentences as a sequence of simple sentences;
- avoiding or explaining use of idiomatic expressions;
- restating at a slower rate when needed, but making sure that the pace is not so slow that normal intonation and stress patterns become distorted;
- pausing often to allow students to process what they hear;
- providing specific explanations of key words and special or technical vocabulary, using examples and non-linguistic props when possible;
- using everyday language;
- providing explanations for the indirect use of language (for example, an ELL student may understand the statement, "I like the way Mary is sitting" merely as a simple statement rather than as a reference to an example of good behavior).

1.3 Deciding on the Best ESOL Program

This section outlines the learning outcomes that ELLs typically accomplish in differing ESOL programs and the importance of the maintenance of first language development. Although school systems differ across America in the ways in which they try to deal with ELL populations, this section describes the pedagogical pros and cons of an array of ESOL programs and clarifies terminology used in the field.

There are several factors that influence the design of an effective ELL program. These include considerations regarding the nature of the ELL student demographics to be served, district resources, and individual student characteristics. The MLA Language Map at www.mla.org/map_ main provides an interactive look into the distribution of languages spoken in the United States. The online maps are able to show numbers as well as percentages by state, district, and zip code. Over 30 languages may be geographically represented and compared. The MLA Language Map shows graphically that not all districts are the same. ELL populations differ across the country. Some areas may have an overwhelming majority of Spanish speaking ELLs whereas other districts may have an equally large numbers of ELL students but speaking 50–100 different languages. On the other hand, some districts may have very few ELLs while other districts experience an influx of ELLs of whose language and culture the area's schools have little knowledge (for example, Hmong in Marathon County in Wisconsin, Haitian Creole in Palm Beach, Broward, and Dade counties in Florida, and Somali/Ethiopian in Hennepin and Ramsey counties in Minnesota). Cultural and linguistic differences, as well as factors such as size, age, and mobility of community members, very much influence the types of ESOL instructional programs that school districts choose to develop. Refer to English Language Learner Programs at the Secondary Level in Relation to Student Performance (www.nwrel.org/re-eng/products/ELLSynthesis.pdf) for a wonderful research-based yet easy-to-read outline of how the implementation of different ELL programs in schools affects the language learning gains of ELLs.

As mentioned above, not all ELLs are the same. ELLs may enter a school with vastly different educational backgrounds. Some enter U.S. schools with a strong foundational knowledge in their first language. This means that they may have had schooling in their first language, have literacy skills in their first language, and/or have developed social everyday language competency as well as academic proficiency in their first language. Other ELLs may have had less or even no academic schooling in their first language. Many ELLs, especially refugees, may have attended school in their homeland only for it to have been interrupted by famine or war, or for other socioeconomic or political reasons. Some ELLs arrive in the United States with their families at a very young age and, although they speak their first language at home, they may have never developed reading or writing proficiency in it. As will be discussed in the next chapter, it is of great importance to uncover the nature of an ELL's first language development since this has a profound bearing on how an ELL manages to acquire English.

A third factor, according to the Center for Applied Linguistics (CAL, 1987, at www.cal.org), is the resources that a district has at its disposal. Some districts may have a cadre of qualified ESOL specialists working in schools, whereas other districts may only be able to use paraprofessionals and yet others draw on the surrounding community for help. Based on these constraints, one can classify different ESOL programs into what Baker (2001) terms strong and weak forms of bilingual education. Table 1.2 provides an overview of the merits of the many types of ESOL programs operating across the United States.

According to a report submitted to the San Diego County Office of Education (Gold, 2006), "there is no widely accepted definition of a bilingual school in published research in this country" (p. 37). As a rule of thumb, they are widely understood to be schools that promote bilingualism and literacy in two or more languages as goals for students (Baker, 2001; Crawford, 2004).

TABLE 1.2. Types of ESOL programs in the United States

Type of program	Target ELLs and expectations	Program description	What research says
Submersion	All ELLs regardless of proficiency level or length of time since arrival. No accommodations are made. The goal is to reach full English proficiency and assimilation	ELLs remain in their home classroom and learn with native speakers of English. The teacher makes no modifications or accommodations for the ELL in terms of the curriculum content or in teaching English	States such as Florida have in the past faced potential litigation because of not training teachers to work with ELLs or modifying curriculum and/or establishing ELL programs. In order to avoid submersion models, Florida has established specific ELL instructional guidelines (Consent Decree, 1990)
ESL class period	As above, though usually in school districts with higher concentrations of ELLs	Groups ELLs together, to teach English skills and instruct them in a manner similar to that used in foreign language classes. The focus is primarily linguistic and ELLs visit these classes typically 2 or 3 times per week	This model does not necessarily help ELLs with academic content. The effect is that these programs can tend to create "ESL ghettos." Being placed in such programs can preclude ELLs from gaining college-entrance applicable credits (Diaz-Rico & Weed, 2006)
ESL-plus (sometimes called submersion with primary language)	ELLs who are usually at speech emergence and/or intermediate fluency stage. The aim is to hasten ELL's ability to integrate and follow content classroom instruction	Includes instruction in English (similar to ESL class period and pullout) but generally goes beyond the language to focus on content-area instruction. This may be given in the ELL's native language or in English. Often these programs may incorporate the ELL for the majority or all of the school day	According to Ovando & Collier (1998) the most effective ESL-plus and content-based ESL instruction is where the ESL teacher collaborates closely with the content teacher
Content- based ESL	As above	ELLs are still separated from mainstream content classes, but content is organized around an academic curriculum with gradelevel objectives. There is no explicit English instruction	See above

TABLE 1.2. (continued) Types of ESOL programs in the United States

Type of program	Target ELLs and expectations	Program description	What research says
Pull-out ESL	Early arrival ELLs. Usually in school districts with limited resources. Achieving proficiency in English fast is a priority so that the ELL can follow the regular curriculum	ELLs leave their home room for specific instruction in English: grammar, vocabulary, spelling, oral communication, etc. ELLs are not taught the curriculum when they are removed from their classrooms, which may be anything from 30 minutes to 1 hour every day	This model has been the most implemented though the least effective program for the instruction of ELLs (Collier & Thomas, 1997)
Sheltered instruction or SAIDE (specifically designed academic instruction in English). Sometimes called structured immersion	Targets all ELLs regardless of proficiency level or age. ELLs remain in their classrooms	This is an approach used in multilinguistic classrooms to provide principled language support to ELLs while they are learning content. Has same curriculum objectives as mainstream classroom in addition to specific language and learning strategy objectives	ELLs are able to improve their English language skills while learning content. Exposure to higher-level language through content materials and explicit focus on language fosters successful language acquisition (Brinton, 2003)
Transitional bilingual	Usually present in communities with a single large ELL population. Geared towards grades K–3. Initial instruction in home language and then switching to English by grade 2 or 3	ELLs enter school in kindergarten and the medium of instruction is in the home language. The reasoning behind this is to allow the ELL to develop full proficiency in the home language so that the benefits of this solid linguistic foundation may transfer over to and aid in the acquisition of English. Intended to move ELL students along relatively quickly (2–3 years)	Of all forms of traditional bilingual programs, the transitional model entails the least benefit to the ELL in terms of maintaining and building CALP in their home language

TABLE 1.2. (continued) Types of ESOL programs in the United States

Type of program	Target ELLs and expectations	Program description	What research says
Maintenance bilingual	As above, but the ELL continues to receive language and content instruction in the home language along with English	As above, but are geared to the more gradual mastering of English and native language skills (5–7 years)	ELLs compare favorably on state standardized tests when measured against achievement grades of ELLs in transitional bilingual programs or ESL pull-out, ESL class period and ESL-plus programs (Hakuta et al., 2000)
Dual language/ Two-way immersion	This model targets native speakers of English as well as native speakers of other languages, depending which group predominates in the community	The aim of this program is for both English native speakers and ELLs to maintain their home language as well as acquire another language. Curriculum is delivered in English as well as in the ELL's language. Instructional time is usually split between the two languages, depending on the subject area and the expertise of the teachers	Dual language programs have shown the most promise in terms of first and second language proficiency attainment. Research results from standardized assessments across the United States indicated that ELLs can outperform monolingual English children in English literacy, mathematics, and other content curriculum areas. Has also many positive social and individual affective benefits for the ELL (Genesee, 1999)
Heritage language	Targets communities with high native population numbers, e.g. Hawai'i, Native Americans in New Mexico. Community heritage language maintenance is the goal	In heritage language programs, the aim can be to help revitalize the language of a community. Sometimes English is offered as the medium of instruction in only a few courses. Usually the majority of the curriculum is delivered in the home language	Language diversity can be seen as a problem, as a right, or as a resource. Heritage language programs are operationalized through local, state, and federal language policies as emancipatory (Cummins, 2001)

1.4 Teaching for English Language Development

This section explains the very practical implications of research in the phenomenon of bilingualism for classroom teachers as it relates to a context where many ELLs are learning English as their second, third, or even fourth language. One very important objective of this section is to help teachers understand how they can positively and purposefully mediate an ELL's language development in English.

A very prevalent concept of academic English that has been advanced and refined over the years is based on the work of Jim Cummins (1979; 1980; 1986; 1992; 2001). Cummins analyzed the characteristics of children growing up in two language environments. He found that the level of language proficiency attained in both languages, regardless of what they may be, has an enormous influence on and implications for an ELL's educational success. One situation that teachers often discover about their ELLs is that they arrived in the United States at an early age or were born in the United States but did not learn English until commencing school. Once they begin attending school, their chances for developing their home language are limited, and this home language is eventually superseded by English. This phenomenon is often referred to as limited bilingualism or subtractive bilingualism. Very often ELLs in this situation do not develop high levels of proficiency in either language. Cummins has found that ELLs with limited bilingual ability are overwhelmingly disadvantaged cognitively and academically from this linguistic condition. However, ELLs who develop language proficiency in at least one of the two languages derive neither benefit nor detriment. Only in ELLs who are able to develop high levels of proficiency in both languages did Cummins find positive cognitive outcomes.

The upshot of this line of research in bilingualism seems counterintuitive for the lay person, but it does conclusively show that, rather than providing ELLs with more English instruction, it is important to provide ELLs with instruction in their home language. By reaching higher levels of proficiency in their first language, an ELL will be able to transfer the cognitive benefits to learn English more effectively.

Of course, we don't live in a perfect world, and it is not always feasible to provide instruction in an ELL's home language, so it behooves all teachers to be cognizant of the types of language development processes that ELLs undergo. Cummins (1981) also posited two different types of English language skills. These he called BICS and CALP. The former, basic interpersonal communication skills (BICS), correspond to the social, everyday language and skills that an ELL develops. BICS is very much context-embedded in that it is always used in real-life situations that have real-world connections for the ELL, for example in the playground, at home, shopping, playing sports, and interacting with friends. Cognitive academic language proficiency (CALP), by contrast, is very different from BICS in that it is abstract, decontextualized, and scholarly in nature. This is the type of language required to succeed at school or in a professional setting. CALP, however, is the type of language that most ELLs have the hardest time mastering exactly because it is not everyday language.

Even after being in the United States for years, an ELL may appear fluent in English but still have significant gaps in their CALP. Teachers can be easily fooled by this phenomenon. What is needed is for teachers in all content areas to pay particular attention to an ELL's development in the subject-specific language of a school discipline. Many researchers (Hakuta *et al.*, 2000) agree that an ELL may easily achieve native-like conversational proficiency within two years, but it may take anywhere between five and ten years for an ELL to reach native-like proficiency in CALP.

Since Cummins's groundbreaking research, there has been a lot of work carried out in the area of academic literacy. An alternative view of what constitutes literacy is provided by Valdez (2000), who supports the notion of *multiple literacies*. Scholars holding this perspective suggest that efforts to teach academic language to ELLs are counterproductive since it comprises multiple dynamic and ever-evolving literacies. In their view, school systems should accept multiple ways of communicating and not marginalize students when they use a variety of English that is not accepted in academic contexts (Zamel & Spack, 1998).

However, one very important fact remains. As it stands now, in order to be successful in a school, all students need to become proficient in academic literacy.

A third view is one that sees academic literacy as a dynamic interrelated process (Scarcella, 2003), one in which cultural, social, and psychological factors play an equally important role. She provides a description of academic English that includes a phonological, lexical (vocabulary), grammatical (syntax, morphology), sociolinguistic, and discourse (rhetorical) component.

Regardless of how one defines academic literacy, many have criticized teacher education programs for failing to train content-area teachers to recognize the language specificity of their own discipline and thus being unable to help their students recognize it and adequately acquire proficiency in it (Bailey *et al.*, 2002; Kern, 2000).

Ragan (2005) provides a simple framework to help teachers better understand the academic language of their content area. He proposes that teachers ask themselves three questions:

- What do you expect ELLs to know after reading a text?
- What language in the text may be difficult for ELLs to understand?
- What specific academic language should be taught?

Another very useful instructional heuristic to consider when creating materials to help ELLs acquire academic literacy was developed by Cummins and is called Cummins' Quadrants. In the Quadrants, Cummins (2001) successfully aligns the pedagogical imperative with an ELL's linguistic requirements. The four quadrants represent a sequence of instructional choices that teachers can make based on the degree of contextual support given to an ELL and the degree of cognitive demand placed on an ELL during any given instructional activity. The resulting quadrants are illustrated in Table 1.3.

TABLE 1.3. Cummins' Quadrants

Quadrant I: High context embeddedness, and Low cognitive demand (easiest)	Quadrant III: High context embeddedness, and High cognitive demand
Quadrant II:	Quadrant IV:
Low context embeddedness, and	Low context embeddedness, and
Low cognitive demand	High cognitive demand (most difficult)

Quadrant I corresponds to pedagogic activities that require an ELL to use language that is easy to acquire. This may involve everyday social English and strategies that have a high degree of contextual support (i.e. lots of scaffolding, visual clues and manipulatives to aid understanding, language redundancies, repetitions, and reinforcements) or this may include experiential learning techniques, task-based learning, and already familiarized computer programs. Activities in this quadrant also have a low degree of cognitive demand (i.e. are context embedded). In other words, they are centered on topics that are familiar to the ELL or that the ELL has already mastered and do not require abstract thought in and of themselves.

Quadrant IV corresponds to pedagogic activities that require the ELL to use language that is highly decontextualized, abstract, subject-specific, and/or technical/specialized. Examples of these include lectures, subject-specific texts, and how-to manuals. The topics within this quadrant may be unfamiliar to the ELL and impose a greater cognitive demand on the ELL. Academic language associated with Quadrant IV is difficult for ELLs to internalize because it is usually supported by a very low ratio of context-embedded clues to meaning (low contextual support). At the same time, it is often centered on difficult topics that require abstract thought (high cognitive demand). It is important for the teacher to (1) elaborate language, as well as (2) provide opportunities for the ELL to reflect on, talk through, discuss, and engage with decontextualized oral or written texts. By doing this the teacher provides linguistic scaffolds for the ELL to grasp academically.

Quadrants II and III are pedagogic "go-between" categories. In Quadrant II, the amount of context embeddedness is lessened, and so related development increases the complexity of the language while maintaining a focus on topics that are easy and familiar for the ELL. In Quadrant III, language is again made easier through the escalation of the level of context embeddedness to support and facilitate comprehension. However, Quadrant III instruction allows the teacher to introduce more difficult content-area topics.

When a teacher develops lesson plans and activities that are situated within the framework of Quadrant I and II, the ELL engages in work that is not usually overwhelming. In low-anxiety classrooms, ELLs feel more comfortable to experiment with their language to learn more content. As an ELL moves from level 1 of English language development (preproduction) to level 3 (speech emergence), a teacher may feel that the time is right to progress to creating lesson plans and activities that fit pedagogically into Quadrants III and IV. A gradual progression to Quadrant III reinforces language learning and promotes comprehension of academic content. According to Collier (1995):

A major problem arising from the failure of educators to understand the implications of these continuums is that ELLs are frequently moved from ESOL classrooms and activities represented by Quadrant I to classrooms represented by Quadrant IV, with little opportunity for transitional language experiences characterized by Quadrants II and III. Such a move may well set the stage for school failure. By attending to both language

dimensions (level of contextual support and degree of cognitive demand) and planning accordingly, schools and teachers can provide more effective instruction and sounder assistance to second-language learners. (p. 35).

The degree of cognitive demand for any given activity will differ for each ELL, depending on the ELL's prior knowledge of the topic.

1.5 **Not All ELLs are the Same**

The United States continues to be enriched by immigrants from countries the world over. Many cities have ethnic enclaves of language minority and immigrant groups and these populations are reflected in school classrooms. This section outlines the background characteristics of ELLs that teachers need to be aware of when planning or delivering instruction. Certainly, ELLs bring their own strengths to the task of learning but they also face many challenges. Equally, these diverse backgrounds impact classroom practices culturally in terms of how ELLs behave in classrooms, how they come to understand curriculum content, and how their interactions with others are affected (Zehler, 1994). The following affords a glimpse of their diversity:

María is seven years old and is a well-adjusted girl in second grade. She was born in Colombia, but came to the United States when she was four. Spanish is the medium of communication at home. When she entered kindergarten, she knew only a smattering of English. By grade 2 she had developed good basic interpersonal communication skills (BICS). These are the language skills needed to get by in social situations. María sounded proficient in English; she had the day-to-day communication skills to interact socially with other people on the playground, in the lunchroom, and on the school bus. Of course, all these situations are very much context-embedded and not cognitively demanding. In the classroom, however, María had problems with her cognitive academic language proficiency (CALP). This included speaking, reading, and writing about subject-area content material. It was obvious to her teacher that Maria needed extra time and support to become proficient in academic areas but, because she had come to the United States as a four-year-old and had already been three years in the school, she was not eligible for direct ESOL support. Collier and Thomas (1997) have shown that, if young ELLs have no prior schooling or have no support in native language development, it may take seven to ten years for them to catch up to their peers.

Ismael Abudullahi Adan is from Somalia. He is 13 and was resettled in Florida as a refugee through the Office of the United Nations High Commissioner for Refugees (UNHCR; see www.unhcr.org/home.html). As is the case with all refugees in the USA, Ismael's family was matched with an American resettlement organization (see www. refugees.org/). No one in his family knew any English. They were subsistence farmers in Somalia and, because of the civil war in Somalia, Ismael had never attended school. The resettlement organization helped the family find a place to live, but financial aid was forthcoming for only six months. While all members of the family were suffering degrees of war-related trauma, culture shock, and emotional upheaval, as well as the stress and anxiety of forced migration, Ismael had to attend the local school. Everything was foreign to him. He had no idea how to act as a student and all the rules of the school made no sense to him. All Ismael wanted to do was work and help his family financially; he knew that at the end of six months financial aid from the government would stop and he worried about how his family was going to feed itself. He is currently placed in a sheltered English instruction class at school.

José came to the United States from Honduras with his parents two years ago. He is now 14. His parents work as farm laborers and throughout the year move interstate depending where crops are being harvested. This usually involves spending the beginning of the calendar year in Florida for strawberry picking, late spring in Georgia for the peach harvest, early fall in North Carolina for the cotton harvest, and then late fall in Illinois for the pumpkin harvest. When the family first came to the United States from Honduras as undocumented immigrants, José followed his parents around the country. His itinerancy did not afford him any consistency with schooling. Last year, his parents decided to leave José with his uncle and aunt in North Carolina so that he would have more chances at school. Now he doesn't see his parents for eight months out of the year. He misses them very much. At school José has low grades and has been retained in grade 8 because he did not pass the North Carolina High School Comprehensive Test. He goes to an ESOL pull-out class once a day at his school.

Andrzej is 17 years old. He arrived with his father, mother, and 12-year-old sister from Poland. They live in Baltimore where his father is a civil engineer. The family immigrated the year before so that Andrzej's mother could be closer to her sister (who had married an American and had been living in the United States for the past 10 years). Andrzej always wanted to be an engineer like has father, but now he isn't sure what he wants to do. His grades at school have slipped since leaving Poland. He suspects that this is because of his English. Even though he studied English at school in Poland, he never became proficient at writing. Because he has been in the United States for more than a year, he no longer receives ESOL support at school. His parents, however, pay for an English tutor to come to his house once a week.

The above cases reflect the very wide differences in the ELL population in schools today. One cannot assume that every ELL speaks Spanish or that all ELLs entered the country illegally. The ELL population in a school may include permanent residents, naturalized citizens, legal immigrants, undocumented immigrants, refugees, and asylees. Of this foreign-born population, 4.8 million originate from Europe, 9.5 million from Asia, 19 million from Latin America, 1.2 million from Africa, and 1 million from other areas including Oceania and the Caribbean (U.S. Census Bureau, 2005).

Stages of Cultural Adjustment

What the above cases of María, Ismael, José, and Andrzej also identify is that since the nation's founding immigrants have come to the United States for a wide variety of reasons. These may include one or any combination of economic, political, religious, and family reunification reasons. Depending on the reason for coming to the United States, an ELL might be very eager to learn English since they might see having English proficiency as the single best means to "get ahead" economically in their new life, or they might resist learning English because they see this as an erosion of their cultural and linguistic identity. A teacher may find an ELL swaying between these two extremes simply because they are displaying the characteristics and stages of *cultural adjustment*.

The notion of cultural adjustment or, as it is sometimes called, "culture shock" was first introduced by anthropologist Kalvero Oberg in 1954. The emotional and behavioral symptoms of each stage of this process can manifest themselves constantly or only appear at disparate times.

Honeymoon Stage

The first stage is called the "honeymoon" stage and is marked by enthusiasm and excitement by the ELL. At this stage, ELLs may be very positive about the culture and express being overwhelmed with their impressions particularly because they find American culture exotic and are fascinated by it. Conversely, an ELL may be largely passive and not confront the culture even though (s)he finds everything in the new culture wonderful, exciting, and novel. After a few days, weeks, or months, ELLs typically enter the second stage.

Hostility Stage

At this stage, differences between the ELL's old and new cultures become aggravatingly stark. An ELL may begin to find anything and everything in the new culture annoying and/or tiresome. An ELL will most likely find the behavior of those around him/her unusual and unpredictable and thus begin to dislike American culture as well as Americans. They may begin to stereotype Americans and idealize their own culture. They may experience cultural confusion and communication difficulties. At this stage, feelings of boredom, lethargy, restlessness, irritation, antagonism, depression, and feelings of ineptitude are very common. This occurs when an ELL is trying to acclimatize to the new culture, which may be very dissimilar to the culture of origin. Shifting between former cultural discourse practices and those of the new country is a problematic process and can take a very long time to overcome. If it is prolonged, an ELL may withdraw because of feelings of loneliness and anxiety.

Home Stage

The third stage is typified by the ELL achieving a sense of understanding of the new culture. The ELL may feel more comfortable living in the new country and experiencing the new culture. They may regain their sense of humor. In psychological terms, an ELL may start to feel a certain emotional balance. Although feelings of isolation may persist, the ELL may stop feeling lost and even begin to have a feeling of direction. The ELL re-emerges more culturally stable, being more familiar with the environment and wanting to belong. For the ELL, this period of new adjustment could initiate an evaluation of old cultural practices versus new ones.

Assimilation Stage

In the fourth stage, the ELL realizes that the new culture has positives as well as negatives to offer. Integration patterns and practices displayed by the ELL become apparent. It is accompanied by a more solid feeling of belonging. The ELL enjoys being in the new culture, functions easily in the new environment (even though they might already have been in the new culture for a few years) and may even adopt cultural practices of the new culture. This stage may be seen as one of amalgamation and assimilation.

Re-Entry Shock Stage

This happens when an ELL returns to the old culture for a visit and notices how many things have changed in the country as well as how they themselves have changed. Upon returning from the home country, an ELL will have developed a new sense of appreciation and of belonging to the new culture.

Worthy of note is the fact that the length of time an ELL spends in each of these stages varies considerably. The stages are neither discrete nor sequential and some ELLs may completely skip stages. They may even exhibit affective behaviors characteristic of more than one stage.

Cultural Practices at School

Whenever an ELL steps into a new school environment, the ELL will be sure to go through a process of cultural adjustment. For an ELL, the countless arrays of unspoken rules acquired in his/her culture of origin may not be suitable in the new school and a new set of practices needs to be discovered and internalized. These include, but are of course not limited to, school rules, what it means to be a "good" student, how to interact with fellow students and teachers, eating practices, bathroom practices, and even ways of learning. It would be fairly easy to learn new rules for living if such were made explicit and one were provided with lists of things to learn. However, most cultural rules operate at a level below conscious awareness and are not easily relayed to students.

Often ELLs find themselves in the position of having to discover these rules on their own. Shared cultural discourse practices can be seen as the oil that lubricates social interaction; however, what a community's cultural practices are, as well as the meanings that group members attach to their shared repertoire of cultural practices, are not always made explicit. Unfamiliarity with these cultural rules on the part of an ELL can cause a great deal of stress.

Many definitions regarding what culture is or is not abound. Diaz-Rico and Weed (2006) provide a very nice overview of the characteristics of culture. For them, culture is an adaptive mechanism, culture is learned, cultures change, culture is universal, culture provides a set of rules for living and a range of permissible behavior patterns, culture is a process of deep conditioning, culture is demonstrated in values, people usually are not aware of their culture, people do not know all of their own culture, culture is expressed verbally and non-verbally, culture no longer exists in isolation, and, last but very poignantly, culture affects people's attitudes toward schooling and it governs the way they learn. It can affect how they come to understand curriculum content and how they interact with fellow students.

Diaz-Rico and Weed (2006) offer a number of strategies to promote cultural pluralism and assuage potential exclusionary practices such as stereotyping, prejudice, and racism in the class-room. Ways to acknowledge different values, beliefs, and practices include accommodating different concepts of time and work rhythms, as well as different concepts of work space. Being open to culturally sensitive dress codes and inclusive of culture in school rituals are effective ways

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of promoting cultural pluralism. Considering different notions about work and play and maintaining an inclusive understanding of different health and hygiene practices as well as being tolerant of different religious practices and food and eating practices are critical in teaching acceptance. Most important to remember in relation to your ELL students are culturally based educational expectations (roles, status, gender), different discourse patterns, and your need to foster cultural pride and home–school communication.

One way to ease your ELL's cultural adjustment while demonstrating inclusiveness is to get to know where your ELLs come from and then incorporate aspects of their culture into your lessons. You could overtly ask your ELL about their home country, but this tactic may not provide you with the type of information you want since your ELL may not have the language proficiency in English to express abstract cultural concepts. Therefore, you should observe your ELL and how they behave, interview people from the same country, conduct a home visit, or visit the community in which the ELL lives. Of course, teachers are often constrained by time, so an alternative is to conduct internet research or buy appropriate books.

1.6 **Culturally Responsive Pedagogy**

As more and more students from diverse backgrounds populate 21st century classrooms, and efforts mount to identify effective methods to teach these students, the need for pedagogical approaches that are culturally responsive intensifies. Today's classrooms require teachers to educate students varying in culture, language, abilities, and many other characteristics.

(Gollnick & Chinn, 2002 p. 21)

The question is: How does a teacher adequately respond to the multicultural classroom?

In 2000 Gay wrote that culturally responsive pedagogy is validating, comprehensive, multidimensional, empowering, transformative, and emancipatory. In other words, culturally responsive pedagogy necessitates that teachers tread outside their comfort circles. It is only natural for humans to see, understand, judge, make sense of, and canonize the world around them through their own discursive norms of practice. What this means in the context of education is that teachers make choices every day about what they will and will not teach. More importantly, teachers make choices as to how they will present and frame their curriculum choices. Of course this sends a subtle message to students: What curriculum matter is taught and how it is framed tends to legitimatize, validate, and endorse it over other potential curricular perspectives, which by default are marginalized.

Thus, teachers instruct in ways and about things that are familiar to them. They usually adopt and transmit the dominant voice in society, namely that of white middle-class America. The problem is, if a student is an ELL, (s)he is usually not white, middle-class, or American. This is where the practice of culturally responsive pedagogy can help. Look at the reflection vignette below. It shows how the media can tend to reinforce dominant societal perspectives, perspectives that are reinforced and repeated in school curricula and textbooks across the country.

Reflection Vignette

I was driving my 12-year-old son to school in the fall of 2003 when over the radio we heard a commercial for the movie *Alamo*. Coincidently, the previous day we had been to the movies and one of the trailers was for the same movie. Kevin Costner was one of the Texan heroes in the movie, and every time the movie trailer showed the Texans the screen was bright and full of smiling people. The music was light and they were obviously the "good guys." However, when the screen shot showed the Mexican antagonists, the screen was dark, with hues of blue and red, the background images were full of cannon sounds, and the faces were "mean-looking."

Back in the car, I asked my son, who at the time was focused on playing his Gameboy, "You're doing American history now in your social studies class, right?"

My son, recognizing that another of dad's teachable moments was upon him, just rolled his eyes and disgruntledly put down his Gameboy.

"Yes, why?" he said.

"What aspect of U.S. history are you learning about now?" I asked.

"We're learning about the westward colonization of North America."

"Did you hear that ad?" I asked.

"Sure."

"Let me ask you something. What do you think would happen if a bunch of Cubans came into the middle of Florida, bought up a cluster of farms, and then told the government they were not going to pay taxes?"

"I suppose the government would fine them," he said.

"Well, what would happen if those same Cubans then told the government that they were going to create their own country?"

"The government would send in the army and kick 'em all out and probably send them back to Cuba."

At that point, I could see a flash of realization cross my son's face. "Oh, I get it," he said, "the Cubans are the Texans."

In the United States the Alamo is usually constructed as part of a righteous war of independence against an autocratic foreign government, namely Mexico. Yet in Mexican schools the war surrounding the Alamo is constructed as an aggressive grab for land by non-Spanish speaking settlers. Who is right? Perhaps the question should be: Am I teaching curriculum matter in a way that alienates and inadvertently marginalizes my students? How would a Mexican ELL feel in your classroom if you taught a unit on the Alamo, or on the westward European settlement of North America, and Mexico and the Mexicans were portrayed as the baddies? At the very least it marginalizes an ELL's voice in the classroom and indirectly discredits his/her potential contribution of another perspective for the class to think about.

Using Gay's (2000) principles of culturally responsive pedagogy, how does a teacher make the curriculum more validating, comprehensive, multidimensional, empowering, transformative, and emancipatory?

The first step is to be conscious of our choice of language. Language is never neutral. What and how we say things in the classroom affects the way our students perceive curriculum matter. The second step is to be conscious of the images we present to the students. The third step is to engage in critical and reflexive thinking and writing tasks. By getting teachers to reflect critically

on the language, images, and content of their teaching, we begin to open the door on *other* ways to think about teaching that are less ethnocentric. The fourth step is to learn the history and culture of the ELL groups in your classroom. The fifth step is to try and visit teachers who are successful at implementing culturally responsive pedagogy and, last, become an advocate in your own educational institution to reform ethnocentric discursive practices so that it becomes more inclusive. Richards, Brown, and Forde (2004) suggest the following activities to become more culturally responsive:

- 1. acknowledge students' differences as well as their commonalities;
- 2. validate students' cultural identity in classroom practices and instructional materials;
- 3. educate students about the diversity of the world around them;
- 4. promote equity and mutual respect among students;
- 5. assess students' ability and achievement validly;
- 6. foster a positive interrelationship among students, their families, the community, and school;
- 7. motivate students to become active participants in their learning;
- 8. encourage students to think critically;
- 9. challenge students to strive for excellence as defined by their potential;
- 10. assist students in becoming socially and politically conscious.

1.7 Not All Parents are the Same Home-School Communication

Any school administrator and teacher will readily admit that the key to a school's success and indeed the key to a child's learning success is the active involvement of parents in the learning process. In the case of ELLs, parents are often at a loss because of barriers that prevent them from fully participating in the school community. Parents' hesitancy to involve themselves in their child's school arises from barriers such as the frustration they feel because of their own limited knowledge of English, their own possible lack of schooling, perceptions about power and status roles, or the anxiety they have because of different cultural norms such that they do not readily understand American school cultures or the cultural expectations, rights, roles, and responsibilities of teachers, parents, and students.

Schools can greatly enhance the effectiveness of ELL home-school communication and involvement by taking active steps to reduce these barriers. Careful planning is required to meet these challenges, though it can be done.

- 1. Knowledge is King! Get as much background information as is possible. Information useful to schools and teachers includes home language, home cultural/ethnic values, parental attitudes towards education, work schedules of parents, English proficiency, and the circumstances under which they have come to be in the United States (e.g. are they refugees, itinerant migrants, political asylees, second or third generation heritage speakers?). Depending on the information a school receives, a classroom teacher may make informed decisions about bilingual aide support, translation support, and changing school cultural practices that raise rather than bring down barriers to ELL home–school communication and parental involvement.
- 2. *Communicate as if it is going out of style!* The importance of fostering ELL parental involvement centers foremost on fostering and maintaining good lines of communication between the school/teacher and the home/parents. An important facet that frames parents' participation

in schools is their perceptions of school personnel. Is the school inviting and welcoming? Are teachers and the administration approachable? Are teachers empathetic to ELL parental concerns, wishes, contributions, values, and cultural practices? How often are they invited to attend school functions? Do teachers follow through on their communications? Do teachers make an effort to talk directly and in person with parents? Are parents allowed to visit often and learn what goes on in the classroom? Do teachers take the time to explain the whats, whys, and hows of their teaching and the ELL child's learning?

3. It's not just about educating the ELL! If schools want to enlist the support and help of ELL parents, then both the administration of a school and its teachers need to be prepared to extend their instruction beyond the ELL student to the ELL parent—beyond the classroom and into the ELL home. In other words, in order to break down the types of barriers that inhibit ELL parents from school involvement, steps need to be taken to educate the parents in matters concerning English language, as well as U.S. school customs. What would such steps look like? In an article published in Essential Teacher (2004), Bassoff says it centers solely on access, approachability, and follow-through.

Ideas: On Fostering Access

- Create, endorse, and implement an ELL parent–school participation program/policy.
- Have an ELL parent representative on school committees.
- Make the school a place to foster ELL community events.
- Provide access to the school library to aid ELL parents' learning of English.
- Translate all school communications into the home language.
- Make sure all written communication reaches the ELL parent.
- Foster in-school support groups for ELL parents.
- Advocate that your school district establish an "Intake Center" for new arrivals that will help ELL newcomers with school registrations, placement, testing, and information services.
- Allow ELL parents to come to school professional development opportunities.
- Provide ELL parent education workshops and orientation opportunities.
- Advertise the contact information of bilingual school staff.

Ideas: On Fostering Approachability

- Use ELL parents as sources of information.
- Invite ELL parents to school.
- Use parents to raise multicultural awareness in the school and classroom; multiculturalism is a two-way street—foster inclusion through the provision of multicultural workshops, presentations, and events to mainstream monolingual school personnel and students.
- Multicultural appreciation events could include ethnic music and dance performances, art displays, drama shows, science fairs, and festival evenings, all accompanied by talks from ELL parents or ELL community leaders.
- Be amenable and open to different ways about thinking about education—show this through inclusive classroom practices, activities, realia, and visuals.
- Embed multicultural routines in everything and all the time.
- Foster ELL literacy family evenings.
- Establish native language parent groups.

Ideas: On Achieving Good Follow-Through

- Give mainstream students service-learning opportunities to help ELL parents/families adjust to U.S. life.
- Foster ELL parent network circles.
- Provide classes that help ELL parents to meet their children's education needs.
- Have the school library purchase a wide range of fiction and non-fiction bilingual books.
- Take the time to learn about the culture, language, and education system of the ELLs' home countries and apply what you learn in your classroom.
- Create virtual spaces to post ongoing information for ELL parents as well as WWW links to useful websites.¹

1.8 **English Language Learners with Special Needs**

We want to highlight an important subset of the ELL population that is often disadvantaged because its members fall simultaneously into two underrepresented groups: special needs and ELL. They are underprivileged because many teachers within these separate discipline areas have not been trained to work with this population of students—ESOL teachers with special needs students, or special needs teachers with ELLs.

In 1984 the National Office for Educational Statistics reported that 500,000 students in the United States were English language learners with exceptionalities. Today, more than 20 years later, it is projected that there are more than 1 million ELLs with special needs in the United States (Baca & Cervantes, 2004).

Despite an abundance of legislative initiatives (*Civil Rights Act—Title VI* in 1963, *Title VII of the Elementary and Secondary Education Act* (ESEA) reauthorized in 1974, 1978, 1984, and 1998, *Lau v. Nichols* in 1974, and the *Equal Educational Opportunity Act*, extending the Lau decision to all schools, *President's Committee on Mental Retardation* in 1970, the *Education for All Handicapped Children Act* in 1975, the *Bilingual Education Act* in 1984, reauthorization of the ESEA in 1994 coupled with a Presidential Executive Order in 2000, the *Individuals with Disability Education Act* (IDEA) of 1997 and *Title II* of the *No Child Left Behind* (NCLB) *Act* 2002), inappropriate referrals, assessments, and the institutionalization of inappropriate instructional processes remain crucial issues in the education of ELL special needs children.

A colleague of ours once told the story of when he first came to the United States. His son was seven years old and at the end of the summer in 2005 was ready to be placed in grade 2. In Florida, the parents of every newly enrolled student are obliged to fill out a home language survey form. Our colleague was raising his children bilingually and both his children were equally fluent in English and German. When asked on the form what languages were spoken at home, he wrote German and English. A week later, his son innocuously said at the dinner table that he enjoyed

being pulled out of the classroom, whereupon both parents asked the son what he meant. "Why I love being in the ESOL class with all the kids who speak other languages." Little did my colleague know that, because he had written German on the home language survey, the school was legally bound to place his son in ESOL classes. The upshot of the story was that our colleague went to the school and explained to the administration that his son was a balanced bilingual speaker and having him in ESOL classes was unnecessary. The administration told him that there was nothing they could do because the home survey was filled out as it was. Ultimately, my colleague had to disenroll his son, re-enroll him in the same school, and fill out the home survey again (this time just putting English as the home language) to finally have him pulled from the ESOL classes. The reason this story is related is because parents and teachers are all too familiar with the fact that, within education environments, rule-driven practices, acronyms, and terminologies abound that more often than not pigeon-hole students into predetermined roles and assign these students to inevitable and predictable expectations. Unfortunately, ELLs with special needs have fallen prey to this stereotyping. There is, however, an ever-increasing but incomplete body of research that spotlights instructional strategies for ELLs with special needs that teachers may draw upon to help them in their efforts to identify, instruct, and assess. The following section summarizes some of the more important aspects of this research. The following two points may act as instructional guides:

- Students with mild to severe disability levels benefit from native language instruction (de Valenzuela & Niccolai, 2004).
- Instruction needs to be enriching and not remedial, empower language learners, recognize the learners' culture and background, provide learners with authentic and meaningful activities, connect students to real-life experiences, begin with context-embedded material that leads to the use of context-reduced material, and provide a literacy/language-rich environment (Echeverria and McDonough, 1993).

But how can we translate the above into effective classroom practice?

There are various pedagogic models that have been developed based on theoretical frameworks, research findings, and recommended practices appropriate for ELLs with special needs (Ruiz, 1995a,b). Ortiz (1984) describes four basic types of pedagogic models that offer structured institutional support for ELLs with special needs to achieve more accomplished social and academic skill levels. These models are:

- 1. *Coordinated services model*—assists the ELL with special needs with a monolingual English speaking special education teacher and a bilingual educator.
- Bilingual support model—bilingual paraprofessionals are teamed with monolingual English
 speaking special educators and assist with the individualized education plans of ELLs with
 special needs. Wherever noted on the individualized education program (IEP), the bilingual
 paraprofessional provides home language instruction concurrently with the teacher providing content expertise.
- 3. *Integrated bilingual special education model*—consists of one teacher who is certified in both bilingual education and special education, where the teacher is able to assist with level-appropriate English language instruction as the learner develops in proficiency.
- 4. *Bilingual special education model*—in this model all professionals interacting with the ELL special needs student have received bilingual special education training and are qualified to provide services that meet the goals outlined in any IEP.

Another model, the Optimal Learning Environment (OLE) Project (Ruiz, 1989), is based on a constructivist philosophy and works within a holistic–constructivist paradigm, focusing on the extensive use of interactive journals, writers' workshops, shared reading practices, literature conversations, response journals, patterned writing, as well as the provision of extended assessment time. The aim of the strategies is to build on a student's schema and interest.

The benefits of such models highlight the individualized and diverse needs of language learning students with special needs. As yet, guaranteeing unambiguous benefits across the board is not possible precisely because of the dearth of empirical research on instructional planning and curriculum design in this area. A very real consequence of this situation is the paucity of curricular materials available specifically geared to bilingual special education. Both fields of education have propagated methods on preparing either English language learners or special needs students. The main point to be internalized here is that materials must be integrated and specifically designed for English language learners *with* special needs. It is not enough that they receive "half of each curriculum" (Collier, 1995). Lack of curricular materials and trained personnel is still cited as the greatest barrier to providing services to English language learners with special needs.

So, what can teachers do to facilitate language learning for ELL students with a special need?

Of course, implementing well-informed instructional practices is one thing, but awareness raising, understanding of difficulties, and knowledge of differences and disorders are also an integral part of assisting the English language learner with disabilities.

In conclusion, we offer Hoover and Collier's (1989) recommendations as a point of departure to think about teaching ELLs with special needs:

- 1. Know the specific language abilities of each student.
- 2. Include appropriate cultural experiences in material adapted or developed.
- 3. Ensure that material progresses at a rate commensurate with student needs and abilities
- 4. Document the success of selected materials.
- 5. Adapt only specific materials requiring modifications, and do not attempt to change too much at one time.
- 6. Try out different materials and adaptations until an appropriate education for each student is achieved.
- 7. Strategically implement materials adaptations to ensure smooth transitions into the new materials.
- 8. Follow some consistent format or guide when evaluating materials.
- 9. Be knowledgeable about particular cultures and heritages and their compatibility with selected materials.
- Follow a well-developed process for evaluating the success of adapted or developed materials as the individual language and cultural needs of students are addressed. (Hoover & Collier, 1989: 253)

Conclusion

Understanding your English language learners can be daunting. They are different; they probably come from very different home environments from you, their teachers. Some of your students may be third-generation American and yet others may be newly arrived undocumented immigrants.

After reading Part 1, we don't expect you to now know everything there is to know about ELLs. We did not set out to provide you in these few short pages with an all-inclusive research-informed, all-encompassing treatise on ELLs in education. We have been circumspect, to be sure, in trying to

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introduce you to ELLs. There are plenty of ELL-specific books for that. It *was* our intent, however, to raise your awareness about the educational implications of having ELLs in your classroom. Our goal with this is to start drawing a picture of who an English language learner is and from this position help you think about the educational possibilities for your class.

Parts 2, 3, and 4 of this book are devoted exclusively to completing this picture. Not in a global sense, but finely etched within the parameters of your own content area.

What will be introduced to you in the pages to come will undoubtedly refer back to some of the points raised in Part 1. We have no intention of offering you static teaching recipes; instead we offer something akin to ideas, understandings, and skills that you can transfer to your own classrooms. Last, we refer you to Part 4 of this book, which offers you avenues for future professional development.

Part 2 What We Know from Research

The intersection of ELL and technology-based research is in its infancy. Part 2 explores the theories that have framed this research and how research has attempted to unpack this nexus. More importantly, we draw connections to pedagogy and what teachers can take from theory and research into their classrooms. We will state the main principles that guide our recommendations for instruction. Although we believe our principles are consistent with research about effective instruction, no amount of research can prove we should teach this rather than that. In other words, we summarize such research and make it useable for teachers.

In chapter 2.1, we begin by drawing on the work of Vygotsky in providing a theoretically informed basis to argue for the pedagogical application of differentiated instruction (DI), constructivist principles (CP), and project-based learning (PBL) as a 'good fit' approach for teachers wishing to infuse technology into their classrooms. Together, these approaches can seamlessly advance instructional practices that realize the five principles for creating effective second language learning environments outlined in the Introduction. We end Part 2 with chapters 2.3 and 2.4, in which we use research to support teaching through technology that matches, augments, and complements classroom tasks, which we believe means choosing the right technology to fit the pedagogical activity at hand. We realize teachers cannot do all of what we're suggesting all of the time. But the aim should be to do it reasonably often—its benefits will rub off on other learning activities that may be more routine.

2.1 **Taking the Lead from Vygotsky**

Although originating in psychology, the importance of Vygotsky's work lies in the way in which it has increasingly come to contribute to the knowledge base of other disciplines. Over the past 40 years, Vygotsky's sociocultural theory of mind has variously been described as a theory of cognition (Luria, 1981), a theory of education (Bruner, 1985), a theory of language development (Bronckart, 1995), a theory of semiotics (Rommetveit, 1985), and a social theory of human development (Wertsch, 1990). His work explains how all cognitive development has its origins in social enterprise and so it has come to inform many approaches to pedagogy that value the collective nature of learning as well as the pedagogical worth of group work as a means to stimulate individual growth. Such approaches include differentiated instruction (DI), project-based learning (PBL), and constructivist pedagogy (CP). The instructional implications of these approaches will be discussed later in chapter 2.2.

According to Vygotsky, the individual is inseparable from his/her social context and consequently cognitive development is viewed as an essentially sociocultural activity. The postulates of sociocultural theory derived from this theoretical perspective are characterized by three basic propositions that, in their entirety, ultimately lie at the core of Vygotsky's work. These are: (1) an emphasis on social activity as the source of human thinking and development; (2) sign-mediated activity; and (3) the zone of proximal development (Vygotsky, 1962; 1978; 1981). By contextualizing these propositions within the overall framework of education, it is hoped to build a theoretical basis upon which to guide and inform the present book, and to augment our current understanding of ELL instruction through technology. The following section provides an account of the above three propositions.

The Social Origins and Cultural Bases of Mind— Fundamental Concepts

Vygotsky conceived consciousness to be inseparable from human (socially and culturally mediated) behavior. He claimed that, from birth, children interact with adults, who acculturate them into their sociocultural environment, their repository of symbols, their language, their discursive practices, and the meanings they attach to these. Within a Vygotskian framework of mind, mental activity is uniquely human because "it is the result of social learning, of the interiorization of social signs, and of the internalization of culture and of social relationships" (Blanck, 1990: 44). Consequently, cognition is to be seen as a social product achieved through interaction.

For teachers, this means that providing students opportunities to interact is *the single* most important factor in stimulating the development of higher-order thinking. Using DI, PBL, and CP techniques in the classroom, all of which stress allowing each individual student to learn at their own level and pace, provide a means to help students internalize language and curriculum content through pedagogically informed interactive activities.

Vygotsky distinguished between two types of tools, physical (such as concrete objects) and psychological (such as language). In this same vein, speech may in effect be seen to be a cultural tool used by individuals for the organization of thinking.

All psychological tools, in other words, language, counting systems, mnemonic techniques, algebraic symbol systems, art, writing, schemes, diagrams, maps, mechanical drawings, and all other types of conventional signs (Vygotsky, 1981: 137) acquire different forms depending on the historical context of a culture and the individuals within any given social or cultural context. In commenting on how "aspirant members of a culture learn from their tutors, the vicars of their culture," Bruner (1985: 32) remarks that

[the] world is symbolic . . . in the sense that it consists of conceptually organised, rule-bound belief systems about what exists, how to get to goals, about what is to be valued. There is no way, none, in which a human being could possibly master that world without the aid and assistance of others for in fact that world *is* [Bruner's emphasis] others. The culture stores an extraordinary rich file of concepts, techniques, and other prosthetic devices that are available (often in a highly biased way, for the file constitutes one of the sources of wealth in any society and most societies do not share their wealth equally among all). The prosthetic devices require for their use the language as an instrument of thought As Vygotsky said, it is a matter of using whatever one has learned before to get to higher ground next.

Implications for the Classroom

An ELL enters a classroom in the United States with an already existing full repository of cultural tools, concepts, and techniques that have been shaped by his or her culture of origin—the dissonance between the understandings an ELL has of these and the understandings given to cultural means in a U.S. classroom can impose significant hurdles to learning for an ELL. A teacher needs to be sensitive to these discontinuities and proactively help an ELL learn the meanings attached to cultural practices and artifacts—meanings that are not overtly taught, but nevertheless intuitively known by native English speakers.

Implications for the Classroom (continued)

Examples of this include:

- An American child giving the teacher an apple—this act carries with it all manner
 of sociocultural and historical associations: "Johnny Appleseed," "apple-polishers," tokens of appreciation, etc. For a Mexican ELL these connotations would
 be lost.
- A Somali refugee ELL leaves his seat and walks around the perimeter of the classroom. The teacher tells him to sit down. In the following week, the Somali ELL continues to repeat the classroom circling. The teacher finds the Somali ELL is being disrespectful to her directions and a disruption in the classroom. After sending the Somali ELL to the administration, she finds out that in Somalia, the physical act of circling something is a mark of showing respect and appreciation—all the Somali ELL was doing was expressing, in the only way he knew how, how grateful he was to the teacher in providing him with an education.
- A Chinese ELL hands in an essay that has clearly been copied from another source. The teacher knows this because the English used in the essay is far beyond the proficiency level of the ELL. The teacher fails the ELL and accuses him of plagiarism. The Chinese is at a loss because he doesn't understand why the teacher has become so upset, since as a student in China he was encouraged to copy the words of scholars as a sign of respect for their work and as acknowledgement that he was a mere student unworthy to change, adapt, challenge, or synthesize the writings of someone more knowledgeable than him.

Tools, Signs and Mediated Activity

Vygotsky's fundamental claim is that human activity (internal mental functions and external social functions) can be understood only if we take into account the 'tools' or 'signs' that mediate this activity. Lantolf and Appel (1994: 7) point out that

Tools are created by people under specific cultural and historical conditions. As such, they carry with them the characteristics of [that] culture. Since tools are directed at objects, they influence and thereby change objects. In turn, they also exert an influence on the individual in that they give rise to previously unknown activities and previously unknown ways of conceptualising phenomena in the world.

Psychological tools are artifacts, such as algebraic symbols and language systems, that serve to broker individual mental activity and ultimately to mediate individual cognitive development. Cognitive development and the general acculturation of any individual into a "knowledge community" is realized through a process of the individual coming to discern the significance of external sign forms (i.e. language) that he or she has already been using in social interaction. In more informal terms the claim is that children can say more than they realize and that it is through coming to understand what is meant by what is said that their cognitive skills develop (Wertsch & Addison Stone, 1985: 167).

According to Vygotsky, the genesis of the capacity to successfully use strategic processes (otherwise referred to by Vygotsky as "self-regulation") lies in an individual's competence to negotiate through social interaction. In other words, self-regulation is facilitated by the nature and quality of an individual's interactional involvement and ability to understand the discursive practices of the knowledge and sociocultural community in which the interaction takes place.

This may be explained in the following way: Initially, an ELL undertaking an unknown activity for the first time (be it cognitive, linguistic, sociocultural, physical, or any combination of these) will be incapable of completing such a task without 'getting help' through interaction with more experienced/knowledgeable/native speaking peers. During such interaction, the ELL becomes socialized into the strategic processes of reasoning of the classroom culture (or knowledge community). The metacognition of the ELL is controlled by the surrogate who has the ability to perform and complete the task strategically. Bruner (1985: 24) extrapolates the clarification in the following terms:

[I]f the child is enabled to advance by being under tutelage of an adult or more competent peer, then the tutor serves the learner as a vicarious form of consciousness (surrogate) until such times as the learner is able to master his own action through his own consciousness and control. When the child achieves . . . conscious control over a new function or conceptual system, it is then that [s]he is able to use it as a tool. . . . the tutor in effect performs the critical function of 'scaffolding' the learning task to make it possible for the child to internalize external knowledge and convert it into a tool for conscious control.

In the same way, the teacher or a group of peer students can act as a surrogate to any ELL individual student through the student-based activities recommended through DI, PBL, and CP.

Regulation

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This brings us to one of Vygotsky's primary propositions connecting sign-mediated activity and the zone of proximal development, namely the notion of regulation. Vygotsky perceived the novice as learning from his/her sociocultural environment those discursive practices that society has constructed and legitimized. A novice's early stages of development are dependent on other people, who initiate the novice through instruction. These more knowledgeable peers/teachers/adults ultimately come to shape and organize the novice's world.

The role of language in the process of internalization as the principal psychological tool is crucial. Aljaafreh and Lantolf refer to the process of internalization as appropriation (1994: 467), where appropriation refers to a process in which an individual does not simply reproduce the mental activity of another individual but rather transforms and changes the process itself, ultimately creating new cognitive abilities where none before existed (Vygotsky, 1981: 163). This underpins the importance of fostering group work in the classroom as well as allowing ELLs ample opportunities to use their language to learn language.

Novices are initially incapable of independently controlling their sociocultural environment. This holds as much for ELLs trying to interact in linguistically new territory as it does for children exploring their physical world. In fact, where a novice engages in any new social activity, it is the environment replete with cultural artifacts that comes to exert its influence on the novice. At such time, the novice is said to be *object-regulated*.

At the next stage of development, the novice is able to engage in certain activities, but only with appropriately scaffolded and linguistically mediated assistance from an expert. At this stage the

metacognition of the novice is directed by a surrogate who is capable of carrying out the activity. This is called *other-regulation*.

In time, the novice begins to take independent control over strategic mental actions until *self-regulation* is achieved.

Implications for the Classroom

In order to get an ELL from object-, through other-, to self-regulation the task of a teacher is not just to design activities that get students to "talk" (input/output exchange), but to design activities that promote quality dialogic engagement. In group work with quality discussion going on, students shape and guide their own growth in the zone of proximal development (ZPD) by means of language (of course, all the while, benefiting the ELL group member). Bereiter (1994: 7) calls this progressive discourse, in which learners (i) work toward a common understanding of group action, (ii) frame questions and propositions in which evidence is brought to bear, (iii) expand the knowledge capital of collectively validated propositions, and (iv) allow any proposition or idea to be subjected to criticism if it will advance dialogic interaction.

However, Lantolf and Appel (1994: 12) point out that self-regulation is neither absolute nor achieved at a specific point of ontogenetic development. If an ELL achieves self-regulation in any specific activity, for example the ability to use English in a home or retail setting, it does not mean that the same ELL has achieved self-regulation in all activities, for example the ability to use English in a school setting, nor does it mean that the same ELL maintains this self-regulative ability in perpetuity. In other words, self-regulation is a relative phenomenon (see also Wertsch & Hickman, 1987).

Passage from other-regulation to object-regulation and from object-regulation to self-regulation is, as Aljaafreh and Lantolf (1994: 467) describe it, a "dynamic process of reconstruction and qualitative change in which the novice and the expert collaborate in constructing a mutual activity frame" within what Vygotsky (1978) calls the zone of proximal development.

The Zone of Proximal Development

The zone of proximal development (ZPD) represents the most crucial of Vygotsky's postulates owing to its potential implications for education. It provides a conceptual link between the psychology of child development and the pedagogy of instruction. The underlying assumption behind the concept is that psychological development and instruction are socially embedded. Vygotsky explained this relationship in the following terms:

The child is able to copy a series of actions which surpass his or her own capacities, but only within limits. By means of copying, the child is able to perform much better when together with and guided by adults than when left alone, and can do so with understanding and independently. The difference between the level of solved tasks that can be performed with adult guidance and help and the level of independently solved tasks is the zone of proximal development. (Vygotsky, 1978: 117)

Vygotsky defines the ZPD as

the distance between the actual developmental level as determined by individual 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)

The ZPD thus focuses on the ELL's active creation or use of new means to accomplish and understand an activity. The ELL, as such, is not seen as a mere passive recipient of the teacher's instruction, nor is the teacher simply the fount of *all-knowing* behavior. Instead, the teacher and ELL achieve intersubjectivity in joint problem-solving activity, in which both share knowledge and responsibility for the task (Diaz, Neal, & Amaya-Williams, 1990: 140). More importantly, Moll and Greenberg (1990: 5) suggest that Vygotsky's ZPD actually represents a change of focus from teacher-fronted instruction to student-centered learning.

Based on Vygotsky's notion of the zone of proximal development, several investigators have examined the role of the teacher within the ZPD. Wertsch (1984: 13) points out that, rather than simply framing the role of the teacher as modeling, the teacher initially creates a level of "intersubjectivity," in which the ELL redefines the problem situation in terms of the teacher's perspective. Once the ELL shares the teacher's goals and definition of the problem situation, the teacher gradually and increasingly transfers task responsibility to the ELL (Rogoff & Gardner, 1984).

The next section serves to orient the reader to how sociocultural theory (SCT) has been applied in second language acquisition research.

Sociocultural Theory in Second Language Acquisition Research

A number of studies have validated the powerful effect mediation has in second language learning. There are studies by Roy (1988) on the mediational effects of second language (L2) writing; by Warschauer (1998) and Erben (1999) on computer-mediated L2 interaction; by Antòn and Di Camilla (1998) on the mediational use of the first language (L1); by Antonek, McCormick and Donato (1997) on the mediating role of portfolios; and by Appel and Lantolf (1994) on the mediating function of L2 speaking. All provide evidence to suggest that mediation acts as a cognitive amplifier that not only facilitates ELL interaction but also helps ELL learners to reconstruct their sociocultural, linguistic, and professional discursive practices and promotes their socialization into target knowledge communities. Lastly, these studies have also established how mediational tools provide a key strategic and cognitive role in scaffolding in group activity in second language classrooms.

In addition to mediation, a number of SCT studies have focused their attention on the role of regulation in second language acquisition as well as on the instructional potential of the ZPD in L2 classrooms.

Ohta (1995) remarks that socially organized classroom environments stimulate second language learners in establishing scaffolding support structures within pair or group interactional activities that help to refine learners' second language knowledge through discursive experimentation. The dynamic nature of the ZPD is underlined by Foley (1991), who reinforces the social nature of learning insofar as, although the teacher and classroom environment may function as mediators of second language learning, second language learning remains ultimately a self-regulating process that cannot be controlled by a teacher or syllabus. Underlying this proposition

is the Vygotskian hypothesis that, although learning precedes development, it must be integrally incorporated into the social interaction between ELL and expert knower.

De Guerrero and Villamil (1994: 493) conclude that learner collaboration in problem solving can be a potentially powerful mechanism for movement in the ZPD because "it allows for interchangeability of roles and for continuous access to strategic forms of control in accordance with task demands." It is exactly the creation, facilitation of, and participation in problem-solving activities that DI, PBL, and CP promote. A discussion of these techniques now follows.

Differentiated Instruction, Project-Based Learning, and Constructivist Pedagogy Principles

Differentiated instruction is a pedagogical strategy that allows students to work collaboratively on meaningful tasks at their own level and pace. This best (classroom) practice has gained considerable attention, particularly in the area of language learning. Both interactionist (Long, 1996) and sociocultural (Donato, 1989) researchers agree that differentiated learning, collaboration, and communication between learners are beneficial for language learning to occur. Central to student-centered learning is *equity in education*, the premise that advocates that all students must be afforded a fair and equal opportunity to participate in the learning process. In student-centered learning environments, students are actively engaged in creating, understanding, and connecting to knowledge (McCombs & Whistler, 1997). In student-centered classrooms, teachers share the control while students are allowed to explore, experiment, and discover on their own (Nunan, 1988). In this setting, computer technologies provide more venues for all students to be equally and actively engaged in language learning activities. Knowing how to instructionally do this within a context of project-based learning, the one computer classroom, and using technology is the focus of the following section.

Differentiated Instruction

In the introduction of this book a teaching vignette was described. The vignette outlined Ms Sylvia's classroom and how she met the learning needs of her heterogeneous charges by using an array of techniques that exemplified differentiated instruction. Table 2.1 is a nice encapsulation of what DI is and what it is not.

The example of Ms Sylvia's lesson shows that as a teacher one has the choice to differentiate (i) the content/topic of a lesson, (ii) the process of the lesson, and/or (iii) the product of the lesson. What is implied, though not often explicitly stated is that a fourth way to differentiate is through individual learning styles.

TABLE 2.1. What differentiated instruction is and is not

DI is DI is not

- 1. Having a vision of success for our students.
- Providing a variety of assignments within units of instruction, realizing that students do not all learn in the same way.
- 3. Recognizing the variance in learning styles of our students.
- 4. Allowing students to choose, with teacher direction, the route to their learning.
- Providing opportunities for students to demonstrate proficiency in an area they already know and allowing them to move forward.
- 6. Offering tiered lessons, of varying degrees of difficulty, dealing with similar content.

- 1. Individualization. It is not a different lesson for each student each day.
- 2. Giving all students the same work or even identical assessments all of the time.
- 3. Assuming that all students learn by listening.
- 4. Merely having centers in the classroom.
- 5. Assigning more work to students who have demonstrated mastery in an area.
- 6. Only for students who demonstrate a need for acceleration.

Found at http://web.westbloomfield.k12.mi.us/ealy/lafer/about.html

Teaching Tip

At "Advance Learning with Technology" (http://members.shaw.ca/priscillatheroux/styles.html) a wonderful collection of learning style rubrics/evaluators can be found. These can help you measure your students in terms of Howard Gardner's multiple intelligences (http://surfaquarium.com/Ml/inventory.htm), hemispheric dominance (www.mtsu.edu/~studskl/hd/learn.html), learning style inventory (www.engr.ncsu.edu/learningstyles/ilsweb.html), Kolb's learning styles (http://changingminds.org/explanations/learning/kolb_learning.htm) and the Myers–Briggs personality type inventory (www.myersbriggs.org/my-mbti-personality-type/mbti-basics/).

Specific DI strategies include:

- 1. Assessing learners for their readiness to learn, the results of which become the basis for deciding what flexible groupings will be created in any given lesson (see Appendix C for an example of a classroom flexible grouping chart). Examples of assessing learners for readiness to learn are the use of exit cards, quizzes and surveys. To get immediate feedback, a teacher could try to do bell work in the last five minutes of class rather than the first five minutes of class. In this way, students have time to fill out an exit card, survey, or quiz before they leave and the teacher can go over the answers and decide what groupings to divide the class into for the next lesson.
- 2. Adjusting questions scaffold students' learning. A tried and tested all-time favorite is the use of Bloom's taxonomy, which classifies questions by thinking level. Don Clark (www.nwlink. com/~donclark/hrd/bloom.html) has put together a list of scaffolded question types based on Bloom's three learning domains: cognitive (knowledge, comprehension, application, analysis, synthesis, evaluation), affective (receiving phenomena, responding to phenomena, valuing, organization, internalizing values), and psychomotor (perception, readiness to act, guided response, mechanism, overt response, adaptation, origination).

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- 3. Compacting curriculum centers on students who finish work early because they have mastered the topic of the lesson. In these circumstances, it is advisable to have enjoyable and motivating activities on hand to give to the "fast finishers." We say fun and motivating because it is a danger to have students see the extra work you give them as a penalty; therefore, making the extra extension activity enjoyable helps them to perceive it as an extrinsic reward. There are many online gaming sites that provide free educational games centered on science, mathematics, language arts, social studies, health and PE, music, etc. A work-station, set up with one or two computers, makes this an ideal curriculum compacting exercise. Such games can be found at www.funbrain.com/ or http://nobelprize.org/educational_games/ or www.eduplace.com/edugames.html or www.lethsd.ab.ca/mmh/games/top100.htm to name but a few.
- 4. *Tiered assignments* or *tiered activities* are very important when you have ELLs in the classroom. Tiered activities are all about creating activities that, while having the same focus, allow students who are at differing cognitive levels to work at their own level. Examples are Box 2.1 and Table 2.2.

Box 2.1. Sample tiered lesson

Introductory activity: The teacher asks the question, "What do we know about the issue of global warming?" Student answers are recorded. The teacher then asks, "As scientists, what criteria might we use to judge the validity of the information regarding global warming?" The criteria are posted for future reference. Students are then asked to develop a concept map representing what they know about the issue.

Using the two pre-assessment techniques, the teacher determines that there are three distinct levels of readiness to accomplish the task. All students will use the posted criteria to judge the information they will use for the activity.

Tier I: Students will use reading material that pictorially represents required information and conduct a pre-developed survey of science teachers and students to determine their awareness of the issue and what they believe and why they hold that belief. Students will apply the validity criteria to the information gathered. Findings will be presented.

Tier II: Students will use grade-level reading material to gather secondary information and develop and conduct a survey of a least two scientists currently investigating the issue. Students will apply the validity criteria to the information gathered. Findings will be presented.

Tier III: Students will compare their knowledge of global warming with at least one other environmental issue and note the similarities and differences in the evidence that is presented by each side of the issue. Each issue being addressed must meet the established criteria. Findings will be presented.

Culminating activity: Students present their findings on global warming and explain how this issue is an example of conflict as being a catalyst for change. After all presentations are completed, the teacher asks, "What can we generally say about the issue of global warming? What predictions can we make based on our current knowledge of this issue? What value, if any, do the validity criteria have in drawing defensible conclusions?"

http://web.ics.purdue.edu/~rlmann/Differentiation%20Handouts.

Bloomfield.doc

TABLE 2.2. Tiered activities

To alter the depth of a lesson Subject area: Language arts

Grade level: 7-8

Topic: Persuasive essay

	Basic	Intermediate	Advanced
Outcome/performance indicators	Students will write a cohesive paragraph with a main idea and supporting details	Students will state a point of view and cite multiple reasons to defend that viewpoint	Students will expand the quality of their essay by adding multiple, credible sources of support
Assessment	Students will describe their opinion about a topic by writing 5–6 detailed sentences explaining their opinion—to be assessed using the NYS independent writing rubric	Students will use the learning activity as a rough draft to develop a multiparagraph persuasive essay—to be assessed using the NYS independent writing rubric	Students will write a persuasive essay using multiple reasons, logical explanations and credible sources to support their point of view—to be assessed using the NYS independent writing rubric
Instruction/learning activity	Students will receive a rubric to help them design and evaluate the cohesiveness of a paragraph. Students will identify their point of view and list 5–6 reasons in support of their opinion	Teacher will explain/describe the essential elements of a persuasive essay using a graphic organizer. Students will identify a point of view, list 4-5 reasons to support it, and explain each reason with detailed bullets	Students will learn how to evaluate the credibility of a source and locate multiple sources, quotes, references, etc., to increase the quality of their arguments. Students will develop criteria to identify credible sources
Resources	List of issues and problems (appealing to students) that have alternate points of view	List of issues and problems (appealing to students) that have alternate points of view	Opposing viewpoints series, editorial pages of <i>D&C</i> and <i>USA Today</i>
Homework	Students will collect good and bad examples of cohesive paragraphs from newspapers, magazines and younger students' work	Students will collect good and bad examples of persuasive editorials in newspapers and periodicals	Students will search the web for multiple, credible sources to support their argument

Pre-assessment: Quick write (short writing sample) a current "hot topic" that is controversial

Source: www.anderson4.k12.sc.us/curr/docs/Diff_Inst/tact.doc

Although not directly relating to the four ELL levels, the above examples do give us a hint of what tiering involves. In the above, a teacher with ELLs may well use Tier I and Basic for ELLs at levels 1 and 2, Tier II and Intermediate for ELLs at level 3 and Tier III and Advanced for ELLs at level 4. Other examples can be found at "Best Practices: Pieces of the Puzzle" (http://wblrd.sk.ca/~bestpractice/tiered/examples.html).

5. Peer teaching as the name suggests is when students teach and help each other. Many teachers use this strategy with ELLs; however, there is a danger! If a teacher pairs an ELL together with a monolingual English speaker and automatically expects the English speaker to do a good job at peer teaching or communicating then the teacher may be disappointed. Remember most teachers have gone through a four-year baccalaureate degree program to become good teachers; the point being: when organizing peer teaching activities, train the "teacher" in the skills and strategies in which they need to be effective.

Students need to be also taught about the effectiveness of using such communicative strategies as redundancies, repetition, circumlocution, comprehension checks, confirmation checks, elaborations, and simplifications when trying to interact with ELLs.

Teaching Tip

An interesting article called "Peer and Cross-Age Tutoring" by Page Kalkowski can be found at www.nwrel.org/scpd/sirs/9/c018.html. Also, Teacher Workshops (www.t2tweb.us/workshops/Sessions.asp?SessionID=90) provides a wonderful downloadable handout of examples of peer teaching in secondary mathematics by Rosalyn Swiggett. Example ideas can be transferred to other subject areas.

- 6. Reading buddies is a helpful DI strategy. Regardless of the students' word recognition, word analysis, and/or comprehension skill level, pairing up students is useful for each student to be able to read to each other and discuss what was read.
- 7. Learning centers are an extremely good organizational tool to create DI environments. Technology can enhance the ability of teachers to make learning centers; the trick is to vary the complexity of tasks and to help students manage their time. The degree of structure that a learning center/work-station provides is dependent upon the activity. Learning centers provide students with opportunities to explore, discover, create, practice, and apply skills. They promote critical thinking, independent learning strategies, and cooperative learning strategies and help students take responsibility for their own work. Learning centers can be organized around themes, student interest, subject area, literacy skills, and research.

Teaching Tip

A very good site providing plenty of ideas for learning centers can be found at "Busy Teacher's Café" (www.busyteacherscafe.com/learningcenter/main.htm). Another site that provides useful tips to plan for the successful implementation of learning centers in a classroom is found at "Best Practices: Pieces of the Puzzle" (http://wblrd.sk.ca/~bestpractice/centres/process5.html).

- 8. Anchor activities are a way of giving teachers a chance to move around the class and have students do work that is completed over an extended period of time, though within the time-frame of one lesson perhaps 5–10 minutes of instruction time will be devoted to it. Other ways to describe anchor activities are ongoing assignments that students work on independently throughout a unit. Anchor activities may be employed in the morning to set the "work tone" for the rest of the day, when students complete assigned work and when students are stuck and are waiting for a teacher's help. Types of anchor activities include silent reading, journal writing, vocabulary work, math problem of the day, learning-center work, and completing agenda notes.
- 9. Independent study projects are, as the name suggests, a means for teachers to assign projects that are completed individually or by a group. The topics and means by which projects are carried out should conform to student interests and talents. Of course, technology offers ample means: assignments using podcasts, blogs, wikis, webpages, and PowerPoint are all ways that allow students to engage in the types of activities and strategies that sound differentiated instruction promotes.

Teaching Tip

Below are two short articles reinforcing why we should implement differentiated instructional techniques within classes with ELLs.

- Irujo, S. (2004) Differentiated instruction: We can no longer just aim down the middle (www.coursecrafters.com/ELL-Outlook/2004/sept_oct/ELLOutlookITIArticle2. htm)
- Irujo, S. (2006) Flexible grouping: Nobody ever said teaching was easy! (www. coursecrafters.com/ELL-Outlook/2006/mar_apr/ELLOutlook/ITIArticle3.htm)

Project-Based Learning

"Project-based learning (PBL) is a model for classroom activity that shifts away from the classroom practices of short, isolated, teacher-centered lessons and instead emphasizes learning activities that are long-term, interdisciplinary, student-centered, and integrated with real world issues and practices" (Asan & Haliloglu, 2005).

The major benefit of PBL is how it can allow a teacher to create projects across curriculum areas, in other words, projects that foster interdisciplinary learning. Within the framework of a PBL curriculum, teachers have many opportunities to build relationships and interact with students.

The San Mateo County Office of Education, California, stresses how "finished products, plans, drafts, and prototypes all make excellent 'conversation pieces' around which teachers and students can discuss the learning that is taking place." For ELLs this is of great import as the onus is on the teacher to provide pedagogical space for an ELL to use their English and receive useful feedback. At each stage of a project, the teacher has the opportunity to check in with the ELL: to ask them how they are going with their project, ask them to summarize what they have done, to explain the steps they have gone through, to demonstrate what they have learned, to help the ELL focus on their errors as well as correct these, and so on. During these teacher–ELL interactions ELLs have the chance to play with their language, practice their communication skills, and respond to the teacher. Simultaneously, the teacher has the opportunity to encourage and help improve

an ELL's communication skills. We remind you, the reader, of feedback strategies (introduced in Part 1 of this book) to use with ELLs to help with enhancing their language learning; for now these feedback strategies are explicit correction, recasts, clarification request, metalinguistic clues, elicitation, and repetition.

In terms of portfolios, PBL also documents the process of student learning such that they can be shared with other students, teachers, parents, and mentors. By its very nature, PBL platforms drafting, editing and redrafting stages of any given piece of student work thereby allowing teachers to assess students' learning during the process of the project as well as the product of the project. It also facilitates collaboration, mediation, and student interaction. This gives ELLs occasion to acquire collaborative skills, such as group problem-solving and decision-making, relying on peers, integrating teacher or peer feedback, practicing interaction skills, and working as student researchers. Within a Vygotskian perspective students are afforded time to build intersubjectivity and dialogic space to self-regulate learning.

PBL can be further enhanced through the use of educational technology by giving students the option to use a wide variety of online tools and to access authentic materials. Connecting to the World Wide Web helps an ELL connect with world Englishes as they are used across the globe. In other words, an ELL through active engagement with the internet can access ways to use English that are real, authentic and appealing. Lastly, PBL is about learning taking place beyond one solitary lesson. In and of itself, such extended learning time allows ELLs to epistemologically engage with their own learning; they can plan, revise and reflect on both learning process and product.

Teaching Tip

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Edutopia provides many classroom examples, articles and summaries of research of PBL at www.edutopia.org/projectbasedlearning.

Constructivist Pedagogy

The reason why constructivist pedagogy is added here to this discussion is that it has emerged from the collective works of Vygotsky, Bruner, and Piaget, and, whereas researchers such as Vygotsky offer us a theoretical rationale behind what we are proposing in this book, constructivist pedagogy, more importantly, offers the teacher a pedagogical bridge to frame and implement the theoretical ideas that these researchers propose.

In this section, we shall briefly outline the tenets of constructivist pedagogy, link them back to Vygotskian theory and, as we have been doing, simultaneously connect them with the instructional strategies we have so far proposed. We will also flag the technologies that lend themselves to realizing all these ideas and strategies in the classroom for the benefit of ELLs.

There are two perspectives of constructivist pedagogy. These are cognitive constructivism and social constructivism. Rather than highlighting their differences, we shall attempt to underscore their similarities in the light of classroom practice. Jonassen (1994) proposes eight such similarities: that constructivist classrooms

- 1. afford multiple truths and accounts of reality;
- provide multiple portrayals of reality, avoid curricula dangers of stereotyping, tokenism, and over-simplification, and are thus better situated to represent the complexity of the real world;

- generate learning environments in which students create knowledge rather than reproduce it;
- 4. emphasize authentic contextualized and meaningful task participation rather than decontextualized instruction;
- 5. accentuate exploratory, real-world, and/or case-based learning over predetermined and lock-step instruction;
- 6. stress careful reflection on experience and critical thinking;
- 7. enable "context- and context-dependent knowledge construction";
- 8. support collaborative and cooperative learning through interaction, dialogic engagement and social negotiation rather than standardized, competitive learning.

What this means is that a student never enters a classroom as a *tabula rasa* or blank slate waiting to be filled with knowledge by the teacher. Instead, students come to each task of learning with the expertise and knowledge from prior experiences, which in turn influences the way in which a student (a) approaches each new task of learning, and (b) internalizes and constructs new knowledge from the task.

The second notion is that learning is active rather than passive. Learners confront their understanding in light of what they encounter in the new learning situation. If what learners encounter is inconsistent with their current understanding, their understanding can change to accommodate new experience. Learners remain active throughout this process: they apply current understandings, note relevant elements in new learning experiences, judge the consistency of prior and emerging knowledge, and based on that judgment, they can modify knowledge. (Hoover, 1996)

In constructivist pedagogy, all learning is active and not passive. This of course fits in with differentiated instruction, which also guides each learner to take full responsibility for their learning.

Implications for the Classroom

For more concrete K-12 classroom examples of all facets of DI, PBL, and CP go to "Best Practices" at http://wblrd.sk.ca/~bestpractice/index.html.

The challenge for teachers is that they cannot assume that, just because every student uses their prior experiential knowledge base to engage with each and every new learning activity, students will understand and internalize new subject matter in the same way. The trick is to reconcile inconsistencies between what a student knows and what they are given to learn as well as to make these inconsistencies salient for the student in ways that they can further create new knowledge. Furthermore, students by default *need* different learning experiences to advance to different and higher levels of understanding. In other words, one pedagogical size *never* fits all!

In order to make the most of a student's current knowledge base, teachers need to provide students with learning opportunities and situations that are important, relevant, timely, and developmentally appropriate for them rather than important to the teacher, to a "received" and standardized curriculum/syllabus, or to a school system.

It is exactly the types of pedagogical tasks that DI and PBL approaches advocate that provide an instructional basis with which to implement constructivist pedagogy in the classroom. Moreover, it is exactly the nature of such a pedagogical approach in the classroom that facilitates the types of linguistic interactions within activities that assist ELLs to learn more English.

Before moving on to the next section, we would like to close the preceding discussion on SCT, DI, PBL, and CP in the following snakes and ladders game (Figure 2.1): we attempt to link for you, the reader, theory, praxis, pedagogy, and its implications for technology in a more salient and less 'text-heavy' way.

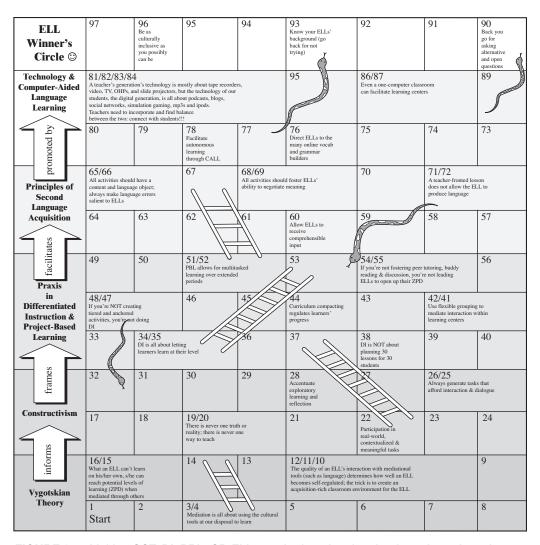


FIGURE 2.1. Linking SCT, DI, PBL, CP, ELLs, and educational technology through snakes and ladders.

2.3 Making Accommodations for ELLs and Infusing Technology into a Lesson

In order to bridge theoretical and practical considerations, it is important for content-area teachers to be able to apply research findings to their everyday practice. This chapter sets forth specific suggestions regarding the integration of technology into curriculum development and teaching materials. In addition, it offers ideas for appropriate development and use of teaching materials as well as practical classroom applications. Let's start with the following Chinese proverb:

Tell me, I'll forget. Show me, I'll remember. Involve me, I'll understand.

Now consider the following:

Differentially instruct me, I'll internalize.
Use technology with me, I'll participate, I'll transfer, I'll employ and I'll create.

Using the above as our mantra, we will now take a lesson that was created by a preservice social studies teacher, Ms Stefanie, during her final internship. She taught in a middle school with a relatively high ELL population. Our aim is to simulate the feedback of the mentor teacher, Ms Iglesias, to the intern and map out how the original lesson plan was transformed so that the final draft ultimately exemplified many of the instructional sequences (ELL modifications and technology infusion) we would like you to reflect on and consider. Aside from the specificity of the content (investigation of the nature of countries throughout the world), the lesson plan below could unfold across any range of content subject-areas. Why? In essence, it is instructionally generic: (1) the teacher introduces a new topic by asking students a range of questions to

activate their schema; (2) the teacher then explains the parameters of project: researching a topic (a country) and creating a product (a brochure); (3) the students are then let loose in the library to research the topic and collate the information in the form of a brochure.

Class: World History

Class Period: fifth

Subject: Geography

Grade Level: sixth grade

Lesson Length: 50 minutes Nature of Lesson: country study

Purpose

The purpose of this lesson is for students to become familiar with our world's countries and their differences economically, politically, geographically, and culturally.

Content Objectives

- 1. Given research, the students will be able to (SWBAT) identify characteristics that constitute a nation.
- 2. Given an assignment, the SWBAT expand their knowledge of geography and world history.

State Standards

Standard 1: The student understands the world in spatial terms (SS.B.1.3):

- uses various map forms (including thematic maps) and other geographic representations, tools, and technologies to acquire, process, and report geographic information including patterns of land use, connections between places, and patterns and processes of migration and diffusion;
- uses mental maps to organize information about people, places, and environments;
- knows the social, political, and economic divisions on Earth's surface;
- understands how factors such as culture and technology influence the perception of places and regions;
- knows ways in which the spatial organization of a society changes over time.

Standard 2: The student understands the interactions of people and the physical environment (SS.B.2.3):

- understands the patterns and processes of and diffusion throughout the world;
- knows the human and physical characteristics of different places in the world and how these characteristics change over time.

Teacher Materials

Map, pins, project assignment handouts, PowerPoint, internet access, computers, library access, magazines, pen, pencil, paper.

Content and Procedures

Activity I: five minutes

Introduction and Schema Activation

When students enter the class, there will be a map tacked on the wall. Students are instructed to pinpoint on the map where they were born or where they grew up. We will have a discussion on the different cities and countries. Prompt a class discussion by asking questions such as: What language do they speak there? Does any slang originate from the area that they are from? What are common foods they eat there? What music is popular? What is the climate like? What do the people look like? How do they dress?

After the discussion, the students will come up to the front of the room one at a time and pick a slip of paper out of a bowl.

Activity II: 10 minutes

Project Assignment

The slip of paper will show their assigned country that they will be researching for a project. For the project, students are instructed to complete a brochure with text and images. Their brochure may include information on their country's capital, official languages, religions, flag, climate, economy, government, brief history, culture, and geography. The brochure should be a strictly factual and informative non-fiction text. Anyone should be able to read the student's brochures and really get a feel for the country's conditions and culture.

Activity III: 30 minutes

Project Research

We will all go to the library. Students are instructed to research their assigned country. They are instructed to cite one online source and one book source. I will have brought a box of my old magazines to the library for them to sift through.

Activity IV: five minutes

Conclusion

The students should finish their research and put their brochure together by the following week. We will have one more class period to work on the assignment. The rest will be homework.

Homework

Work on brochure!

Assessment

The brochure project will be worth 40 points. The brochure will be graded out of 30. Content will be worth 20 points and neatness and creativity will be worth 10. The remaining 10 points will go toward their presentation. It will be informal but the students are to present their brochure and their findings to the class the following week.

The first question asked of Ms Stefanie by Ms Iglesias was whether she thought it was necessary to rewrite the objectives so that her ELLs would be better accommodated. In writing content objectives it is imperative to consider if the goals one sets for the class in general are realistically attainable for your ELLs as well. Often an ELL's language proficiency prevents an ELL mastering a topic in the same amount of time as native English speakers. In addition, depending on their country of origin, an ELL may not understand the meaning of or have experience in such tasks as "doing research," "creating a brochure," "collecting and synthesizing data." Thus taking into account Ms Stefanie's ELLs' language proficiency and backgrounds the following modifications to the content objectives were made:

Content Objectives

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- 1. Given research, the students will be able to (SWBAT) identify characteristics that constitute a nation.
 - i. ELLs will become familiar with and practice the stages of "doing research."
 - ii. ELLs will investigate their country of origin.
- 2. Given an assignment, the SWBAT expand their knowledge of geography and world history.
 - iii. ELLs will create a brochure using a model as a guide.

In discussing the content objectives with the intern another important issue was raised: the need for all content-area teachers, in this case the social studies intern, to make sure that the ELLs also acquire knowledge of English so that their language development is promoted and actively reinforced in every lesson. As a result, every ELL is guaranteed to be given the necessary language tools to follow and learn the content of the lesson. The mentor voiced the need to add language objectives to the lesson plan. Echevarria, Vogt, and Short (2008) suggest six language categories to consider when writing out language objectives. These should be closely tied to the topic of the lesson and the degree of proficiency of your ELLs. They include key vocabulary, language functions, language skills, grammar/language structures, lesson tasks, and language learning strategies. Deciding on which language category to write into the language objectives depends on the needs of your ELLs. Every topic has content obligatory key vocabulary to master. If the topic is new to the students, then instructional time needs to be allocated to help students, and especially ELLs, learn this vocabulary so that they can then converse about the topic. At times a lesson might require students to use specialized language functions such as comparing, contrasting, describing a process, expressing an opinion, formulating questions, etc. In this case, a teacher needs to model the appropriate language functions. If Ms Stefanie were to choose this category for her lesson, a possible language objective could be: SWBAT express their opinion about the country data they have found when presenting the information to the class (including: "In my opinion . . ", "For me . . ", "According to . . .", "I think that . . .", "For myself . . .", "Personally . . .").

At times, specific *lesson tasks* necessitate students engaging with language in unambiguous ways. For example, in Ms Stefanie's lesson the project activity requires students to find information and arrange it in the form of a brochure. A possible language objective could be: *SWBAT paraphrase information into bullet points*.

Often times, it is not necessarily the language that needs to be taught to ELLs, but helping them develop better *language learning strategies* themselves. Such strategies may include repeating

aloud, not being afraid to make mistakes, speaking to others in English or discussing, not waiting for the teacher to evaluate your progress, reviewing class notes, guessing when in doubt, rewriting class notes, recording new vocabulary and grammar in a notebook, making review cards, grouping verbs, nouns, etc., not pretending to understand when you really don't, paraphrasing when necessary, using mime and gestures, writing down words that you don't know, then find out what they mean, keeping a language diary, practicing daily, memorizing using images, sounds, rhymes (mnemonic devices), teaching someone what you have learned, using cognates for association with English, reviewing the day's lesson after class, using a dictionary. In Ms Stefanie's lesson such a language objective could look like: SWBAT find definitions for new vocabulary they find while researching their country and write the first ten new words in a sentence in their language journal.

Ms Stefanie talked it over with her mentor, Ms Iglesias, and they both agreed that her ELLs needed help with their language skills and their grammar. *Language skills* involves practice with the macroskills of speaking, listening, reading, and writing. Ms Stefanie felt that all her ELLs needed help with reading and identifying the main points in a text. In addition, Ms Iglesias felt that many of the less proficient ELLs needed more work on their grammar. Ms Stefanie had noticed many of her ELLs confusing "It is . . ." and "There are . . .", so it was agreed that this would be included as a language objective for the preproduction and early-production ELLs. Finally, her new language objectives became:

Language Objectives

- 1. Given research, the students will read a text and practice identifying the main points.
 - i. ELLs will read teacher prepared modified texts and identify main points, and then;
 - ii. in groups, ELLs will practice reading unmodified texts and discuss, then list with peers what the main points are.
- 2. Given a brochure project, ELLs will practice "It is ..." and "There are ..." constructions and, using the main points they have gleaned from their texts through their research, rewrite these main points using sentences starting with "It is ..." and "There are ..."

Diversity is a two-way street. Not only does the ELL need to learn about cultural practices in the United States, but native English speaking Americans need equally to learn about the rest of the world. Ms Iglesias suggested adding a cultural objective as well. Since the students were going to learn about countries throughout the world, Ms Stefanie decided to make sure that each ELL's home country was written on a piece of paper and in the hat to be chosen by a student to research and present. Her cultural objective read:

Culture Objectives

- 3. Given a class discussion, SWBAT understand and differentiate between countries, cultures, and regions.
 - i. Less proficient ELLs can pair with a native English speaking student to jointly research the ELL's home country.

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When it was time to look at the instructional procedures/activities of the lesson, Ms Stefanie's mentor asked,

"The brainstorming strategy at the beginning of the lesson is good . . . it builds schema and arouses student interest, but how do you know that the ensuing discussion that your questions stimulate doesn't fly right over the heads of your ELLs?"

Ms Stefanie said, "The ELLs are quiet, I'll admit that, but they seem engaged. I simplify my language. I speak louder. They smile and look at me when I talk. They are very respectful. When I ask them if they understand, they always answer 'yes."

What Ms Stefanie failed to realize is that no teenager likes to be singled out in a classroom, let alone be seen by their peers as dumb because they haven't understood something. This is a common phenomena among ELLs. Their language proficiency is often too low to make sense of the teacher's academic English, the unfamiliar vocabulary, and the idioms as well as the cultural references that teachers often use to explicate a point. Ms Stefanie also didn't understand that, just because teacher talk is simplified, it doesn't mean that the ELLs can better comprehend the meaning of what a teacher says.

Ms Iglesias proceeded to explain to Ms Stefanie the importance of using a variety of instructional scaffolds to help ELLs follow the content of the lesson.

"Even though your brainstorm questions seem easy to you, to a preproduction and/or early-production ELL it can all sound like spaghetti," she said.

Ms Iglesias then wrote on a piece of paper:

Когда студенты введите класса, то будет карте на стене. Студенты поручено определить на карте, где они выросли. Мы будем иметь обсуждение различных городов и стран.

and asked if Ms Stefanie knew what it meant. Ms Stefanie said, "of course, no."

She then showed Ms Stefanie a second piece of paper and asked, "Do you know what this means?"

それらはどんな言語をそこで話すか。国に大統領があるか。そこに食べる共通の食糧は何であるか。 どんな音楽が普及しているか。気候は何のようなあるか。国のお金は何を呼ばれるか。

Again Ms Stefanie said "no".

Ms Iglesias explained, "My point is that all language needs to be scaffolded in order for students to comprehend the message. Even if I would have uttered these two paragraphs in Arabic and Russian respectively, spoken slowly . . . you still would not have understood."

"That is right," replied Ms Stefanie.

So what can a teacher do in such circumstances? In Part 1 of this book, we introduced you to a range of strategies that support classroom communication processes. These include using visuals, flash cards, realia, and graphic organizers, as well as using mime, gesture, body language, and when speaking employing redundancies and repetitions, circumlocutions, cognates, BICS level vocabulary, and making constant visual references and providing visual cues in conjunction with one's teacher talk.

By the end of their discussion, Ms Stefanie and Ms Iglesias agreed to incorporate a number of different pedagogical and linguistic strategies to help scaffold the ELLs' comprehension during the lesson. Her modified lesson then read (ELL accommodations in gray):

Teaching Tip

Associate Professor Joyce Nutta has compiled a series of online professional development videos to help content-area teachers understand many of the issues ELLs face in schools. At http://tapestry.usf.edu/Nutta/data/frameset/index.htm she demonstrates the importance of using the types of scaffolds listed above in order to make classroom language comprehensible to ELLs. She explains the efficacy of the various strategies using Italian.

Content and Procedures

Activity I: 10 minutes

Introduction and Schema Activation

When students enter the class, there will be a map tacked on the wall. Students are instructed to pinpoint on the map where they were born or where they grew up. We will have a discussion on the different cities and countries. What language do they speak there? Does the country have a President? What are common foods they eat there? What music is popular? What is the climate like? What do the people look like? How do they dress? What is the country's money called?

After the discussion, the students will come up to the front up the room one at a time and pick a slip of paper out of a bowl.

ELL Accommodations: I will include the ELLs by scaffolding this discussion. As I verbally ask the questions, I will show images/pictures on flash cards to help them understand the intent of each question. For example, when asking what language a country uses, I will show a flash card that includes images of the world, ethnically diverse people, and arrows pointing from the people to the language they speak and their country. Meanwhile, as the students respond to questions, I will write down their responses and feedback on the chalkboard next to where I have already written the original question. As for classroom instructions, I will model first what I want the ELLs to do. For example, point to a student, say the word *come* and make a "come" gesture with my hand and then put my own hand in the hat to pull out a card. Read the name of the country on the card aloud and identify where it is on the map.

Activity II: 10 minutes

Project Assignment

The slip of paper will read their assigned country that they will be researching for a project. For the project, students are instructed to complete a brochure with text and images. Their brochure may include information on their country's capital, official languages, religions, flag, climate, economy, government, brief history, culture, and geography. The brochure should be a strictly factual and informative non-fiction text. Anyone should be able to read the student's brochures and really get a feel for the country's conditions and culture.

ELL Accommodations: I will hand out an example of an already completed brochure as well as a blank brochure template to fill out. The template brochure will include writing prompts to help the ELL. These prompts will reinforce the ELLs' learning of "There are . . ." and "It is . . ." On the front cover of the brochure, students are instructed to include a short paragraph to draw in "potential tourists'" interests. Samples of what this may look like is also given to the ELLs. Before going to the library, I will make sure that all ELLs know what they are to do. Rather than asking "Do you understand?", I will get them to repeat what they need to do. As one ELL explains, I will ask another to paraphrase what the first ELL said and so on.

Activity III: 30 minutes

Project Research

We will all go to the library. Students are instructed to research their assigned country. They are instructed to cite one online source and one book source. I will have brought a box of my old magazines to the library for them to sift through.

ELL Accommodations: If any of the ELLs are having difficulty, they may opt to research their home country or may include more images rather than text in their brochure. We will work more closely with the ELLs on this topic and direct them to preselected books. The less proficient ELLs can add more visuals than text as well as work in tandem with a native English speaker on the same country. As individual students are researching and finding books, I will pay closer attention to the ELLs (directing them, helping them find the main points in the texts they find, and helping them construct their "There are . . . ", and "It is . . . " sentences.

Activity IV

Conclusion

The students should finish their research and put their brochure together by the following week. We will have one more class period to work on the assignment. The rest will be homework.

ELL Accommodations: During the week, I will request drafts from the ELLs to make sure they are on track to complete the brochure as instructed and to help them practice their oral presentation of their country to the class.

Finally, the discussion between Ms Stefanie and Ms Iglesias turned toward the assessment. Ms Iglesias indicated that, although a teacher wants an ELL to work through and internalize the same content set of procedural and declarative knowledges as native English speakers, this is not always possible. The most equitable step to take is differentiating the nature of what is actually assessed. Informal assessments provide teachers with a means to gauge whether an ELL has understood the lesson. These include, teacher observations and teacher-to-student conversations as well as self-assessments including exit cards, KWL completion cards, and outcome sentences. Within Ms

Stefanie's lesson, she had already planned to pay individual attention to the ELLs' work progress while in the library. A further means of assessment is a performance-based approach, which Ms Stefanie had already planned in the form of the presentation of the brochure. Lastly, Ms Stefanie created a separate rubric for her ELLs so that their work outcomes could be equitably measured. Her modified assessment thus read:

Assessment

ELL Accommodations: The ELLs' brochures will be graded more leniently. I will create a separate rubric that better evaluates the ELLs performance measured according to their own level of proficiency rather than that of a native English speaker. The brochure and presentation will be graded more on effort. What I really want from the ELLs is for them to (i) practice their reading skills, (ii) capture main points from a text, and (iii) learn to use new English language structures when writing and presenting (these will be the criteria in my rubric). It will give them the opportunity to speak out loud in front of people and build confidence while practicing building sentences, connecting words, enhancing vocabulary, etc.

The above lesson became the penultimate draft version. Suffice to say that when the university supervisor, Dr. Werther, came to review Ms Stefanie's lesson and saw that Ms Iglesias had access to technology in her class, the first question he asked of Ms Stefanie was why she hadn't planned to infuse her lesson with technology and thereby further enhance the learning experiences of her ELLs.

Before getting back to describing how the planning conference between Ms Stefanie and her university supervisor went, we would like to outline how one can think about instructional technologies (ITs). In sum, we feel that current ITs can be categorized into two groups based on usage and purpose. On the one hand, there are technologies used by the teacher for instruction, for the creation of teaching resources or for managing teaching. Examples of this are activities created on an exercise builder such as http://quia.com, a presentation shown to the class using PowerPoint, creating a quiz through http://quizstar.com, and communicating to parents via a course management tool such as http://nicenet.org. On the other hand, there are technologies introduced into an instructional cycle that act as a catalyst for learning. Using ITs as learning instruments merits closer consideration. The difference between the two is in who *does the creating*—the teacher or the student. Examples of ITs used as learning instruments include podcasts, webpage builders, email, and instant messaging to name but a few.

To further clarify the distinction look at the illustration below. Think of a continuum. On the one side, a teacher may use ITs solely as a tool for facilitating teaching, for example, using an overhead projector to show a transparency, using a document camera to illustrate a page from a book, or using a TV and VHS monitor to show a video. Next, a teacher can use instructional technology solely for the purpose of managing and organizing their own classroom. This includes setting up a virtual learning environment such as www.ning.com to post homework, announcements and other miscellaneous classroom information or using an assessment system such as http://quizstar.4teachers.org/ to write tests and post grades. As one moves along the continuum,

a student becomes less of a passive receiver/viewer of IT and more of an active user of IT—a continuum in which the teacher exerts progressively less control over the IT in shaping a student's learning (Figure 2.2).

In the middle of the IT continuum students receive online work to do. Here a student does not necessarily change or create anything, but does answer and respond to online work a teacher has created. Examples of this include an online activity, a webquest, or visiting unspecified websites to research, analyze, synthesize, and internalize information. Nowadays there are many open source (free and accessible) sites that allow students to access specific online subject-area exercises, activities, and educational games created by other teachers. For example, representative sites include Scholastic's website at http://teacher.scholastic.com/activities/index_grades35.htm, San Diego State University's Bernie Dodge webquest maker at http://questgarden.com/ and the University of Victoria's Humanities Computing and Media Centre's online activity maker called Hot Potatoes at http://hotpot.uvic.ca/. Importantly, these enable students to facilitate their own learning. They have the singular advantage of providing students with a motivating means to engage with learning and to get immediate feedback without needing the physical proximity of a teacher.

Next in line are websites that promote the practice of specific skills. These sites usually require users to create user accounts. Sites such as http://writeboard.com enable students to participate in process writing endeavors and Google's gmail at www.google.com/accounts/ManageAccount

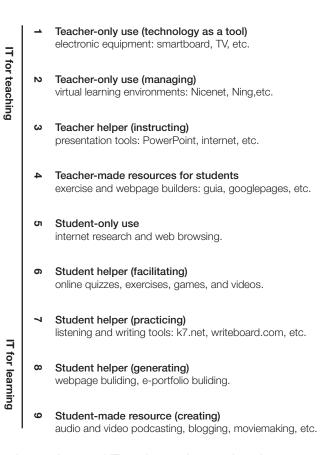


FIGURE 2.2. Nine-point continuum of IT use by teachers and students.

enables students to create free email and instant messaging accounts. Each of these provides students, ELLs in particular, with a venue to practice writing skills through asynchronous and synchronous modalities. Other sites provide similar services, though the skill that students practice is speaking and listening rather than reading and writing. These include a computer-to-computer speaking service provided through www.skype.com and audio recording service provided through www.k7.net/, which sends telephone voice messages straight to email. Just think of the many well-intentioned teachers who never have the class time to sit down with their ELLs and practice content-area specific English with them. With an online tool such as k7.net an ELL need only call a phone number and then read a passage, answer questions orally, verbally paraphrase a lesson, and/or speak about any facet of their work, hang up and whatever was said into the phone then shows up as an audio file attachment in the teacher's email inbox. Without interruption a teacher can now pay closer attention to an ELL's English language development.

The last two categories on our IT use continuum focus on IT tools that enable students to actively create, generate, produce, and construct educational products. The difference between them is that a website and an e-portfolio can act as a repository of an array of online tools whereas blogs, podcasts, and movies are all online resources that are typically hosted on a website or in an e-portfolio. Finally, we want to refer you back to our elaborated Chinese proverb highlighted at the beginning of this section:

Use technology with me, I'll participate, I'll transfer, I'll employ and I'll create.

In other words, using ITs in creative student-centered ways means, for ELLs, being one more step removed from relegation to silence and non-participation at the back of the classroom. From Vygotsky's theoretical perspective, IT has the potential to mediate students' learning in a multitude of creative ways and to open up many potential dynamic zones of proximal development.

Teaching Tip

Its can be used in multiple ways and of course depending on usage by the teacher or student can fit anywhere on the continuum of IT use (see above).

Also remember that pedagogy *always* informs the choice of IT use and not the other way around.

The continuum of IT use does not imply that a teacher needs to use technology representing practices situated exclusively at the extreme right of the continuum. Throughout a unit of work or a teaching day, a teacher will shift back and forth along the IT use continuum many times.

ITs are sometimes best utilized, not when they are used alone, but when they are used in conjunction with other complimentary ITs.

If you are unsure about ITs, take baby steps. Become familiar with one IT through using and infusing it into your teaching before using other ITs. Once you are comfortable, start building up electronic resources (e.g. a collection of revision PowerPoints for your ELLs, a library of audiofiles that review and highlight key points of important lessons, a teacher's webpage containing lists of links to extension activities, etc.).

Now we wish to return to Ms Stefanie's lesson and the conference with her university supervisor. Dr. Werther asked Ms Stefanie at what points in her lesson she thought an ELL might not understand, fall behind, and/or get lost. Ms Stefanie had to think about it and eventually said, "I think my lower level ELLs would get confused at each transition juncture if I didn't explain myself well enough. I also think that my ELLs would need extra help with their English so that they could navigate through learning the content of the lesson."

"Quite so," said Dr. Werther.

Whereupon Ms Stefanie said, "But I feel if I pay too much attention to my ELLs my English speakers switch off."

"Exactly!" said Dr. Werther, "and it is at these times—the transition times, the extra help times—that technology used differentially can help."

At this point Dr. Werther showed how technology could reinforce Ms Stefanie's teaching, alleviate her anxiety of not being able to attend sufficiently to her ELLs and at the same time provide her ELLs with needed level-appropriate subject matter and English help (Table 2.3).

Needles to say, all IT use requires upfront planning, but once materials are created they can be always reused and finetuned for future lessons. Also, all lessons do not need to be "IT heavy." For novice IT teacher-users, try infusing one IT, rather than the eleven ITs as in the above lesson. As you gain confidence, gradually infuse more ITs at points in the lesson that best ease an ELL's learning.

Teaching Tip

For new teachers struggling with how to integrate technology into your classrooms, finding useful lesson plan templates can be a blessing. Go to www.teach-nology.com/web_tools/lesson_plan/ to find lesson plan templates that can guide you on what to think about as you plan your lessons around technology.

Introduction and Schema Activation
When students enter class, there will be
a map tacked on the wall. Students are
instructed to pinpoint on the map where they
were born or where they grew up.
ELL Accommodations: I will include the
ELLs by scaffolding this discussion. As
I verbally ask the questions, I will show

ELL Accommodations: I will include the ELLs by scaffolding this discussion. As I verbally ask the questions, I will show images/pictures on flash cards to help them understand the intent of each question. Meanwhile, as the students respond to questions, I will write down their responses and feedback on the chalkboard next to where I have already written the original question.

As for classroom instructions, I will model first what I want the ELLs to do. For example, point to a student, say the word come and make a "come" gesture with my hand and then put my own hand in the hat to pull out a card.

Project Assignment
Students are instructed to complete a
brochure with text and images.

IT Use Continuum)

A simple tip to free up your hands and movement during a discussion is to use a PowerPoint with clicker device to match the spoken word to visuals and the written word (point 3 on the IT Use Continuum)

Using IT is all about upfront planning. If you know you are going to use certain vocabulary in the next www.eduplace.com/kids/hml/ayudas/index.html (point 4 on the IT Use Continuum) OR, if you have esson or unit, provide the ELL with online vocabulary building exercises, using http://quia.com, so Environment such as http://nicenet.net (point 2 on the IT Use Continuum) or your own classroom a smartboard in the classroom, project a graphic organizer onto the screen from your computer website thereby adding to your online resources for this unit (point 4 on the IT Use Continuum) Prior to the lesson download and print off any number of bilingual graphic organizers found at and, once all student answers have been recorded, save it and post it to your Virtual Learning that they can learn key words prior to the lesson (point 4 on the IT Use Continuum)

audio/visual podcast can be created easily on a Mac through garageband or on any computer using an online program to record the instructions for a task for the ELL to watch and listen to repeatedly. Any such recording can be stored on a VTE or a teacher website for future re-use. For example, an PowerPoint and then load the PowerPoint onto a web page. ELLs could refer to the instructions by ELLs may not immediately understand what is required of them. One way to alleviate this is to use podomatic.com. One could even use a digital recorder and upload the sound and images onto a going to the in-class computer or at home any time (point 4 on the IT Use Continuum)

TABLE 2.3. (continued) How differential IT can help

Good teaching necessitates good modeling. If a teacher limits it to the classroom, as soon as the a scanner to scan items and upload to your web page. Or, if you are giving a model lesson, have modeling is finished, it can't be referred to again by the students (other than from memory). Use a student video record it. Use Movie Maker or iMovie to edit it and then post to your website for students to access in the future (point 4 on the IT Use Continuum) Instructional technology infusion example of an already completed brochure Lesson transitions and extra help times as well as a blank brochure template to fill ELL Accommodations: I will hand out an

The template brochure will include writing prompts to help the ELL. These prompts will reinforce the ELLs' learning of "There are ..." and "It is ..."

On the front cover of the brochure, students are instructed to include a short paragraph to draw in "potential tourist's" interests. Samples of what this may look like is also given to the ELLs.

Project Research

We will all go to the library. Students are instructed to research their assigned country.

Conclusion

The students should finish their research and put their brochure together by the following

ELL Accommodations: During the week, I will request drafts from the ELLs to make sure they are on track to complete the brochure as instructed and to help them practice their oral presentation of their country to the class.

and peer editing of texts (point 7 on the IT Use Continuum)

ELLs can become disoriented in an English-medium library if their task is to search for specific

com/ as well as buddying an ELL with a native English speaker promotes ELLs engaging in drafting

an online process writing tool such as http://writeboard.com or google docs at http://docs.google.

A good way to let ELLs practice their writing skills is when they can get immediate feedback. Using

functions and constructing exercises for the ELL to practice throughout the year is an easy way to

In order to help an ELL with their English grammar, targeting content obligatory language

promote ELL English language development. Such sites include http://a4esl.org/ as well as www.

nonstopenglish.com/ (point 6 on the IT Use Continuum)

the ELL gets to the information they need and works through the information in a way you want. For good online webquest templates try Zunal at http://zunal.com/index.php or Questgarden at http:// information. Try creating for the ELL an online webquest. In this way you, as a teacher, make sure questgarden.com/ (point 5 on the IT Use Continuum)

students could use Chaptertoolme at www.macupdate.com/info.php/id/18818 or Storybox at www. to practice writing, and speaking skills, linking visuals, audio and the written word. For Mac users, ELLs, like other students, could put their brochure together as a digital story. This brings the ELL story-box.co.uk/ (point 9 on the IT Use Continuum)

help an ELL is to get them to record their speech/presentation through k7 for the teacher to listen to Practicing speaking is often daunting for an ELL, especially in a class in front of peers. One way to in private and then provide feedback (point 7 on the IT Use Continuum)

2.4 Principles of Technology Use in Educational Settings

In the Introduction to this book, we referenced Appendices A and B the ISTE/NETS technology standards. Rather than repeat them here again, we wanted to highlight some best practices for using technology with ELLs. These *do's* of technology use will provide a realistic motivation for content-area teachers to steadily integrate technology into the classroom.

Know Your Students

In order to use IT on an ongoing basis in your lessons, it is important to become familiar with your own students' familiarity with technology. Most students will readily text message a friend on their cell phone, or know how to access a social networking site such as www.myspace.com or www.facebook.com, or download music to their iPods and MP3 players but this does not necessarily mean they are technoliterate. Students sometimes have an unhealthy aversion to anything that smacks of education, so one cannot assume students will automatically know how to make a PowerPoint, a podcast or a website even though they may have happily downloaded podcasts and surfed the internet. One way to gauge students' computer literacy levels is to conduct a needs assessment at the beginning of the year. Teachers can easily construct a short survey or adapt one found online such as the one located at www.mccsc.edu/survey.html. The results of the needs assessment will enable a teacher to better judge how much technology to infuse into a lesson and how much scaffolding a teacher needs in order to support student learning.

However, it is very important to be aware that teachers cannot expect students to learn technology *and* English *and* content all at the same time. Remember, just as teachers need to take baby steps when trying to infuse technology, so too do students when they are equally trying to get their heads around the technology.

Teaching Tip

Before steaming ahead with a new topic, if you are sure you are going to use a given IT, give students classroom time to tinker with the IT in question. In this way they won't be trying to master the technology as well as content. Allow for "technology tinker time" and then, when the time comes to use the technology to aid instruction, neither you nor the students will get frustrated.

Choosing Materials

Instructional technology is marvelous for accessing authentic materials as well as creating original resources. Remember the last line of our elaborated Chinese proverb? "Use technology with me, I'll participate, I'll transfer, I'll employ, and I'll create." Well, as teachers we need to be aware of creating tasks that fit the students in terms of *their* learning potential and computer literacy level (Chapelle, 2001). For example, if you have a class of students always listening to their MP3 players or iPods, then building lessons around audio and video podcasts will link into something in which students are already interested. In addition, venturing out from students' strengths can serve to motivate especially ELLs to use the specific aspect of English they need to master (Erben, Ban, Jin, & Summers, 2007). Erben *et al.* suggest that using purposeful and contextualized IT materials allow students to apply their knowledge of their world to content and language learning tasks. For ELLs this translates into the following potential IT activities:

- For ELLs at the preproduction stage (level 1), choosing technology that supports text with images such as photos, graphs, or charts is highly advisable since it links text with its visual representation and acts equally as a mnemonic device.
- For ELLs at the early production stage (level 2), in addition to those listed for level 1 ELLs, choosing ITs that promote vocabulary, grammar, and listening acquisition such as exercise builders, as well as digital stories, audio podcasts and online videos (YouTube) is recommended since all ELLs will go through a silent period when learning English. This means that, before speaking, ELLs will spend a lot of time just trying to understand their linguistic environment. To help them at this time it is more important to create language rich opportunities to further their listening comprehension strategies.
- For ELLs at the intermediate fluency stage (level 3), in addition to those listed for level 1 and 2 ELLs, it is important to use ITs that promote speaking, reading and writing skills such as synchronous VoIPs (skype.com, gizmo.com), online elaborated texts and process writing tools such as writeboard.com.
- For ELLs at the speech emergent stage (level 4), in addition to those listed for level 1, 2, and 3 ELLs, it is important to promote an ELLs CALP, in other words, their subject-specific language ability. ITs that would naturally support this are tools that work in tandem with each other. Examples of this include a website or VLE that combines multiple links to e-communication tools, e-listening tools, e-creation tools, and e-assessment tools (see Part 3).

Students Working with Technology

One of the biggest challenges of technology integration into classroom tasks is the shift in the role of the teacher (Doering & Beach, 2002; Parks, Huot, Hamers, & Lemonnier, 2003). As our nine-

point continuum of IT use indicates, it is inevitable that, the more a teacher employs instructional technology in the classroom, the less teacher-centered and the more student-centered a classroom will become. Technology-enhanced classrooms have been found to promote discovery learning, learner autonomy, and learner-centeredness. In 2000, Kramsch, A'Ness, and Lam pointed out that new ITs are changing our very concept of authorship. Students not only write text but change the very rules by which texts are written (Warschauer, 2006). In other words, new ITs are creating new possibilities of student agency. For ELLs this translates into ELLs directly seeing the results of their learning choices in terms of ever-increasing English language abilities.

A further means by which teachers can promote learner autonomy through the infusion of ITs is to allow students to work collaboratively in pairs or small groups where they can engage in interactive problem-solving or cooperative projects.

Language Use

Research in language learning and IT use in classroom settings has over the years clearly come out in favor of its beneficial effects on second language development (Lee, 2004; Belz, 2001). Especially in networked collaborative interactions, use of emails, bulletin boards, and chat rooms has been found to promote lively exchanges between native and non-native speakers in addition to fostering scaffolding of ideas and grammar (Toyoda & Harrison, 2002). More importantly, using ITs to foster collaborative communication among students has been shown to foster proficiency in all language skill areas—speaking, writing, reading, and listening, including intercultural communication (Jin & Erben, 2007). In an interesting study, Lotherington and Xu (2004) investigated the computer-mediated communications between English and Chinese speakers using instant messaging. Their analyses found that the second language learners were strikingly creative in their use of spelling, word order, discourse, and sociocultural conventions—a clear indication that the use of instructional technologies for communicative purposes promotes language play, an important factor in second language development. Why? One reason may be that, just like the difference between the amount of students' language use in the playground compared with their use in the classroom, Erben (1999) made a distinction between public and private classroom communication and noticed that when ELLs knew they were not being monitored by the teacher, especially during networked computer-mediated communication activities, their language production increased substantially. This occurred because they were more focused on getting their message across rather than being caught up on trying to be communicatively accurate. There is a place for both types of communication in the classroom and the trick for teachers is to try to create IT activities that foster both types of interaction—communicatively accurate interactions and communicatively effective interactions.

Challenges of Technology Use in Classrooms

Whenever one is working with ITs one needs to be aware of the potential frustrations and how to avoid them. At the most basic level are the "technical difficulties," which serve to frustrate teachers more than anything else. These "technical difficulties" can range anywhere from a burnt-out bulb on an overhead projector to the computer screen freezing on you during the middle of a PowerPoint presentation. Other potential problem situations, especially those that can create classroom management situations, are when the teacher has students visit a website to conduct research and many of the links on the website are broken or when the students are ready to utilize a particular online tool and the server that hosts the website is temporarily down. Unanticipated events such as these can easily get students upset or frustrated. Although these examples might

raise a teacher's level of frustration as well, we recommend that you "don't throw the technology out with the bath water." To reduce such avoidable frustrations, upfront planning is the key! Always check the technology (hardware and software) first before you walk into your classroom to teach!

There are also other types of limitations with which teachers should be familiar. In many school districts across the country, school district administrations have security blocks in place so that students cannot access questionable sites from school computers. Often these security programs search for key words, regardless of context. We have seen situations where a Spanish teacher has prepared a wonderful IT infused lesson involving bullfights and five minutes into the lesson discovered that the websites she had viewed and found appropriate at home were blocked by the school district because they contained such words as "bull", "bloody," and "carcass." Communicate with your school district's technology department to find out what IT security measures are in place for your school.

This brings up the issue of quality and appropriateness. The World Wide Web is an enormous compilation of information. To better serve ELLs, in fact all students, a teacher is obligated to act as a quality control agent in order to make sure students avoid wasting time accessing inferior websites and sites that contain erroneous information. Teach your students to be critical agents of whatever they read online. There are plenty of online website evaluation rubrics to help teachers assess the quality of webpages.

Nowadays, with websites such as YouTube at www.youtube.com, much of what students and teachers can access contains video material. For ELLs, seeing a person during communicative acts helps scaffold comprehension because an ELL will also look at a person's body language and facial expressions to help encode the meaning of a message. For example, look at the following textual interaction over email.

The teacher emails his ELL student: "You have the following outstanding work; homework from last week, fieldtrip reflection, and textbook answers (pp. 102–104)." The ELL emails back: "This is my second email of outstanding work. Thanks for the encouragement for saying my work is outstanding."

Obviously, the ELL has not picked up on correct meaning due to the ambiguity. This confusion might have been avoided had the interaction taken place face-to-face. Since the nature of email is asynchronous, an immediate answer or response is not always expected and the likelihood of such interactional breakdowns is higher. In contrast, using synchronous communication tools, although more demand is placed on students' language proficiency, does promote language play. In addition, many free software packages such as MSN, Google's gmail and Yahoo have video-conferencing capabilities. In a school, the broadband speed may be low and consequently virtual meetings (video conferences) often appear as jumpy and pixilated video on a computer screen; however, they do allow ELLs to see facial gestures and thus enhance message comprehension no matter the clarity of the picture.

As mentioned above, providing students curricula time to tinker with new ITs is extremely important before they are expected to carry out an assignment using them. Not only should students be trained on the use of a new program, but also they should be advised of any rules surrounding its use. For instance, a grade 10 teacher takes his biology class into the school's computer lab. He wants to initiate a synchronous online classroom discussion on the "ethics of biomedical research." He knows that in a face-to-face situation some students will not participate on account of shyness and/or the sensitive nature of the topic. He also knows that synchronous chat encourages much more lively discussion. His first step, however, is to introduce the students to his expectations in maintaining netiquette and the rules of interaction. He explains that he wants his students to identify themselves and respond to at least one posting at a time. This procedure

should first be explained, and then modeled to the class. If this type of training is not provided, students may experience stress that distances them from the technologies being used. However, when used properly, the benefits seem to far outweigh the risks.

Another challenge that may concern many teachers hoping to infuse IT into their classroom is the issue of classroom control. In a traditional class, the teacher is the center of teaching and learning. Thus, it is easy for the teacher to monitor what goes on in the classroom. Often teachers see tight control as a means to safeguard positive student behaviors. Since ITs do facilitate learner-centeredness and student independence, students used only to teacher-fronted approaches may feel lost in a poorly designed technology-enhanced classroom. From a behavior management perspective, teachers need to train students to work effectively in different types of learning environments. IT-infused classrooms are no exception. Therefore, to ensure optimal use of technologies in a content-area class, a pedagogically sound teaching plan is necessary. Both teachers and students should be aware of the general principles when carrying out online activities and when using ITs.

2.5 ComputerAssisted Language Learning (CALL) Research

Computer-mediated communication (CMC) is the umbrella term that refers to human interaction by means of computers. Since the early 1990s, research into CMC has examined how electronic media can be employed to enhance second language learning (Kern & Warschauer, 2000).

The various types of interaction that fall under CMC can be grouped into two categories: asynchronous and synchronous interaction. Asynchronous interaction involves participants communicating over elapsed time. In this type of interaction, a time delay exists between the time the sender sends a message and when the receiver reads the message. Examples of asynchronous technologies include email, text messages transmitted over cell phones, and bulletin boards. Synchronous interaction involves interactants participating online at the same time in order to communicate in real time. Examples of synchronous communication include telephone conversations, board meetings, voice conferencing, video conferencing, and electronic chat. The use of both asynchronous and synchronous technologies has intensified in all sectors of society including educational settings (Perez, 2003). It is, however, essential to ask why teachers should use CMC for interaction when communication can be achieved just as easily, if not more easily, in traditional face-to-face classrooms.

To answer this, we need to refer to research that has been conducted in the field of second language acquisition. CMC research suggests that, when communication occurs online, there is increased participation on the part of students (Bölke, 2003), the teacher's role as the instructor shifts from disseminator of knowledge to a moderator, thus increasing student participation (Heift, 2007), participation is equalized among students when no one student dominates (Warschauer, 1996), and the quality of language generated by students is favorably impacted by their participation in CMC (Stockwell & Harrington, 2003). Additional benefits of using CMC in order to facilitate ELLs' language learning include increasing an ELL's access to comprehensible input (Warschauer and Healey, 1998), providing ELLs with opportunities for output production (Blake,

2000), and giving ELLs opportunities to negotiate meaning (Fernández-García and Martínez-Arbelaiz, 2002).

Negotiation of meaning is an important concept for second language acquisition research, since it has proven to greatly promote second language learning. In effect, negotiation of meaning is the efforts of two people engaged in any type of interaction when both work to maintain the flow of communication. As native speakers we all use communication strategies to facilitate communication. These include requests for help ("How do you say . . . ?"), clarification checks ("Did I understand you correctly? Did you mean . . . ?"), self-corrections ("No, no . . . let me explain, I meant . . ."), comprehension checks ("Let me repeat that so we are on the same page . . ."), confirmation checks ("I get it now . . ."), circumlocutions ("You know . . . that air ball thingy in the sky . . ."), redundancies ("The big, large, huge traffic jam . . ."), simplifications, and repetitions, to name but a few. However, ELLs often fail to use these communication strategies when speaking. Often they are so cognitively overloaded in classrooms, especially when they are trying to use academic English, that they forget to employ the above simple strategies to grease the flow of their own interactions with the teacher and other native speakers of English. As mentioned above, research in CMC has shown that CMC used in classroom settings greatly minimizes an ELL's anxiety levels so that they pay more attention to their own communication strategies.

Pellettieri (2000) explored negotiation of meaning and task-based instruction using electronic discussions with 20 second language learners. Learners participated in communicative online tasks ranging from focused open conversation to more closed tasks such as jigsaw activities. This study found that task-based synchronous electronic discussions do indeed foster negotiation of meaning. In addition, these negotiations do facilitate mutual comprehension and learners do attend to their own grammar and modify their own output. In another study, Fidalgo-Eick (2001) examined differences in the quantity of negotiation of meaning according to different task types. Her results showed significant differences in the amount of negotiation according to task type in which decision-making tasks triggered more negotiation. In an earlier study, Blake (2000) found that jigsaw activities elicited more negotiations in online environments.

To sum up: Computer-mediated communication needs to be exploited in settings across the curriculum, especially in contexts where ELLs need to improve their English, because, through interaction, CMC has the potential of providing learners with *comprehensible input*, of encouraging learners to produce *comprehensible output*, and of fostering *negotiation of meaning*.

In the Introduction of this book, we presented five principles for creating effective second language learning environments. We repeat them here and link them to what we have learned so far about using ITs to teach ELLs.

1. Give ELLs many opportunities to read, to write, to listen to, and to discuss oral and written English texts expressed in a variety of ways.

Surf the web, have students use and create blogs connected with the topics of your subject area, modify classroom texts using PowerPoints, and add voice-overs and visuals to scaffold ELL comprehension, and have students join targeted subject-relevant listservs so that they learn by reading other people's postings.

2. Draw attention to patterns of English language structure.

Create online grammar activities through Quia.com and other exercise builders, use writing process tools such as writeboard.com or Google documents, and get ELLS to reflect on their written interactions with other people through asynchronous communication tools such as email.

Give ELLs classroom time to use their English productively.
 Develop classroom activities that foster students' use of a variety of ITs simultaneously to

create assignments, projects, and reports specific to your subject area. In this way ELLs not only get involved but utilize language to create learning products. Examples of creative use ITs include using a webpage builder to make a website, using online video editing software to make a movie, serializing audio and video podcasts, and creating blog sites.

4. Give ELLs opportunities to notice their errors and to correct their English.

Use online quiz generators and surveys to help ELLs monitor their English, create e-portfolios to display and critique student work products, use online recording software such as k7.net for ELLs to audio-record their answers to questions raised in class or in a text so that they can re-listen to and self-correct their pronunciation, grammar and fluency.

5. Construct activities that maximize opportunities for ELLs to interact with others in English. Organize collaborative synchronous and asynchronous activities with email, instant messaging, video conferencing, voice conferencing, bulletin boards, and discussion boards. Use DI practices, CP, and PBL principles to foster collaborative activities among students. For example, pair students when working through a webquest or have a group of students create a digital story or a virtual tour (see Tramline, which creates virtual field trips, at www. field-trips.org/index.htm). Lastly, you may want the class to work within a social network environment such as Ning (www.ning.com), which is password protected and safe for students, or be adventurous and try some of the newest virtual simulation worlds such as SIMS or Second Life to create student avatars for your students to speak with.

A teacher's IT choices are only limited by his or her own imagination. Failing that, talk to your colleagues and surf the web for ideas. Take tiny steps in infusing ITs into your classroom; you will undoubtedly touch on any number of the five principles for creating effective second language learning environments and thereby help your ELLs in small though very significant ways.

Conclusion

In Part 3 of this book, we continue to weave our story on how best to use ITs to teach ELLs. Part 3 is very practical in its orientation. We highlight a range of technologies and show how they might educationally serve an ELL's learning. We continue to link back to and refer to principles of second language acquisition, differentiated instruction, constructivism, and project-based learning to underpin the theoretical and research-driven nature of the IT activities that we propose.

We want to conclude by drawing on the recommendations of the SouthEast Initiatives Regional Technology in Education Consortium (SEIRTEC), who have been providing technical support and professional development to teachers in technology-poor schools in Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina. Their 14 years of work in this area has provided them with a rich base to make recommendations in terms of ways that technology can and cannot be successfully implemented in schools. We repeat their nine recommendations here to form the basis of informing your own thinking about integrating technology in ways that will help your ELLs be more successful in your classroom.

- 1. Leadership is the key ingredient.
- 2. If you don't know where you're going, you'll end up someplace else.
- 3. Technology integration is a *s-l-o-w* process.
- 4. No matter how many computers are available or how much training teachers have had, there are still substantial numbers who are "talking the talk" but not "walking the walk."

- 5. Effective use of technology requires changes in teaching, and the adoption of a new teaching strategy can be a catalyst for technology integration.
- 6. Each school needs easy access to professionals with expertise in technology and pedagogy.
- 7. While many of the barriers to using technology to support learning are the same for all poor communities, some populations have some additional issues.
- 8. In some schools, infrastructure remains a serious barrier to technology adoption.
- 9. Educators can benefit from tools that help them gauge the progress of technology integration over time. (www.seirtec.org/publications/lessondoc.html, retrieved October 14, 2007).

To learn more about SEIRTEC's elaboration of these nine recommendations, check out their website.

Part 3 Teaching ELLs through Technology

3.1 **Orientation**

In Part 3 (Chapters 3.1–3.7), we describe learning activities for middle and high schools. The activities are intended to apply the principles explored in the first two parts of the book. We chose topics for the activities that are adaptable to more than one grade level and span the range of curriculum areas (science, mathematics, social studies, language arts, music, art, health and PE). We also include a brief description on how to use the individual technologies introduced in each chapter apart from explaining how they can be used pedagogically to enhance ELL learning experiences. In addition, in order that you the reader be able to focus on technology use and integration, we have purposefully chosen the curriculum content of all activities to derive from commonly treated classroom topics and themes.

Each chapter continues to be accompanied by "Teaching Tips," "Classroom implications," and "Teaching Help" boxes. These are intended to help the reader reflect on issues of best practice. In order to facilitate your usage of the book, activities have been modified for all levels of ESOL. The four levels are Preproduction (level 1), Early Production (level 2), Speech Emergence (level 3), and Intermediate Fluency (level 4); see Part 1 for a detailed description of what ELLs are linguistically capable of at each level.

At all of these levels instruction can be meaningful. Of course, the greater challenges come at the lower levels. However, using DI, PBL, and CP strategies will help to ease even a preproduction ELL into the heart of the learning process. In other words, instruction, even for preproduction students, can be made meaningful by skilled use of learning centers, tiering activities, flexible grouping, anchoring activities, compacting curriculum, exit cards, extended-lesson projects, adjusted questioning, peer buddies, and realia, as well as creating an acquisition-rich language environment in the classroom and modifying teacher talk (using redundancies, repetition, circumlocution, simplification, elaboration, and comprehension checking). As Cruz and Thornton

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(2008) explain, "reliance on looking at maps and pictures, pointing, body language, and the like may be labor intensive but it need not be uninteresting or intellectually empty."

In Chapters 3.1–3.7, we have classified technologies in terms of their potential to foster ELL learning. Thus Chapter 3.2 focuses on e-creation tools: those tools that enable an ELL to play with and use language in a creative, exploratory sense while simultaneously constructing materials against which learning performance can be measured (see Chapter 3.5 on e-assessments, rubrics, and grading online). These tools include podcasts, PowerPoint, moviemakers, audiomakers, and web publishing. Chapter 3.3 is all about e-communication: using online tools such as email, instant messaging, listservs, and discussion boards that foster ELL written and spoken interaction. Chapter 3.4 deals with writing/reading-facilitative e-tools, such as wikis, blogs, writeboards, and webquests and Chapter 3.5 focuses on listening-facilitative e-tools such as vcasts, audioblogs, accessing audiolibraries, and podcasts. Chapter 3.6 pertains to e-assessment tools and, last, Chapter 3.7 shows the reader how to use virtual learning environments in the classroom.

Teaching Tip

As you begin to read and use the technologies suggested in the following chapters, remember the "K-I-S-S" rule of multimedia:

Keep It Simple to get Started! Keep It Short and Sweet! Keep It Simple to Survive!

The Computing Teacher, 21 (3), 1993

In the chapters that follow, all activities act as fuel for thought; a pedagogical springboard for future praxis and your own instructional experimentation. Because technology implementation lies at the core of facilitating the above instructional practices of DI, PBL, and CP, we want to scaffold your own learning by providing you with an ELL-sensitive lesson plan format. The template may be different from what you are used to; however, for us there are certain essential components that need to be included in every lesson plan regardless of the format. We feel the template below contains those essential components yet also takes into account ELLs' varying levels of language proficiency. By adding the ELL levels to the template, we hope to prompt your planning to include thinking about necessary curricula adaptations for ELLs level 1–4 when you transfer the ideas we will give you into your own classrooms.

Lancas Diagnatis and State of
Lesson Plan with ELL Modifications
Content Objectives
Level 1:
Level 2:
Level 3:
Level 4:
Mainstream:
Languaga Objectives
Language Objectives
Level 1:
Level 2:
Level 3:
Mainstream:
Culture Objectives
•
Level 1:Level 2:
Level 3:
Level 4:
Mainstream:
Standards Met
Materials

Orientation: WHAT¹	Orientation: HOW	ELL Modification/ Adaptation (each level)
		<u>.</u>
Guided Practice		
		ELL Modification/
Enhancement: WHAT ²	Enhancement: HOW	Adaptation (each level)
Independent Practic	ce	
Synthesis: WHAT ³	Synthesis: HOW	ELL Modification/ Adaptation (each level)
	-,	

Checklist for Differentiation Strategies	
flexible groupings reading buddies tiered activities curriculum compacting learning centers cooperative learning anchored activities adjusted questioning peer teaching technology	
Technology	
Assessment	
Level 1:	
Homework	
Level 1:	
Reflections/Notes	

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In conclusion, we will finish with a paragraph taken from our companion book in this same series of Teaching ELLs across the Curriculum, called *Teaching ELLs through Social Studies* by Cruz and Thornton: We hope that the activities described in the following sections succeed in making tangible what we have been talking about in this book so far. Although all the activities are meant as models, some of them will doubtless fit better than others with teachers' established instructional practices. Some of the exercises we have used successfully for many years in various ways; others have been created more recently and piloted with our teacher education students. In all cases, we took Noddings' (2006: 284) advice to heart: "try things out, reflect, hypothesize, test, play with things."

3.2

E-creation Tools and Self-Made Computer-Based Resources

Getting ELLs to Play and Be Creative with Language

Orientation

This section discusses different possibilities for students to become creative with language and publish their thoughts and ideas in a variety of ways. Present-day language learning theorists point to the importance of having learners come in direct contact with the language through authentic interaction with the language they are learning (Lantolf & Thorne, 2006). In addition, students who work together in small groups are able to take advantage of social learning environments that promote language learning (Markee, 2004).

Included in this section is information on how to use different e-creation tools as a source for language use, how to create classroom activities for ELLs, and suggestions for projects that can be adapted for you and your students to use in your classroom.

E-creation tools are software or applications of software that provide a free forum for students to publish their original work. In some cases, this software has been created for use in other areas, but all of them can be easily adapted for use in the classroom by ELLs. Although other principles are highlighted, we want to stress how e-creation tools on the whole lend themselves to promoting principle 5 of our *five principles for creating effective second language learning environments*, namely, "Construct activities that maximize opportunities for ELLs to interact with others in English."

Specific tools discussed in this section are web publishing sites, presentation software, exercise creating tools, and podcasting sites and software. The following terms will be used in this chapter and will help you to understand the use of the tools.

Web Publishing

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Content provided through the use of a website for access by the public in general. Web publishing is all about creating a webpage and publishing it on the World Wide Web. Some sites require more technology knowledge than others, but nowadays it is common to be able to publish on the web without special software, other than a word processing program.

Presentation Software

Software designed for creating presentations, especially in the area of education or business, such as PowerPoint.

Teaching Tip

Presentation software like PowerPoint can be used to create interactive educational games such as *Jeopardy* and *Who Wants to be a Millionaire*. You can find an example at http://son.uth.tmc.edu/coa/FDGN_1/RESOURCES/jeopardy_INST.pdf. On this site, you can find two already created games to give you an idea.

Exercise Creating Tools

This is software that creates different exercises that can be used as assessment tools. It can also be used to have students create exercises for each other. These activities can then be launched on any e-publishing site.

Teaching Tip

These websites will offer you sites where you can create your own exercises:

- www.quia.comuia.com
- http://hotpot.uvic.ca/
- www.downloadjunction.com/product/software/6814/index.html

Movie Maker

This software accompanies Windows XP and Vista. It can be used to create movies from still photos or video clips. Mac users can find a similar tool in iMovie.

Podcasting

This is an IT tool that enables the distribution of audio files over a syndicated feed that can be replayed on media players or computers. These audio files can be accessed via websites or other locations online. Podcasts are shared to provide content information to the public.

Teaching Tip

Here are some links where one can easily create podcasts.

- www.mypodcast.com/
- www.gcast.com
- www.clickcaster.com/
- http://podomatic.com/
- www.learninginhand.com/podcasting/create.html
- www.podbean.com/

The following are examples of podcasts created by and for ELLs:

- www.manythings.org/e/podcasts.html
- www.stenhouse.com/html/news 17.htm
- http://learntech.ties.k12.mn.us/Podcasting.html
- www.podcastsinenglish.com/pages/level1.shtml
- http://a4esl.org/podcasts/
- www.englishfeed.com
- www.eslpod.com
- www.englishcaster.com/idiomas

How to Create and Use E-creation Tools

Web Publishing: Geocities and Yahoo! Groups

We have selected Geocities and Yahoo! Groups as they are easy to use and widely available. Publishing content to the World Wide Web provides a forum for students and teachers to make their work public and to share their work with anyone who has access to the internet. The activities, exercises and tools described below can be published on the internet. In designing a website, ELLs can create a way to publish their creative efforts while at the same time practicing their language skills.

Geocities provides a free web hosting space. Begin by logging onto Yahoo! and then search for Geocities. The control panel, below the purple stripe, has tabs to create and manage.

The create and update page offers options for building the site and adding additional tools such as a blog, guestbook, and maps.





The first page provides templates for the pages, as well as different options for the type of page.

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The pagebuilder has blank textboxes that can be filled in with different text. The icons on the top are user-friendly for the creation of the page.



Geocities can be used to create a class or topic page. ELLs can also use it as a space to launch activities they create using the other technologies mentioned in this book.

Presentation Software: PowerPoint

PowerPoint is a software application that can be used to create content-rich teaching aids or to produce interactive games. When ELLs create presentations for content, they create a tool that will help them explain concepts to their peers or teachers. The use of written content gives ELLs the opportunity to think about the language they are using, and therefore be more grammatically correct and complete in their explanations. Here are brief instructions for creating presentations using PowerPoint.

As soon as you have an outline for the content you want to include in the presentation, open a blank presentation. You need to have an idea of how many slides you will need.



To insert a title or a subtitle on the slide, click on the text box and write the information.



Use the Design button on the toolbar to change colors and styles of the slides. Use the color to enhance the ideas you want to present.



To animate the text or the images, use the animation schemes provided. This will make the text or images appear on a click of the mouse or when the slide is changed.



You can also hyperlink one slide to another to create a different order for your presentation. This hyperlink button is used for creating interactive presentations with a variety of content.



Interactive Presentations: PowerPoint as a Jeopardy Game

Based on the television show *Jeopardy*, you can use PowerPoint to create similar interactive games that provide a space for ELLs to review content and apply their language skills while enjoying themselves. You can read more about using games to create differentiated learning spaces through projects in Part 2 of this book.

Open PowerPoint and choose *insert table* slide from the toolbar. Allow one more row than column to create a space for the column title.



Create categories by writing the titles in the first row. Then assign values for each question to the cells.



For each value, you will need two cells for each question. The first cell has the question.



The second cell has both the question and the answer.



While clicking on the text box, choose *slide show* and then *slide transition* to animate the text. Choose the *dissolve* effect, and set the speed at slow or medium. Make sure the *on mouse click* box is checked. This is how you will make the answer appear.



Insert an action button over the value of the slide. Choose the hyperlink for the next slide to go to the question.



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Click on the *no fill* button to make the action button invisible. Once you have inserted the invisible button, when you click on the number, it will hyperlink to the next slide. To return to the game board, repeat the process of inserting an action button. This time, hyperlink to the previous slide.



Repeat this process to link the game board to the questions and answers. When you have assigned a question and an answer to each value, your game is finished.

Interactive PowerPoints can also be used to create games that are based on the language of content areas. Remember Ms Stefanie's lesson in Chapter 2.3 of this book and her language learning objectives, which tied into the content obligatory language she thought her students needed to participate in the lesson? Creating interactive PowerPoints can help an ELL learn the content obligatory language of any given topic. Doing so also touches principle 2 of our *five principles for creating effective second language learning environments*, namely, "Draw attention to patterns of English language structure." For example, the *Jeopardy* game can be used to match terms with their definitions, or events with the date they occurred. Preliterate ELLs can work through games where one picture item must be eliminated because it is unlike other pictures in the set.

These games can be posted on the class Geocities or Yahoo! Group website. Aside from teachers creating such interactive PowerPoint games for their ELLs, ELLs themselves can be given opportunity to create their own interactive PowerPoint games. Having students create teachable IT resources for the class and then allowing the students to try them out is a very constructivist way to promote students' retention of subject matter. For ELLs, such a strategy would (a) help them learn content obligatory language in an entertaining way, and (b) help newly arrived ELLs catch up and learn subject-specific content that they may not have learned in their home country.

Teaching Tip

Other types of interactive PowerPoint games include:

- Who Wants to be a Millionaire?
- Hillsborough Squares
- Wheel of Fortune
- Twenty Questions
- Guess the Covered Word
- Weakest Link

The templates for such games and more can be found at http://jc-schools.net/tutorials/PPT-games/ as well as at http://it.coe.uga.edu/wwild/pptgames/

Exercise Creating Tools: Hot Potatoes

Creating exercises for your ELLs gives them a space to repeatedly practice the concepts they are developing. A teacher may want to create the exercises but, as we see in Ms Sylvia's example (see our Introduction), having students create the exercises allows them to both learn the concepts and practice their literacy and language skills through the creation of the exercise. The exercise that is created can in turn be shared with classmates to provide repeated practice to learn new

concepts. If you work in a classroom where there is only one computer, both the teacher and students can use Hot Potatoes to create and store activities for others to use. These activities should be organized into levels and stored in activity banks available for ELLs to use when they have time to practice language that is applicable to the content knowledge being studied. Follow the instructions to create activities.

Hot Potatoes is a program that you can use to create cloze exercises, crossword puzzles, multiple choice, matching, and mixed form activities. Research (Chapelle, 2001; Ellis, 2005) points to the need for providing ELLs with opportunities for language input, making language salient and focusing on form. Through the use of Hot Potatoes ELLs can work with language they understand while creating and using quizzes, games and activities to make the language real for them.



The *masher* is the control panel for the creation of the new exercises. It also includes the source code, if you would like to change the code. Use the toolbar at the top to change the functions and post the activities.



To create a matching exercise, click on the JMatch icon to open the template. For each activity, create a title for the exercise, and then fill in the blanks with the options. You can include text or images in the options.



Save the activities to your computer, to a website, or for printing by clicking on the *file* button on the toolbar.



Continue with the other options to create different types of activities.

To create a cloze exercise, open the JCloze window. Begin by creating a title for the cloze exercise.



Then insert a text, and mark the gaps by clicking on the buttons on the bottom of the screen.



To create a crossword puzzle, click on the JCross icon. Begin by assigning a title to your puzzle.



Use the *manage grid* to create your crossword puzzle. Use the *automatic grid maker* by clicking on the *manage grid* button on the toolbar.



Type the words in the text box, and click on *make the grid* when you have finished the list.



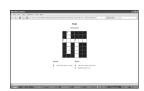
The program will automatically create the crossword.



Now, click on *create clues* to add clues to the puzzle. Fill in the blanks with the clues you want to include.



Here is your crossword as configured for printing. You can also upload it to a website for easy access by your students.



You can also use Hot Potatoes to create quizzes.



Begin by writing the title of your quiz on the top of the page. Write the question and choose the type of question. Write the options in the textboxes, and include feedback for correct or incorrect answers. Be sure to check the correct option(s).



Teaching Tip

These websites have examples of multilevel quizzes and interactive activities that are appropriate for English language learners. They are also good examples of internet-based activity banks that can be created using activity builders such as Hot Potatoes.

- www.a4esl.org/ Here is a collection of quizzes for English learners. It includes grammar, vocabulary, and crosswords at different levels of difficulty.
- www.english.abcingles.net This site offers tests at different levels. It includes reading comprehension tests.
- www.eslcafe.com Dave Spirling's ESL café offers a variety of activities for language learners.
- www.eslactivities.com Here you can find a variety of classroom activities and games for individual use by ELLs.
- www.teflgames.com This site provides interactive games and quizzes for English learners.
- www.cityu.edu.hk/elc/iowa/quiz/ Interactive quizzes at different levels.
- www.triv.net/ The trivia quiz site offers quizzes for higher-level ELLs. It includes content-area quizzes.
- http://grammar.ccc.commnet.edu/grammar/quiz_list.htm These interactive quizzes were created by both teachers and publishers. They are good for highlevel ELLs.
- www.english-test.net/ Tests of different levels are available for ELLs.
- www.english-test.net/ This website holds exercises and tests for ELLs.
- www.englishlearner.com/tests/test.html A wide variety of exercises including grammar, vocabulary, and reading at three levels.
- www.englishforum.com/00/interactive/ Grammar-based quizzes as well as word puzzles, such as scrambled words.

Recording and Editing Sound: Audacity

Audacity is an open source program that enables a user to record voice or music so one can add it to an online project, website, webquest, podcast, blog, etc. Use the following instructions to create an audio file.

Download and open Audacity from http://sourceforge. net/. To convert your files to .wav or mp3 files you will also need to download the lame program that can be found on the same site. If you export your Audacity files to another project, you will not be able to play them unless you save them as .wav or mp3.



Click to record your voice or music. If you do not see the blue wavy line, you are not recording anything. Check your microphone to make sure it is properly connected. Click on button to listen to your recording. Make sure it is the content and quality you want. If you do not like the product, erase it and begin again. When it is what you want, you are ready to save your project.

If you want to cut a piece from the audio, place the cursor on the audio track and click where you want to edit. Then use the scissor icon to cut that piece.

You can also import audio as background, or beginning or ending music by clicking on *Project* then on *Import audio*.







Remember that it is important to save your work regularly so you will have it if you have a computer problem. Also, feel free to read the help manual and click on other buttons to find out what else you can do with Audacity.

Teaching Tip

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Remember, just as you would give your students "tinker time" to play around with and familiarize themselves with any new IT before actually using it to learn subject-area content, make sure that you give yourself adequate time to explore each new software. Go ahead, click on all the buttons, pull down all the menu bars and open up all the items to see what you can and can't do with the software!

This program can be used to create audio for a Movie Maker project or an audio file for a podcast. Above all, Audacity is extremely useful for teachers who want to provide their ELLs with extra listening practice to improve their comprehension skills. Why? Audacity allows anybody to record and/or import audio files and edit them. We have already written about the importance of listening in second language learning processes. Think about principle 1 of our *five principles for creating effective second language learning environments*, namely, "Give ELLs many opportunities to read, to write, to listen to, and to discuss oral and written English texts expressed in a variety of ways." For example, how many times have you had to repeat yourself because your ELLs did not understand classroom instructions or directions for an activity, or how often have you had to go over your whole lesson during your lunch break to help an ELL who was lost during the class? Well, audacity can alleviate some of this. Try the following:

With a digital recorder audio record your lessons (or at least your most information-filled lessons). Upload the recordings onto your computer and then import the audiofile into Audacity. In any classroom lesson, there will be a lot of extraneous noise, off-task conversa-

tions and teacher talk devoted to behavior management . . . you can edit these parts out of your recording so that your 40-minute lesson may be reduced to 10 minutes of high quality teacher talk focused on the topic at hand. You can then upload this edited audiofile *as is* to your own website, or you can further edit the audio file into listening chunks or audio chapters, each of which make up their own audio file. What you can then do is upload each audio file onto a PowerPoint page and add visuals and text to scaffold a user's comprehension—the PowerPoint then becomes a useful speaking book of your lesson and can then be uploaded and linked to your website. In this way, you can quickly build up an audio library of your best lessons. For ELLs, this means that they have access to an amazing library of topic-specific audiofiles that they can repeatedly listen to in order to help them comprehend any topic you are doing in your classroom.

A variation of this would be to use students. We suggest this for three reasons. First, teachers do not have a lot of time during an average work week and time is always a precious commodity in schools. Second, having different groups of students edit recorded lessons (as described above) acts as a creative way to have students relisten to important lessons . . . though, because they are doing something innovative with an IT tool, they won't necessarily see it as revision. Thirdly, getting ELLs to do this in pairs for themselves touches on principle 5 of our *five principles for creating effective second language learning environments*, namely, "Construct activities that maximize opportunities for ELLs to interact with others in English."

Podcasting

Rather than think of a collection of audio files as separate and discrete units, podcasts allow students to serialize audio files into coherent and cohesive anthologies. Many schools and teachers have taken up the creative challenge that podcasts present. Podcasts can be created individually, in pairs or in small groups. Music can be included as a background to any podcast. Podcasting facilitates the creation of projects based on topics that the ELLs are studying in their mainstream classes. In the classroom, using podcasts can offer ELLs opportunity to work together to create projects about their content courses. For example, take a ninth-grade science class working on a unit dealing with insects. The class teacher divides the class into groups of three or four and asks each group to pick one insect and investigate its life cycle (the teacher helps the students by providing a list of local insect species that do not live beyond one month). Students are to find their insects/larvae, create a habitat in a large jar, and record their observations over a period of one month. Using podcasting, one group of students (two native speakers and two ELLs) decide to serialize their observations by:

- creating a user account with podomatic.com (see below);
- giving their podcast website a title, "The Life Cycle of a Maybug";
- writing an introductory paragraph on their podcast website to explain to readers what their observational project was about as well as another paragraph on the maybug;
- writing their observations over the course of the month down on paper;
- scripting their written observations in such a way that it sounds to any listener as a serialized broadcast;
- sharing the recording of each scripted observation directly onto podomatic.com.

ELLs can greatly benefit from using podcasts in this way because they can be channeled into focusing on writing, on speaking, and on how English works while at the same time learning

curricula content. Such projects touch on principle 3 of our *five principles for creating effective second language learning environments*, namely, "Give ELLs classroom time to use their English productively." ELLs at different levels are able to contribute according to their language skills, but, at the same time, are given an opportunity to comprehend and understand the language through its use in developing the project. In addition, this type of project allows more advanced learners to begin to use language to analyze and synthesize ideas and concepts for the podcast.

You or your students can create podcasts by using Audacity and uploading the sound file made through Audacity to a website. Another option is to use Podomatic to create a podcast. Podomatic is an internet-based site where you can create your own podcast. It also provides storage space for the podcasts you create. Individual users need only to be prepared with their script and be ready to record using the podcasting tool. Each user has a website where all of their podcasts can be found.

Let us provide you with some instructions on how to use Podomatic. First of all, go to www. podomatic.com to create your Podomatic account.

On the first screen, click on create a podcast.

Fill in the required information to begin to make your podcast. Be sure you have your script prepared so you can be ready to record.

When you have filled in the information, click on continue.

On the next screen, choose a background for your podcast.

On the next screen, you will record your podcast. At the bottom of the screen, you will use the recording buttons to create your audio file. Be sure to use your script to guide your recording. Click on *post episode* to finish your podcast.

Give your students the URL so they can listen to your podcasts.











Movie Maker: Editing Videos

Movie maker is video production software that is included in Microsoft XP and Vista. Equipped with various tracks, it permits the creation of movies from still digital photos or video clips. Audio

files and music can also be added to the movie to create a professional-looking movie. Thanks to the simplicity of the program, ELLs can quickly and easily create short movies on a variety of topics they are studying in their mainstream subjects. Given a problem to be solved, or topic to be communicated, ELLs can use written language to create their projects. Projects such as autobiographical or cultural narratives can also provide ELLs with a means of positively expressing their identities with their limited scope of language proficiency.

Teaching Tip

EdTech Avenue at http://edtechavenue.com/category/ellesl/ offers different technology tools for ELLs, in addition to providing suggestions for the creation of projects for ELLs.

At the following site, http://facstaff.unca.edu/nruppert/2006/Geometry%20 with%20Movie%20Maker.ppt, you can download a PowerPoint describing one teacher's experiences using Movie Maker to describe mathematical concepts.

Open Movie Maker to create a new project. Begin by importing pictures.



Drag the pictures from the bin to the timeline.



When you have finished importing the pictures, you are ready to insert the transitions. Make sure you are in the *storyboard* mode while working on your movie.



Choose the transitions and drag them to the *transitions* bar.



Use the narration tool to insert audio, or use Audacity to create audio files. If you use Audacity, you need to save the audio files as mp3 files. Import the audio the same way you imported the images to the bin at the bottom of the screen.



Create titles and credits to finish your project. Adjust the audio to play as the images appear. Make any necessary adjustments for quality.

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When you have completed your movie, save it to your computer by clicking on save to my computer. This will create a file with the completed movie. Save the movie in a folder with the images and audio files.





How to Use E-creation Tools in the Classroom

What is the Role of the Teacher in Using ITs with English Language Learners?

Teachers who are interested in using technology as a means of promoting English language learning through project-based learning or within a differentiated classroom have a wide variety of technological tools at their disposal to choose from. Although the specific role of the teacher is one of planning and organizing the integration of subject-specific content material as far as technology is concerned, the onus is on teachers to decide which technology is best suited to accomplish the pedagogical objectives of an activity.

For example: A grade 8 science teacher wants to take her class for a two-day trip to the seashore. Her class is learning about marine life and she thinks her students will learn a lot about the topic. The teacher has six ELLs, all at different levels of proficiency. She expects that her ELLs will have difficulty understanding the guided tours she has organized as she thinks that the tour guides will use content-specific vocabulary way beyond her ELLs' level of understanding. Taking an idea from a recent trip to the local museum, the teacher created an audio virtual tour for her ELLs. This she did by scripting each stage of the anticipated fieldtrip. Using Audacity she labeled each recording to mirror the guided tours students were going to receive—sea currents, crustaceans, beach flora, sea life. She also created audio definitions of all the anticipated new vocabulary that students would be introduced to. Finally she loaded all her audio files onto her website. Knowing that each ELL had an iPod, she asked them to download her recordings. In this way, when all the students were at the seashore listening to the guided tours, her ELLs could listen to her elaborated though simplified explanations on their iPods. They could also toggle back and forth between audio definitions of new words when they came across them. In this way, the ELLs were able to go back and hear the guided tours again and again. This is of course a simple example of helping ELLs through technology. The same science teacher regularly posted new PowerPoints on her website. The PowerPoints were of two varieties: (1) PowerPoints created as revisions, and (2) PowerPoints that were interactive games, but which helped ELLs practice and build content-related vocabulary. The science teacher found the Jeopardy game particularly suited for this. Her categories were "word definitions," "synonyms," "antonyms," "clozed sentences," "finish the sentence," and "unjumble the word." Of course, some students, usually the ELLs, said that they did not have computers at home to practice. So the science teacher created a learning station with the one computer she had in the classroom. Every time the class was broken into group work, she would have her ELLs sit at the computer and work through the PowerPoints and listen to the podcasts she created.

What is the Role of English?

Considering the role of English is another dimension in the creation of appropriate teaching and learning materials. Teachers need to take a differentiating process approach to the creation of projects by ELLs. Whereas some students need direct instruction, others can learn through modeling and independent work and yet others can work individually, only being guided by questions. Using a process approach guides ELLs to work, revise, and edit their language in whatever projects or written tasks they are engaged in while simultaneously including their peers in the revision process. This mediation allows learners to develop their individual language skills through the use of technology and social interaction. The amount of language support provided by the teacher for individual ELLs will depend on the teachers' evaluation of the language needs of their students. However, language support can be integrated through a wide range of techniques. These include creating hyperlinked glossaries for lists of vocabulary words or words within texts to accompany any task, activity, and/or project, and, if necessary, an online dictionary or translator can be made accessible for the ELL as well. Other options for language support may include online graphic organizers created by the teacher.

The following life skills lesson is designed to help newly arrived ELLs who are in grades 10, 11, and 12. In Chapter 1.5, we highlighted the fact that not all ELLS are the same. Think back to the case of Ismael Abudullahi Adan, a refugee from Somalia. His family did not intend to come to the United States but on account of war they find themselves having to deal with all the cultural intricacies of life in the United States. Just to survive, they need to learn the ins and outs of American bureaucracy. The objective of the lesson is to learn about social service agencies and the services they provide. Cultural aspects of community formation are also included.

Grades: 10-12

Topic: My community

Content area: Social Studies/Life Skills

Objective

SWBAT identify and talk about aspects of their community. SWBAT learn about different aspects of community services providers.

Language Objective

This activity will allow ELLs the opportunity to acquire vocabulary to describe their local communities. In addition, they will be able to apply this vocabulary to their everyday lives.

Language to highlight: Students will learn to phrase questions and use the present tense to describe the activities they carry out in different locations in their communities.

Orientation Phase

Step 1:

Have students draw individual pictures or take photographs of the things they find in their neighborhood.

Scan the pictures. Make sure the digital images are small enough to use in a PowerPoint presentation.

Pair students and have them create mock role play dialogues typical of the interactions that may occur in each of the community locations highlighted by the students. Remind students to focus on the types of questions one may hear being asked in these locations.

Suggested vocabulary: car, house, fire station, police station, supermarket, church, park, post office, gas station, bus/train station, hospital, realty office, city hall, court house, doctor's office.

Enhancement Phase

Step 2:

Have student pairs create PowerPoint presentations for each targeted community location. Include the scanned images as well as the scripted role play that represents that particular community location.

Insert hyperlinks that allow vocabulary words to appear when the mouse is passed over the image. In addition, insert glosses that give meanings or elicit pronunciations when the mouse is passed over individual words.

Step 3:

Install the presentations on the classroom computer(s).

Use each PowerPoint presentation to brainstorm other potential interactions that may take place in said locations.

Let's now situate the above activity within a broader social studies lesson on communities. The nature of the lesson is less important; what we want to emphasize is how ITs can be used to foster differentiated learning strategies and how using differentiated strategies can be complemented by using ITs. The above lesson is not necessarily cognitively demanding but in high school teachers often need to teach very abstract or complex topics. Often, this translates into lessons that are in themselves either very language driven (i.e. the teacher lectures the whole lesson so as to get through the content) or interactive but with multiple stages. Both are very anxiety-producing events for the ELL: first, because ELLs do not have the language ability to process complex language elicited as a result of dealing with cognitively demanding and abstract topics; second, because ELLs can become easily confused if language is used to describe a process or task that has many steps to understand.

Differentiated instruction offers a means to minimize the complexity of a topic. Blaz (2006) recommends tiering complex lessons. As described in Chapter 2.2, tiering is all about beginning a lesson with the presentation of a skill or concept and then placing students into small groups that begin to explore the concept/skill in a tiered manner. There are four types of tiering that can take place: by resources, by outcomes, by processes, or by product. Tiering, like many other teaching strategies, is also known by other names, including layered curriculum and multi-menu lessons (Blaz, 2006: 69). In a lesson tiered by resources different materials are used and chosen for their

level appropriateness and complexity of content. A tiered lesson by outcomes is one in which students use the same materials but the outcome is different. A tiered lesson by process is one in which students get to the same end result but the route differs for different groups of students. Finally, a tiered lesson by product is one in which students are grouped by learning preference and each group produces a different product.

Examples of these are found in Tables 3.1–3.3.

Using E-creative Tools as a Virtual Teacher

In this chapter we have looked at five ITs that both teachers and students alike can use to fashion new instructional materials: PowerPoints, podcasts, Movie Maker, webpage building, and online exercise builders. Rather than unpacking numerous IT-infused lesson plans, we want you to walk away with workable ideas on how to use ITs to aid the learning process of ELLs. In other words, we want you to transfer these ideas to your own lessons, make them your own, and hopefully by doing so gain the impetus to generate a whole swath of new ways to use ITs that are unique to you, your classroom, and your students.

Because ELLs struggle with their English, they engage in a constant cognitive tug-of-war. Should they expend energy learning English or learning the content of their subjects? If they concentrate on English, they are likely to fall behind in their coursework, but they can't get ahead with coursework if their English proficiency remains low. It is a constant dilemma. For the teacher, this means that he or she has one or more students in the classroom that without extra help will most likely fail or at the very least do poorly on tests and exams. All teachers want to do the best for their students, but fighting against time is an inevitable battle. Time is the one precious resource many teachers do not have. For teachers this creates a lot of anxiety. How does one give equitable instructional time to all students, when some need more ongoing help than others? The answer centers on effectively using ITs as an active tool within lessons whereby students can transition easily between different types of instructional management modes (student-centered vs. teacherfronted, differentiated vs. unilateral instruction). Even in the one computer classroom. Don't let it just sit on your desk or in the corner, make an active learning center out of it! The following are transferable ideas to take with you:

E-creative tools are adaptable even after they are finished; they become virtual resources to be further manipulated and used as remedial resources for ELLs

Example 1: Think of a situation in which you have your students synthesize a unit of work by creating a PowerPoint. Different students focus on different aspects of the unit. In order to make sure you have exactly what you want, you provide the students with a detailed rubric. When all students finish, you grade them. The best PowerPoints, you copy and keep. You add guiding questions, perhaps voice-overs (if the students haven't already done so), better visuals, or links to accompanying online exercises that you or your students have made at quia.com etc., if you need to, and then post them to your website, your class VLE, or a free social networking site explicitly designed for PowerPoint displays, called Slideshare, at www.slideshare.net. The next time you teach this particular unit of work, you have a ready-made collection of revision slides for your ELLs to access.

Example 2: When it comes to tests and exams, many students' anxiety levels go through the roof. For ELLs this is doubly so. Most ELL school systems will recommend that ELLs be given more time to complete the test. There is, however, another strategy that ITs can easily accomplish that will at least minimize some of the anxiety an ELL feels walking into a test. Using any of the

TABLE 3.1. An IT infused tiered lesson by resources inclusive of ELLs who need help with (1) macroskills, (2) different types of texts

8 groups	Example 1 Shows how different ITs can help ELLs with specific macroskills	Example 2 Shows how one specific IT can help ELLs decode different types of texts
Groups 1a & 1b	Each student in the group interviews a specific community member (doctor, realtor, fireman, teacher, social worker, etc.) and then makes a podcast of the recording. The group listens to all the podcasts and creates a joint oral summary report as a podcast. Designed for ELLs who need to practice speaking and listening skills	The students in a group surf the web to find reports (media reports, descriptions, reviews, dictionary entries) written about a specific community member and what they do. Once finished, the group discusses the characteristics of online reports and writes an imaginary report about their community members. ELLs learn about and develop genre writing skills.
Groups 2a & 2b	Each student in the group reads through a webpage describing the characteristics of a community member (doctor, realtor, fireman, teacher, social worker, etc.). The group summarizes the findings of community member characteristics on a new webpage created by the group. Designed for ELLs who need to practice reading and writing skills	The students in a group surf the web to find narratives (biography, story, diary) written about a specific community member and what they do. Once finished, the group discuss the characteristics of online narratives and write an imaginary narrative about their community members. ELLs learn about and develop genre writing skills
Groups 3a & 3b	Each student in the group reads through a webpage describing the characteristics of a community member (doctor, realtor, fireman, teacher, social worker, etc.). The group summarizes the findings of community member characteristics and creates a joint oral summary report as a podcast. Designed for ELLs who need to practice reading and speaking skills	The students in a group surf the web to find non-narrative (essay, debate, speech, play) written about a specific community member and what they do. Once finished, the group discuss the characteristics of online non-narrative and write an imaginary non-narrative about their community members. ELLs learn about and develop genre writing skills
Groups 4a & 4b	Each student in the group interviews a specific community member (doctor, realtor, fireman, teacher, social worker, etc.) and then makes a podcast of the recording. Each member of the group then summarizes the interview on the podcasts' webpage. Designed for ELLs who need to practice speaking and writing skills	The students in a group surf the web to find expositories (talk, lecture, survey, press release) written about a specific community member and what they do. Once finished, the group discuss the characteristics of online expositories and write an imaginary expository about their community members. ELLs learn about and develop genre writing skills

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TABLE 3.2. Ar

Level	Mainstream activity tiered by process	ELL modifications by proficiency level	
O	Find images on the web for a particular community location and cut/paste them into a PowerPoint. Name the components of the community and add these to a PowerPoint page. On a PowerPoint page, insert links to websites that explain what the community in question does. Describe your community on a PowerPoint	Rather than finding images on the web, the teacher provides the ELL with a collection of pictures. The pictures have captions, which have been separated from the picture. The task for the ELL is to match the caption with the picture (bilingual dictionaries are used). Once completed the pictures are scanned and added to the PowerPoint	Pre-production
Φ	On a PowerPoint page, add links to websites that describe a particular community. Explain how this community differs across the United States. Add pictures of a single community that is visually represented in different ways (map, 3D, real picture) and explain what type of information each visual imparts.	The ELL works with native speakers in groups. Each member of the group takes on a particular role in order to finish the task. It is the ELL's job to formulate and add questions after each PowerPoint slide. Before doing so, the ELL completes an online grammar activity on question formation in English	Early production and speech emergent
⋖	Explain how a particular community differs from country to country. Add a new PowerPoint page that has "voices from the community." These can be audiofiles of different members within a particular community. Add a link to an online quiz on communities	At this level it is important for ELLs to be extended so that they can acquire CALP English related to each curriculum area. Have a native speaker put one writing prompt on each PowerPoint slide, the ELL is to write a short paragraph elaborating each prompt	Intermediate fluency

TABLE 3.3. A tiered lesson based on an IT product by learning preference

Learning preference	Activity	ESOL modification
Verbal-linguistic:	 create a PowerPoint story about community create a speech on a podcast explicating the merits of community 	 use an already created PowerPoint story, make a cloze text out of it, and have the ELL complete it have the ELL listen to 2 students' podcasts and answers questions on it orally through k7.net
Math-logical:	 create a storyboard on a webpage using an online graphic organizer on community design a puzzle game using an online exercise builder on community 	 for ELLs at levels 3 & 4 provide half the completed story using Protopage and get them to finish the rest for ELLs at levels 1 & 2 complete 3 student-created puzzle dames
Spatial:	design a website explicating the merits of community • create an interactive PowerPoint game on community	 use an online graphic organizer, review another student's website and graph the main points do 2 PowerPoint games created by other students
Bodily-kinesthetic:	 Bodily–kinesthetic: • use Movie Maker to create a news report on the merits of community • create, perform, and video a five-minute play on community and edit it through Movie Maker 	 listen to a student's news report and graph the main points on an online graphic organizer watch a student's movie and graph the main character points on an online graphic organizer
Musical:		 listen to 2 PowerPoint songs created by fellow students that have been edited into cloze texts and complete the songs while listening to them
Interpersonal:	 with a peer, video record a debate on your personal thoughts about community; once finished create a vidcast video an interview with a community member on community; once finished create a vidcast 	 watch a student debate and graph the main points on an online graphic organizer watch a student interview and graph the main points on an online graphic organizer
Intrapersonal:	 create a rubric to assess your own performance and k nowledge growth on the topic of community 	 using a PowerPoint create a journal in which you reflect on what you have learned in this topic; use key vocab
Naturalistic:	 identify a problem in the community and use an online survey tool to gauge community members' feelings about the issue 	 with a native speaker review the results of the survey and use an online graphic organizer to make sense of the main results

The basic content objective of the above lesson was: SWBAT identify and talk about aspects of their community.

numerous exercise building sites on the web, spend one period before the test in the school's computer lab. Ask students to go over their work and have each student create one review exercise. Some might choose to create a word/definition matching exercise, or a picture/true-false activity or a quiz (there are many exercise templates to choose from). When students are done, you can get the students to do another student's review exercise. By the time the class is over, you have a great collection of revision exercises (you may need to edit some for quality assurance purposes). But be clever! Organize your students! Rather than have them willy-nilly create review questions, have different groups of students focus on different parts of the unit or module of work. In this way, when finished, you have a sequenced set of online review activities, meaning that, even before the unit of work is finished, you can be directing your ELLs to online revision exercises even after the first introductory lesson.

Because the use of e-creation tools promotes interaction through all macroskills (listening, speaking, reading, writing) they offer the teacher the opportunity of becoming a substitute virtual teacher for ELLs

Example 3: As previously mentioned in this chapter, ITs can be used to capture any lesson that you give virtually. Of course, this is a great help to ELLs, as they often fail to comprehend all instruction during regular class time. You can't always spend your lunchtimes going over what you have just taught with students, even if some, such as your ELLs, need the extra help. In this chapter, we provided an example of how you can easily videotape your lesson, edit it through Movie Maker and upload it to your website, a social networking site such as www.ning.com (which is password protected), or, if you are not shy, a public site such as YouTube at http://youtube.com. Again, don't feel that you have to do all the editing. Pick some of your most techno-literate students and have them edit your lesson for you.

Example 4: At times, you may not feel that videotaping all your lessons is necessary. You may want to record only parts of a lesson. Using a small digital recorder (I bought mine for \$29 at BestBuy), you can audio-record important segments of the lesson for your ELLs and then serialize the recordings on a podcast site such as podomatic.com. Important segments of a lesson might include instructions and/or steps to do a project/experiment, main points of the day, a brainstorming session, a personalized explanation of a specific point/issue. We will let you be the judge of what is important. At the end of the day, you are well on your way to building a virtual collection of useable resources.

ELLs always need help in individual macroskills; each e-creation tool can be used to facilitate learning, through content, while focusing on a skill

Example 5: To foster an ELL's English language development it behooves us as teachers to have each ELL learn the subject matter of each of their classes through all four macroskills. Sometimes ELLs may become proficient in one or two macroskills but not the others. In other words, they may be able to listen and speak well but have poor reading and writing skills. ELLs need to become equally proficient in all macroskills in order to become successful at school. But, at times, ELLs are in content-area classes that emphasize one skill over the others. Have you ever been in a mathematics class where the teacher lectures and the students write? In this class, the skills of listening and writing are promoted to the detriment of speaking and reading skills. We are not saying that all classrooms are like this, but we need to keep a balance. ITs can help do this. For example, Movie Maker and podcasts are very much oral/aural ITs—they engage a person's listening and speaking skills—whereas PowerPoint, webpages, and exercise builders are primarily text-based

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ITs—they engage a person's reading and writing skills. If you find your lesson leans more toward text, then create IT resources (as described above) that focus on speaking and listening. On the other hand, if you give lessons that are very oral/aural, then craft IT materials that focus on reading and writing.

Lastly, don't feel daunted by what may seem a lot of extra work. Remember to take baby steps. Building an IT library of resources takes time. In addition, don't feel that you have to create these resources on your own. Use student helpers, let them become student-teacher for a day, create projects in which students construct IT resources which become future models for your ELLs (as above). Plan ahead; working with IT involves upfront planning; but, once you're in the classroom, let the students take on a more active role.

Conclusion

In this chapter we have reviewed the pedagogical benefits of using e-creative tools to help ELLs learn more efficiently. The ITs we have focused on are those with which you can generate new and novel resources specific to your own classroom. These have included webpage builders, PowerPoint, podcasts, exercise builders, and Movie Maker. We concluded the chapter by giving you some transferable ideas on how to use ITs in your classroom.

In the next chapter, we want to introduce you to IT tools that specifically promote communication: tools that encourage ELLs to speak. In doing so, we will be focusing on principle 3, "Give ELLs classroom time to use their English productively," drawn from our *five principles for creating effective second language learning environments*.

3.3 **Communicative- Facilitating E-tools**

Getting ELLs to Produce Language

Orientation

This chapter centers on software that allows teachers and students to promote various forms of interaction and output. Overall, use of the instructional technologies (ITs) highlighted in this section further underpins principle 3 drawn from our *five principles for creating effective second language learning environments*, namely "Give ELLs classroom time to use their English productively." The technologies discussed in this chapter emphasize interaction and opportunities to produce output. Interaction and output production opportunities can be framed as a means to create multiple teaching scenarios within the classroom. Highlighted ITs include, but are not limited to, asynchronous tools such as email, listservs, and discussion boards, as well as synchronous tools such as instant messaging, and Voice over Internet Protocols.

The highlighted technologies provide students with an opportunity to communicate using what has been described as "speak-writing" (Erben, 1999). Students perform tasks that are traditionally conducted by interacting or speaking with a partner using communicative facilitating e-tools that enhance their learning experience. They have the opportunity to read text-based messages and are able to compose, revise, and edit responses before sending these to their peers. This special characteristic of these modes of communication has been identified by Warschauer (2005) as especially beneficial for language learners.

Definition

Software that facilitates output and promotes interaction among students and teachers is placed under the category of communicative facilitating e-tools. The software in this category may be further divided into two types of tools, those that allow for communications to occur intermittently and those that can occur in real time. Communication that occurs with a time delay is

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labeled as asynchronous communication. Interaction that occurs in real time or without time delay is called synchronous communication. Examples of asynchronous technologies include email, text messages transmitted over cell phones, and discussion boards. Examples of online synchronous communication include telephone conversations, a board meeting, voice conferencing, video conferencing, and instant messaging.

Email

Email makes possible the exchange of electronic messages and computer files between computers. In the classroom, these exchanges can take place between teacher and student, student and teacher, student and student, or student and any outside classroom person, including a keypal. Keypal is the word coined for penpals who communicate using email; it is the digital equivalent of a penpal but email is used as the mode of interaction instead of the traditional paper and pencil letters that were once exchanged.

Teachers and students can obtain an email account from their school or through numerous free email service providers. Some of the most popular free email accounts include Yahoo email found at http://mail.yahoo.com, hotmail found at http://hotmail.com, and gmail found at http://mail.google.com. If you choose a free email account, talk to the media specialist at the school about the settings in order to protect the students from spam messages. Once the email account has been set up, teachers and students can begin the process of exchanging electronic messages.

Teaching Tip

Often free email services are prone to spam messages that can contain inappropriate material for children. You can use the spam filters options found in these email providers to prevent spam messages from appearing in your inbox. Another option is to find and use a child-friendly email that will perform the function of blocking inappropriate messages; these specialized emails include Zoobuh found at www.zoobuh.com/ and Kidmail found at www.kidmail.net, but they may incur a sign-up or a monthly fee.

Let's look at an example of using emails in the classroom: A ninth-grade English teacher instructs a lesson centering on folktales. In this class, there is a level 1 or preproduction ELL student and the teacher has only one computer in the classroom. The class reads a folktale and the ELL student is able to understand most of the folktale through picture labeling, vocabulary clustering activities, and vocabulary organizers, but is unable to participate in the discussion of the folktale because of language proficiency. Through the use of email, the ELL can retell the story in his/her home language and feel a part of the class. The ELL can be paired with a keypal that speaks his/her language and ideally also speaks English. In this situation, the learner is exposed to input in the target language and through this rich exposure is subconsciously acquiring language. At the preproduction level, the learner is able to comprehend much of the input but is unable to express his or her impressions of the story. Retelling the story in the home language empowers the student by making him or her feel part of the lesson because the student is able to recap all that was understood.

There are many websites that assist teachers in locating keypals. Many lists have been compiled and are ready for the teacher to just select the most appropriate keypal site for the student. Two such examples include: "Internet Keypal Exchanges" at www.cln.org/int_keypals.html (Figure 3.1) and www.kidscom.com/friends/keypal/keypal.html (Figure 3.2).

If these sites do not meet the needs of the teacher and ELLs, a quick search can reveal sites that assist teachers in pairing keypals from various languages. Be aware that the keypal may live in a place where the time zone is different and so we recommend that email be used because it is an asynchronous form of communication; the ELL can write the message during his or her school hours and the keypal can read the message during his or her own school hours. Although the teacher may not be able to understand the message written by the ELL if composed in his or her home language, it is one way to include ELLs in class activities. In order to further make the ELL responsible for the assignment, the teacher can ask the ELL to use the copy function of the email and copy the teacher on the message sent to the keypal. In this way the teacher can grade the student on accomplishment of the task rather than on language accuracy.

The same ninth-grade ELL can also be paired up with a buddy in the class. This buddy can email a summary of the story to the ELL student. The ELL can read the book with the class as well as reading the summary any time: after school, during reading time, or during bell work. At the very least, the emailed version of the folktale provides a platform from which the ELL can continuously review classroom material. In effect, the teacher has thus easily provided the ELL with several opportunities to receive variable English input as recommended by principle 1 of our *five principles for creating effective second language learning environments*, namely, "Give ELLs many opportunities to listen to and to read English expressed in a variety of ways."

Another example is the following: A grade 10 social studies teacher is teaching a lesson on Native Americans and has a level 2 ELL in the class. The ELL can communicate using basic inter-



FIGURE 3.1.



FIGURE 3.2.

personal communication skills (BICS) and has just enough language proficiency to be able to interview a Native American, but Native Americans are not readily accessible in the local community. The teacher searches the web and is able to locate several Native American organizations around the country with an email account.

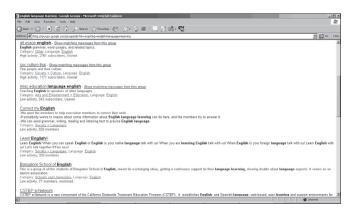
The ELL can use this opportunity to compose an email introducing himself or herself and then pose a few questions to representatives of the Native American organization. The ELL can focus on asking, who, when, where, and why questions in the written email. In other words, the activity becomes a practice in using interrogatives for the ELL.

Yet another example is a ninth-grade social studies class studying geography and natural wonders in their state. The teacher asks the class, including the level 3 ELL, to draft a letter of inquiry to a park ranger in the state where they reside. The students' task is to go online and find the contact details of a park ranger from one of the local state or national parks and draft the letter. Students are instructed to ask questions about the flora and fauna found in the state. Of course, the fastest way to receive a response to such a letter is to use email. Language professionals have historically recognized that language is best learned when it is used for meaningful and authentic communication purposes (Rodgers, 2001). Through this activity, ELLs are able to achieve authentic and meaningful communication with a purpose and a genuine audience.

Listservs

Listservs allows a group of people with a common interest to join and participate in an organized and moderated email discussion group. A listserv is created with readily available software programs. Once the listserv has been established, users send an email to the listserv address and all members of that list receive an email in their inbox.

There are two types of listservs teachers can use in the classroom: already existing and established listservs or listservs created by the teacher and students. To join an already existing group, a teacher can simply search the web using keywords such as listserv, email group, and the topic of interest. Yahoo (http://groups.yahoo.com/) and Google (http://groups.google.com/) both have a large quantity of already available and established listservs. A teacher can look at these sites for topics and ideas. These listservs or email groups can focus on practicing English or on a topic of interest such as astronomy. Some sample English language learning topics include English Grammar, Colloquial English, English Idioms, Varieties of English, Teaching English in the Classroom, Teaching English across the Curriculum. The list of possible topics is endless. A search in Google-Groups for "English Language Learning" revealed 71 such lists (Figure 3.3).



Teaching Tip

Listservs that can assist the teacher working with the ELLs include "Correct My English," "Learn English," and "Practice English."

"Correct My English" is a Google-Group that contains discussions about common English words, specific help on expressions, etc. In this group, members help non-native members to correct their work. Non-native English members can inquire about grammar, writing, reading, and listening. As of March 2008, this site had 676 members.

Together, a teacher and class can also create a personalized and even closed listserv or group email directory where the topic is determined by the group that creates the listserv. For example, suppose the teacher is conducting a grade 9 U.S. government class, specifically focusing on foreign policy. The teacher would like the students, including the ELL students, in class to have access to a government official whom they can ask questions. The U.S. Department of State has created such a listserv. Teacher and students visit www.state.gov/misc/echannels/66822.htm and follow the instructions to subscribe to the "Ask the Ambassador/Ask the State Department" listserv (Figure 3.4).

Members of the list will receive up to four messages per month on a variety of foreign policy topics. Webchat times are also announced on this listserv and students can pose questions to a U.S. Ambassador. ELL students will benefit from this activity because the messages will help them get background information on many current affairs events. Remember, ELLs do not necessary have the content knowledge background that we assume many of our American born students have, but we regularly assume this knowledge base. Providing ELLs with access to such sites as above helps to build an ELL's cultural knowledge of America. Furthermore, ELLs can plan and write questions for the discussion ahead of time. This activity is an example of differentiated learning. In other words, the ELL works collaboratively on a meaningful task, yet it is performed at the student's own level because the ELL has the time to plan, revise, and edit the text-based message before posting the message to the listsery.

Teaching Tip

It is always recommended that participants in a public listserv "lurk" before any posting on the listserv is made. Lurking involves reading the discussion messages without making a contribution until the "culture" of the group is determined and posting etiquette can be followed.

Discussion Boards

A discussion board is an online bulletin board; a communication tool whereby an individual, the teacher or the student, can "post" a comment on a virtual announcement/communiqué board. Other participants who are members of the discussion board can respond to the original "post." This collection of postings creates "threads" of discussion that can go on as long as the group continues to discuss this topic. In the sample screen shot (Figure 3.5), both "testing" and "test" are threads or main topics of discussion.



FIGURE 3.4.

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| Part | Color | Color
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FIGURE 3.5.

Like listservs, a teacher can search already existing discussion boards. However, a closed discussion board where only students in the class are participants might be the best option as these discussion boards are password-protected and are restricted to the teacher and students in the class. Teachers can find and create free discussion boards using programs services such as board-s2go (www.boards2go.com/). Boards2go is a password-protected site and teachers and students become members by selecting a username and a password. If the teacher is already using a virtual learning environment (VLE) such as blackboard (www.blackboard.com/), nicenet (www.nicenet. org/), or sakai (http://sakaiproject.org/), (s)he can use the discussion board function already present in many of these VLEs.

Given the fact that ELLs go through stages of *cultural adjustment* and often teachers do not have the time or the means to discuss these issues in the classroom, a discussion board might be the best place for an ELL student to voice his or her experiences. In this environment, students can talk about their feelings of cultural and linguistic identity loss. As the ELL goes through the stages of cultural adjustment, he or she can express his/her feelings in the discussion board.

The following is an example of the use of discussion boards in a grade 10 biology class that is discussing the topic of "conservation." The teacher asks the students to generate a rough estimate of their home energy consumption. Students are to calculate the energy consumption of each room based on common household devices. Students estimate energy consumption by adding the total wattage of all the electrical items in each room. For example, when calculating the energy consumption of the kitchen, students examine the wattage of the lights, oven, microwave, dishwasher, refrigerator, etc. The teacher creates forums for each room of the house. Students post their calculations for each room in that forum and begin a threaded discussion. In order to promote interaction and an authentic audience, other than the teacher, students are asked to view

each other's postings and make recommendations to their peers on how they can reduce their energy consumption.

This type of activity is especially beneficial for ELLs at the preproduction and speech emergence levels. Students are able to make reading and writing connections by reading their peers' postings, analyzing the postings, learning from them, copying structures of English used by other students, and then making their own recommendations. In addition, the ELL student can revisit the discussion and thus reread the postings and the comments as many times as needed before posting his or her comment.

Another benefit of discussion boards for all students is the promotion of the principle of *equality of participation*. In face-to-face discussions, frequently one student or a small group of students tends to dominate whole class interactions, but research has shown that, when students are placed in discussion boards to conduct similar interactions, participation is equalized and all students participate at a more equal rate (Belz, 2002).

Instant Messaging

Instant messaging (IM) is a text-based synchronous form of electronic communication. It requires two or more people to be online at the same time and these participants communicate via the instant messaging software. In most instant messaging software, the user has a window on the computer screen where an anticipated question, response, or comment can be typed before sending. This allows the user to edit the message before sending it to the user on the other end. In the sample screen shot (Figure 3.6), you can find a sent message and a message on the edit window. The message on the edit window can be edited, reordered, deleted, and revised before it is sent to the user on the other end.

A plethora of free instant messaging software is available for teachers and students. These packages include MSN messenger (http://webmessenger.msn.com/), Yahoo messenger (http://messenger.yahoo.com/webmessengerpromo.php), Miranda (www.miranda-im.org/), Google Talk (www.google.com/talk/), and ICQ (www.icq.com/download/, etc. These programs are downloaded to your computer and are password-protected and secure. Once the software is downloaded, the user then invites people to be part of his or her contact list. The user can then communicate with anyone on the contact list.

One example of how a teacher can use instant messaging (IM) in the classroom, especially a class with ELLs, is using IM within the framework of an information gap activity. Visualize an eighth-grade class working on the topic of oceans. A teacher would like the students to communicate, yet finds the students reticent to participate. The teacher has discovered that an information gap activity is a great way to get students to communicate. An information gap activity is played



out between two students; each student has slightly different information, but each needs the peer to solve, answer, and/or complete the task. The basis of an IM information gap activity can be a picture difference task. The important thing is that an information gap activity promotes interaction between any two students and for a participating ELL this is exceedingly significant; the ELL *must* actively participate and contribute meaningfully in order to complete the pair task.

In the above example, students are studying the oceans and the teacher gives half the students in the class Picture A (Figure 3.7), showing a map of the world with some of the oceans labeled. The other half of the students in the class receive picture B (Figure 3.8). Picture B includes the missing names of the oceans not found on student A's handout and empty spaces for the oceans that student A has on his sheet. In order to fill out the sheet, students must communicate with each other and at the same time learn about the various oceans. Of course, this type of activity can be carried out as a face-to-face task, but doing it through IM provides the ELL with a realistic opportunity to practice writing skills and to get immediate feedback. Additionally, in this type of activity a native speaker is more likely to help an ELL with grammar and/or vocabulary because both are focusing on written language use to get the task completed. Moreover, to complete the task the native speaker is motivated to avoid any communication breakdowns caused by an ELL with low proficiency, so will work harder to help the ELL communicate in ways that the native speaker can understand.

We have learned that students feel less nervous speaking a second language with their peers than in front of the class (Ellis, 2005). In this information gap activity, the ELL student can *speakwrite* his or her message.

Another advantage of this software is that one can "record" or archive the "conversation" that took place. The "conversation" can be saved as a text file that a teacher and a student can examine at a later time. For example, if a teacher saw that an ELL needed help with interrogatives, the activity above would be helpful because the ELL can use and practice asking and answering questions in a meaningful context in order to accomplish the task. Once completed, the teacher and the ELL student can review the transcript and examine the ELL's ability to ask and answer questions.

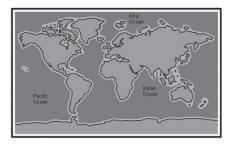
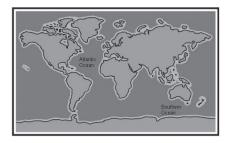


FIGURE 3.7.



Voice over Internet Protocol (VoIP)

Voice over Internet Protocol provides the capability for any computer to call and speak to a user utilizing another computer or landline telephone. Unlike the instant messaging software described above, this type of software is specifically designed to transmit voice and do so efficiently. VoIP is like using a regular phone except that it uses the internet to make the call. The biggest advantage of VoIP technology is that it is usually inexpensive and often even free. In addition, these technologies prepare the ELL to work with communication lacking visual clues such as when speaking via a telephone.

The most commonly used VoIP software includes Skype (www.skype.com/), Yahoo (http://messenger.yahoo.com), Google Talk (www.google.com/talk/), and Gizmo (www.gizmoproject.com/).

Most of these programs function in the same manner as the software described for instant messaging above, but, instead of sending a text message, users send a voice message. The user downloads the software, selects a username and a password, and, once the software is downloaded to the computer, can invite people to the user's contact list.

How to Use VoIP in the Classroom, Especially a Classroom that Contains ELLs

A Think, Pair, and Share (TPS) activity can easily be done in a VoIP setting. A grade 10 science teacher, using the class set of laptops, asks his/her students to brainstorm about endangered and extinct animals before beginning the lesson. First, in the think portion of the activity, the teacher asks his/her students to think about the two words *endangered* and *extinct*, and what these words mean to them. They are asked to list as many animals as possible under each category. Students then open up the VoIP and pair up virtually with a student using the software. They communicate with their partner the meaning of *endangered* and *extinct* in their own words and share their list



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of animals under each category. The last part of the TPS activity involves students sharing with the class what they have learned from each other. It is important that students rephrase what they have learned from their peer instead of repeating their own ideas, because this makes them accountable. In effect, they must take responsibility for listening to their peer when participating in the activity and for sharing their peer's thoughts with the class. Importantly, this activity provides ELLs with an opportunity to interact in English and in turn develop oral proficiency as recommended by principle 3 of our *five principles for creating effective second language learning environments*, namely "Give ELLs classroom time to use their English productively."

This activity is beneficial because all students must negotiate meaning. Students interact with each other and may encounter problems communicating, but, because they must complete a task, students will negotiate meaning until they reach mutual understanding. From a Vygotskian perspective, the students engage in dialogic interaction in order to reach intersubjectivity. In doing so, they open up their own zones of proximal development and are able to reach levels of self-regulation together as a pair which they might not have been able to reach on their own.

Activities conducted through VoIPs prepare an ELL to work with communication lacking visual clues, such as when speaking via a telephone. In these types of interactions, students are forced to give detailed descriptions, and ask questions when they don't understand. If ELLs practice these types of context-reduced interactions, for example communication lacking visual clues or context-embedded textual clues, they will be better able to comprehend context-reduced, abstract, and cognitively demanding spoken or written text when they come across it in the upper grades in school.

We have learned that it is important to help the ELL develop both basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP) with varying degrees of contextual support (Cummins, 1986). This VoIP activity is a low context-embedded and high cognitive-demanding activity, but Think, Pair, and Share activities enable a teacher to help an ELL practice CALP before performing the VoIP activity itself.

In this chapter, we have introduced you to the pedagogical potential of using e-communication tools to encourage your ELLs to use their English. Five ITs were highlighted. The following comprises transferable ideas that can be taken from this section and reshaped in your own classroom. Remember, take baby steps!

E-communication tools can serve as virtual exit cards

Example 1: A grade 11 mathematics teacher always has bell work for five minutes at the beginning of class. Having four ELLs, she always makes sure that they spend time to properly write down their homework so that they understand and that there are no problems afterwards. She gets frustrated when the next day the ELLs have failed to do their homework. Of course, there can be numerous reasons why a student has not done homework, but let's assume that all four ELLs are good hardworking students. One reason why they may not have done their homework is that they did not comprehend the lesson. High schoolers are under a lot of peer pressure, and ELLs are probably already reluctant to put up their hand in class for fear of being made fun of because of their English; they certainly won't want to put up their hand because they didn't understand something and be made to appear "dumb." One way ITs can help is by regularly using email. Try having bell work at the end of the class. Make it a routine for your ELLs to sit down at the computer before they leave class and write an email to you, the teacher. In the email have them write out what they learned and what they still don't understand. Treat it like an exit card. In this way, you are certain to discover what your ELLs have internalized and what aspects of your lesson you still need to revise. For the ELLs, an email exit card procedure will help them save face.

Just as the world is your oyster, so too is the local community your pearl. Enlist community members as classroom e-friends for your ELLs to contact

Example 2: ELLs may come from families where they are the first generation to go to school; they often do not have the luxury of going home and asking a parent to help them with their homework or with their overall studies. Even more proficient ELLs who can read and write English sometimes need help at home, but can't ask their parents because their parents may know no English. Lack of language and education are often two factors that seriously prevent ELL parents from becoming more involved in schools to the detriment of their children. To help alleviate this, at least in terms of school work, establish a network of community e-friends. This may comprise other students' grandparents, community leaders, local supporters, and sponsors of the school. Collect their email addresses and set them all up with instant messaging. Make the list available to your ELLs and tell them that people on the list are their extended circle of support so that, whenever the ELL needs help with homework or doesn't understand something, he/she has a group of e-friends to draw on to provide learning support. By using both email and instant messaging, an ELL can first of all see who is online at any given time and, second, decide whether the learning issue needs immediate attention, in which case instant messaging is better, or the answer can wait, in which case email is better. Last, using these types of asynchronous and synchronous communication e-tools helps an ELL focus on their writing output so that it will indirectly improve this skill.

Use listservs to differentiate homework given to ELLs

Example 3: Often a teacher hands out homework that is too complicated for an ELL to complete. The teacher doesn't have time to think through an alternative piece of homework that may be linguistically more level-appropriate. Let listservs function as a virtual place for surrogate homework. In other words, if you have found a listserv that closely matches the curriculum topic you are teaching, (1) have your ELLs read through the listserv discussion for that day, (2) get them to write down their observations about the postings, and (3) have them summarize the information for you in an email. You, or one of your fast-finishing students, can easily create an online activity in the next lesson using an exercise builder and have your ELLs complete the activity based on what they have gleaned from their listserv readings.

Use an instant messaging IT as an ELL confessional

Example 4: Many ELLs go through stages of cultural adjustment. There is the honeymoon stage, the hostility stage, the acceptance stage, and the home stage. While in the hostility stage some ELLs may go through a great amount of emotional and social upheaval. Sometimes this may have negative implications for classroom behavior; that is because ELLs often cannot verbalize what they are feeling, especially boys, and may externalize their frustrations in unacceptable ways. The best answer is to provide a release valve for your ELL. Each stage of cultural adjustment is different for every ELL. Sometimes a hostility stage may last a week, a month, or even a year. Whatever the length, lend your ELL a friendly ear. However, your ELL may not want to speak to you in public. Sometimes kids like to remain anonymous. One technique is to create a virtual confessional using instant messaging. Your class can enroll using a pseudonym. When they see you online, an ELL may be less reticent to speak with you virtually and share what they are feeling. Sometimes it only takes a few words of kindness and understanding to make an ELL feel welcome and included . . . words that may avoid an ELL engaging in negative behaviors in the classroom.

Conclusion

Email, discussion boards, listservs, instant messaging, and Voice over Internet Protocols are all technologies that can promote interaction and output. Not only are the use of these technologies within pedagogical tasks beneficial for the ELL, they can also benefit all students in the class. Studies (Warschauer, 1996) examining the use of computer-mediated communication (CMC) have shown that participation is equalized, that students participate more uniformly in discussion boards when compared to the traditional classrooms, and that these technologies allow ELLs time to plan and work on their language before posting or sending information to their peers. In the words of Warschauer (1997), they allow the ELL to epistemologically engage with their own language production in ways that make errors in their output more salient and thus open to feedback and correction. This touches on principle 4 of our *five principles for creating effective second language learning environments*, namely "Give ELLs opportunities to notice their errors and to correct their English."

3.4 Writing/Reading-Facilitative E-tools

Getting ELLs to Improve and Focus on Their Literacy Skills

Orientation

This chapter focuses on instructional technologies (ITs) that can be used to help ELLs improve their literacy skills. Literacy is commonly defined as "reading and writing at a level adequate for communication, or at a level that lets one understand and communicate ideas in a literate society, so as to take part in that society" (retrieved from http://en.wikipedia.org/wiki/Literacy). For school students, we also want to emphasize that literacy is all about learning academic language and becoming proficient in academic discourses. We thus want to re-refer to a previous definition for literacy used in Part 1 of this book because it is perhaps more closely attuned to schooling. Thus a student is literate if (s)he "can use reading, writing, speaking, listening and thinking to learn what they want/need to learn AND can communicate/demonstrate that learning to others who need/want to know" (Meltzer, 2001). Once again we want to stress our understanding of literacy as something that is dynamic, multidimensional, interrelated, and dialogic in nature.

Presently, literacy is the focus of nationwide efforts to raise learning achievement of K-12 children. It is seen as a crucial factor in increasing accessibility to education, retention rates in schools, and employment in the country. However, those sections of society who are most disadvantaged are usually the first to "fall through the cracks." Many ELLs across the country fail to reach age-appropriate literacy levels because school systems often fail to meet their educational needs. We have often heard questions such as: "How can a teacher concentrate on helping the one ELL in the classroom if there are 25 other English speaking, equally needy kids clamoring for help?" or "I don't know Spanish and my ELL doesn't know English; how can I teach them algebra?" This section attempts to make a small inroad into suggesting ways to help ELLs' literacy development through technology. By so doing, we hope to help ELLs raise their literacy levels and so provide them with a means to access their new country's institutions and to facilitate their participation in this country.

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This section illustrates the use of five writing/reading-facilitative e-tools such as writeboard, wikis, webquests, and e-books, to enhance an ELL's literacy skills. On the whole, we aim to realize the spirit of principle 1 of our *five principles for creating effective second language learning environments*, namely "Give ELLs many opportunities to read, to write, to listen to, and to discuss oral and written English texts expressed in a variety of ways."

Tools introduced in this section are defined below. Following these definitions, there are directions on how to best install these tools for use in the classroom. Finally, we provide some pedagogical suggestions for using technology to promote literacy in ELLs.

Writeboard

A process writing e-tool, such as Writeboard, is a web-based space that can be shared in collaborative projects, or edited by individual writers. Although each document can be saved, it is also possible to return to previous documents. This tool provides a space where ELLs can collaborate on the production of writing tasks. This permits the ELLs to feel comfortable sharing ideas, making writing mistakes, and editing their classmates' work. In keeping with the concept of differentiated learning, it is easy to organize writing projects with like-level or with multiple-level students. Early research into the use of technology (Chun, 1994) points to the fact that students who are hesitant to participate orally many times are active participants in online writing projects. Because process writing e-tools save different versions of the same document, ELLs can edit and re-edit their work without being concerned about losing their work. This function also allows users to evaluate or self-evaluate their own writing progress by looking back at previous versions of the same text. Collaboration and peer-revision is a further advantage that this tool fosters.

Teaching Tip

EFL Classroom Buzka at http://eflclassroom.buzka.com/Writing is an online resource primarily for English language teachers but content-area teachers will find many useful ideas here as well; it suggests ways of using process writing e-tools for working with ELLs.

The following section explains how to set up a process writing e-tool account with Writeboard at http://writeboard.com and use the tools it contains.

Create a *Writeboard* account. Use the process writing e-tool to create texts you want to share with others.

Use the *invite* people button to include your students or classmates onto the Writeboard. Add a list of people and send the invitation so they can collaborate on a writing project.





Once you and your students have finished the text, it can be exported as a .txt or html file. The text file will open with notepad and the html file will open with a web browser.



The following activity illustrates the use of Writeboard in a classroom situation. A tenth-grade language arts teacher wants her students to enroll in the school district's annual writing competition. The prize is a computer for the classroom. Students need to write a five-paragraph essay on the following topic: "In an age of global warming all schools should switch over to alternative energies." The teacher makes entering the competition a requirement that will attract a grade of 30 percent for the second quarter. Most students let out a collective moan, but the six ELLs in the classroom just think about the hours and hours it will take them to complete the essay. What makes this time novel for the students is that, rather than forcing the students to complete the essay in isolation, she announces that the class will collectively help everyone write the essay. What she does is:

- brainstorm with the class what alternative energies are, then she
- brainstorms the types of alternative energies available.
- Write students' answers on her computer, which was hooked into her LCD so that all students could see what she wrote on the whiteboard. Next she
- went over what a five-paragraph essay comprises. An example of a completed essay was projected onto the whiteboard. Following that she
- broke the class into pairs. They were asked to talk through what they would say in their essay. ELLs were paired with other ELLs and they were allowed to discuss their ideas for the essay in their first language.

After another 20 minutes, the lesson was nearly over, so the teacher showed the students what Writeboard was. That evening the paired students were to use writeboard to construct the introductory paragraph of their essay. The next day, some students said that they went through five or six iterations of the first paragraph, others said they went through more like 10–15 iterations. Students were amazed at how writing and discussing and re-editing their essay helped them become more acutely aware of how writing worked. The ELLs felt comfortable with what they wrote as well, first because it didn't take them as long as they thought it would and, second, because when one didn't know how to write something the other did. The back and forth helping that the ELLs did helped them to learn from each other as well. That lesson, the teacher had the students brainstorm what would go into their second paragraph. Over the next few days the students worked through the same process until the essay was done.

From that time on, all her ELLs asked the teacher if they could collaboratively construct their assignments through Writeboard.

Wikis

A wiki is a collaborative website that many people can work on or edit. This idea was originally conceptualized by Ward Cunningham in 1994; he named it *wiki*, which is a term meaning quick in Hawai'ian. The computer program allows users to access the original postings and add or change content. The original intention of this shared writing was to allow as many participants to contribute and make changes, therefore resulting in a webpage that could be constantly updated.

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It is the product of collective community involvement. Participation in a wiki is a good example of Vygotsky's (1978) zone of proximal development (ZPD) in action. Participants are socially mediated by others in a problem-solving situation. In this case, the problem would be the elaboration of one or more document(s) that informs others about a certain topic. Vygotsky (1978) highlighted the fact that the ZPD need not be a relationship between a novice and expert, but can be the relationship between like-level peers, who mediate each other. ELLs' use of a wiki fits nicely within this concept because, as they work together, their writing community is formed and the mediational process is enriched. In the end, knowledge is shared and collectively constructed.

Wikis have already been very successfully used in the K-12 classroom. Take, for example, the case of East Side Community School in Manhattan. There a teacher has created a site to which many students and teachers have contributed on many different subjects over a long period of time (http://schools.wikia.com/wiki/Main_Page). Another example of a classroom-based wiki is found at www.ahistoryteacher.com/~ahistory/apwhreview/index.php?title=Main_Page. Here, a teacher has constructed a class Holocaust wiki, and an advanced placement world history review.

Teaching Tip

ESL Writing Tech (http://eslwritingtech.wikidot.com/2006-latesol-cool-online-tools) lists resources for wikis, blogs and other tools for online teaching of ELLs.

This following section illustrates the procedure for creating a wiki space.

Choose a free wiki site. For example, you can use Wiki Spaces (www.wikispaces.com/) or any other wiki space you like. Create an account with the name of your wiki and your email.

Begin your new wiki by clicking on make a new space.

On the next page, name your new space by writing the name in the textbox. Then click on *create*. Remember to highlight the free button. To begin to enter text, click on *edit this page* on the left hand margin. You can make changes to your wiki by clicking on *manage this space*.

You can protect your wiki from participation by people who are not in your group by clicking on *members and permission*. You can invite new members by typing their email at the bottom of the page, and sending them the invitation. When other members of your group have joined, you can begin your collaborative writing venture.









This wiki allows group members to post edits to the original text, as well as join in the discussion about the text by using the *discussion* tab.



Wikis promote student-centered teaching in that students themselves have control over what is written and what stays on the wiki pages. Indeed, Richardson (2006) suggests that, the less control the teacher exerts, the more successful the wiki project is. Another advantage is the flexibility of wikis. Students can incorporate links to other websites or use pictures and other graphics to spruce up what they have written. This is clearly appealing to the digital generation, who are not used to seeing only words on a page. Garza and Hern (2006) suggest too that wikis make writing seem more of a process than a series of static drafts that are tweaked and twiddled. Finally, the negotiation involved in the collaboration on a wiki project necessarily helps students develop successful problem-solving skills. To facilitate this, many wikis offer an option called "Discussion" or "Comments" in which students can discuss issues with each other, give reasons for changes, and disagree with what someone else has written (Achterman, 2006). Again, as mentioned above, most wikis have a "History" option that, when clicked, shows what changes have been made, how often, and by whom. This is a very helpful diagnostic tool for the teacher since it shows who needs assistance.

Now look at an activity that illustrates the use of a wiki in a classroom activity. Even though the activity is a shared class activity, ELLs will profit from being involved because it is designed to help the ELL focus on academic language.

The teacher sets up a wiki for use as the class dictionary. This can consist of one page, or a series of pages. The vocabulary can be organized according to topic or, perhaps more easily, alphabetically. During lessons, the teacher highlights vocabulary items (words and phrases) that are important for students to learn. The class can decide as a group what elements need to be put into the dictionary, for example a definition of the word or phrase, a possible translation, an example sentence, information on pronunciation, and so forth. Students are put into small groups, and each group is assigned a period of time when they are responsible for adding class vocabulary to the wiki. The teacher can assign students tasks to be done with the help of the class dictionary, for example Write a story/paragraph using at least ten words from the class dictionary.

Another collaborative activity, though designed solely for ELLs, is one in which ELLs create a content-area grammar wiki. For example, the teacher sets up a wiki for use as the class grammar. This can consist of only one page, or probably better a series of pages, one for each topic. During the lesson, the teacher asks the ELLs to write down any grammatical construction (s)he uses that they are unfamiliar with. After a lesson, the teacher and ELLs sit down to look and learn about the particular grammatical constructions that the teacher used while speaking. The ELLs in groups are asked to create an entry in the wiki that will serve as a reference resource for the whole class. The class can decide as a group what elements need to be put into the grammar page, for example the form and use of the grammar point, examples of use, and so forth. ELLs or groups of students can be asked to add points to the grammar in future lessons, and the class as a whole can be asked to edit and revise it. The teacher can use the class grammar as a basis for pop quizzes, homework assignments, and so forth.

Blogs

Blogs are web logs or journals, posted to a website where they can be seen by anyone. Unlike a wiki, they cannot be edited, unless the owner activates the "comment" feature inviting responses from lectors. As a result, both previous postings and new comments are on the site. Originating in the mid-1990s, blogs were also known as online diaries. Blogger at http://blogger.com has features that let people post something to a blog through a call on their cell phones (Blogger Mobile) or through an email (Mail to Blogger). You can also call Blogger from your cell phone and leave a message. It will be posted to your blog as an MP3 audio file. This does not even require having an account. There are blog search engines and many different types of blogs are named for the way content is delivered such as:

- vlog—comprising videos;
- linklog—comprising links;
- sketchblog—comprising sketches;
- photoblog or photo logs (Flogs)—comprising photos.

Teaching Tip

Free blogging sites:

- www.livejournal.com
- http://wordpress.com
- http://blogsome.com
- http://spaces.msn.com
- http://360.yahoo.com
- http://blog.ning.com

Teaching Tip

"Suel's English Learning Blog" (http://suelenglishblog.blogspot.com/) is an example of a blog that an English teacher uses with his students.

This following section provides step-by step instructions for setting up a blog.

One blog site that is easy to use is *Blogger* at http://blogger.com. Begin by following the three steps that are shown on the home page: *create an account, name your blog, and choose a template.* If you already have an account, begin by clicking on *create a blog.* When you click on *create a blog,* you will be taken to a space where you need to follow the instructions to create and name a new space.



You will be asked to create a design for your blog. If you do not like the way it looks when you see it, you can change the design later. When you have chosen, you must click on *continue*. This image shows you that your blog has been created, and you can begin to post your ideas there.



Now look at the following activities to get a feel of how blogs can be used in the classroom to enhance ELL learning. Multiculturalism is a two-way street. In this educational use of blogs our aim is to show how to immerse ELLs into American culture through communication with native speakers as well as immerse American students in the culture of the class's ELLs through communication with representatives of their culture. Students will gain a deeper understanding of their own culture as well as the other language culture. The hope is that through this activity they will value and respect both cultures. Online collaborative learning has become popular. There are several websites and organizations that help teachers, schools, and individual students find partners in all parts the world. Some examples are www.globalschoolnet.org/pr, www.epals.com/search/maps/?id=homeegnmodule and www.ptpi.org/programs/SchoolProgramApplicationAction.do. Teachers can do searches on these websites to find a partner classroom in the country where the target language is spoken. This activity can be a semester-long project with different chains of activities. Basically, students are given topics to focus on, such as special holidays, activities, traditions and customs, and share their ideas and experiences. Let's examine an example activity:

- 1. After the partner classroom is found and students get to know each other, this activity can be used. The topic is how their native wedding traditions differ from the American traditions (can be British or any other country chosen).
- 2. Students form groups of three or four to search on the internet. They can gather information from the internet and library.
- 3. After drafting, editing, and peer-reviewing, groups present their findings on the class blog site. They can upload the pictures, video files, or audio files they have found. However, be cautious about copyright issues. If students are using their own family pictures, ask for parental approval.
- 4. The partner classroom follows the same steps. If they have their own class blog, they use that or they can post to your class blog if you allow them as participants.
- 5. When both classrooms are ready, students read each group's postings, provide feedback to each other, and ask questions. Provide some time, say one or two weeks, for communication among groups. ELLs are exposed to authentic cultural materials while English speaker students are exposed to a different culture.

Teaching Tip

You can have the ELLs create a bilingual or multilingual blog, depending on the number of language learners you have. Remember that literacy development in the ELLs' first language will contribute to successful literacy development in English.

Webquests

A webquest is a tool used to focus learners' attention on particular content and promote their inquiry through the World Wide Web. These activities can be carried out individually or in small groups, depending on the organization of the task. As the link to content information is provided by the creator of the activity, it permits students to access the content they need to complete the task without spending a lot of time searching. If necessary, links to content on the internet can be given to the learners instead of them searching for their own sites. In order to offer ELLs the possibility of accessing content information in their first language, both the links and webquest instructions can be provided in the learners' home language. Content-area teachers are constantly concerned with providing content-area information to the ELLs at an appropriate intellectual level, as well as in a language the ELL can understand. The use of webquests allows the ELL to access the information in their home language; the next step is for them to be in contact with the same content in English, therefore allowing them to begin to make the connections between languages through the use of content.

Webquests are predesigned activities for learners to use to answer questions about a specific topic. Most are designed to be group activities therefore enhancing interaction. Teachers can create webquests that are developmentally appropriate for their own students. In this case, technology can be used for students to manage student learning and strategy learning. Using a webquest, student research skills can be practiced through guided inquiry.

You can create a webquest on a webpage, in a PowerPoint, in a Word document, or even using one of many free and available online webquest makers. There are six or seven steps to create a webquest for your students' use:

- Title: You need to begin by creating a title for your webquest.
- *Introduction:* In the introduction, explain what the students will learn. Here you need to speak directly to the students about how the activity will be carried out.
- *Task*: In this section, you must outline the end result of completing the activity. You must describe their success in terms of problem solving, project design, or something they need to analyze and then describe. In short, here you will clearly explain how the learner will use the information to create something, or change something. In other words, you will present the big picture of the assignment.
- Process: In this section, you will describe the exact steps the learners need to go through to find the information to do the task. Here, you may want to include suggestions on how to present the information they gather.
- Evaluation: The evaluation section will give learners feedback on how successfully they completed the assigned task. It is important to state specific objectives and provide a scale for evaluating the task. You must also indicate whether or not the task will be evaluated individually or as a group.
- Conclusion: The conclusion describes what the students have learned through the successful completion of the task.
- Credits: In this section, you must list any electronic sites or books that you cited in the creation of the webquest.

As mentioned, webquests are an inquiry-based activity in which a teacher can direct students to prespecified websites. The benefit is that, if you want the class to do the same type of webquest, but you want to direct ELLs to different websites because of their language level, all you need to do is change the web addresses within the webquest.

Ideas to Transfer to Your Class

We started this chapter by highlighting the dynamic nature of literacy development. What the ITs introduced in this section do is reinforce this dynamism in a real way. A teacher is encouraged to use these ITs—writing process tools, wikis, blogs, and webquests—because by their very nature they encourage ELLs to work with language within content-area learning in very collaborative ways.

Teaching Tip

There are a number of webquest makers especially designed for teachers and students. Two user-friendly sites are Zunal (http://zunal.com) and Questgarden (http://guestgarden.com).

Teaching Tip

Bernie Dodge from San Diego State University is credited as the inventor of webquests. His site at http://webquest.org contains hundreds of useful links and additional pages to learn more about the use of webquests in a classroom. He has also a database of webquests across all curriculum areas and grade levels that a teacher would find helpful for their ELLs.

Focus, Focus, Focus

Example 1: In a dreary classroom, a teacher talks, shows, and the students listen and sometimes write. ELLs sit there, lost, and when the bell rings all the students leave none the wiser about what was taught. Of course, we are being cynical, but we want to draw a vivid comparison. A comparison between a not too often uncommon classroom occurrence and how engaging a classroom can be if it works together with a collaborative tool such as a wiki. For ELLs wikis mean engaging with an e-tool that helps them *focus* on how language works. In the following activity ELLs are engaged to create, reflect and change language.

For this activity, the teacher creates a number of wiki pages, each containing a link to a short video on YouTube, or another site. The videos can pertain to the topic of the week's lessons or they can be of general interest. The number of wiki pages will depend on the number of students in the class, the number of computers available, and whether the teacher wants the students to work individually or in small groups. Each computer shows a different wiki page with a link to a YouTube video. The individual students or groups of students at each computer watch the video and write a summary of the video. After a certain time depending on the length of the video and the level of the students, the teacher asks the students to move on to the next computer. There, they watch the video on that page and then edit and improve the summary written by the student or students who were previously at that computer. After a shorter time, again depending on the video and the students' level, they move to the next computer. If there is not enough time for students to complete the activity in class, it can be resumed in a later lesson. Each student or group of students can be made responsible for the final quality of the first video they watched.

Understanding and Taking Ownership of Collective Rules

Example 2: Inviting regular collective updates of classroom rules provides opportunities for the students in a class to take ownership of those rules, but, more importantly, helps ELLs understand them. Doing this on an interactive e-writing tool, such as a blog, even allows parents to participate. Look at the following activity.

Create a list of existing classroom rules. Create a blog that lists each rule. Invite comments on the blog. Invite individual students to check the comments daily and orally update the class on the progress. Have ELLs create a flyer in their home language for their parents about the classroom rules. Be sure to have a colleague who speaks the language check both the grammar and content before sending the flyer home to parents.

Conclusion

This chapter has discussed a variety of forums for improving literacy in ELLs. As the suggestions and tasks imply, improving second language literacy can be supported by using the students' first language as well as validating their cultural and ethnic background experiences. ELLs who are supported in their attempts to participate linguistically will more readily acquire their new language. All interaction with peers and teachers will provide multiple opportunities for interaction with the language in different ways.

In the next chapter, we want to introduce you to IT tools that specifically promote listening; tools that help you more appropriately promote your ELLs' comprehension of oral/aural language. In doing so, we will be focusing on principle 1, "Give ELLs many opportunities to read, to write, to listen to, and to discuss oral and written English texts expressed in a variety of ways," drawn from our five principles for creating effective second language learning environments.

3.5 **Listening- Facilitative E-tools**

Improving ELLs' Comprehension Skills

Orientation

It is important to introduce listening activities throughout an ELL's language development journey. Listening activities are especially beneficial during the early phase of language development. At the preproduction stage of language learning, an ELL's language skills are at the receptive level, during which (s)he enters a "silent period" of listening. ELLs at this stage are able to comprehend more English than they can produce. One of the more fundamental strategies to facilitate second language learning, and specifically listening ability, for ELLs is the use of a wide range of authentic language sources. Authentic materials are those designed for and by native speakers of the language. These materials expose students to real language used in context and to cultural information. In addition, these authentic materials motivate students and keep them on task (Peacock, 1997). Research has shown that learners who listen to authentic oral materials exhibit greater overall listening comprehension (Vandergrift, 2006).

In the past, a feature of part of teaching listening was to use professionally produced newscasts, radio, and/or TV programs. With new technologies such as podcasts, videocasts, audioblogs, iPods, and two-way synchronous video recording, students are now able to learn and manipulate language through the creation of their own video- and audocasting projects. Through the use of listening-facilitative e-tools, we can provide learners with an opportunity to listen to extensive English input. Teachers should look for podcasts that provide students with plenty of meaning-ful language, real-world communication, and access to learn new information that would satisfy principle 1 of our *five principles for creating effective second language learning environments*, namely "Give ELLs many opportunities to read, to write, to listen to, and to discuss oral and written English texts expressed in a variety of ways." Listening is an invaluable component in the process of developing successful academic literacy skills. No longer can we think of school

literacy as merely reading and writing. To be literally independent, ELLs need to develop means to successfully learn in a diverse range of content areas that have very particular ways of making meaning. In order to participate in such learning contexts where texts are constructed, ELLs need to join in ways that enable them to contribute to the evolution of knowledge by shaping what is learned and shared, or by challenging existing practices and developing new ways of using language in advanced literacy contexts (Colombi & Scheppegrell, 2002). Ultimately, listening is an active process wherein learners focus on certain features of the input and construct meaning; in other words, through active listening ELLs can begin to unpack and understand how the language of mathematics, the language of science, the language of social studies, the language of English, etc. is used in a classroom.

Specific e-tools discussed in this section are podcasts, vodcasts, audioblogs, and video listening libraries. Although podcasts were introduced in Chapter 3.2, they were described in terms of their pedagogically creative potential. In this chapter, we will be deconstructing podcasts for their listening potential.

Listening with Podcasts

A podcast is a digital file that is created and posted on the internet and can be played back on a mobile device or on a personal computer at a time convenient to the listener. The prefix pod comes from the expression "play on demand." Other digital files exist online, but there is a qualitative difference between podcasts and these other digital files. As mentioned in Chapter 3.2, podcast has the capability to be syndicated; in other words you can subscribe to a podcast and the subscriber will receive new content once it has been added and uploaded by the author or creator of the podcast. New content is typically added on a daily, weekly, or sometimes monthly basis. When you subscribe or download a podcast, you can listen to the program when, where, and how you want.

Teachers and students can subscribe to, download, and listen to existing podcasts. In addition, teachers and students can create podcasts of their own. There is a wealth of podcasts already online; some are specific to language learning and some are designed for native speaking audiences. The important point is that podcasts designed for native speaking audiences provide ELLs with unlimited opportunities to listen to authentic English used in a variety of ways! Podcasts designed for language learning include theme-based conversations, English language hints, grammar tips, culture, vocabulary, idioms, and everyday conversations. Podcasts for native speaking audiences include news, film reviews, education topics, science reports, documentaries, theatre, history, comedy, politics, sports, etc.

There are various ways to locate and download podcasts. The most popular way to subscribe to a podcast is to use iTunes. iTunes is an Apple software and it is not a web-based application. Users download the free iTunes software onto their computer, navigate to the iTunes store, click on podcasts, and then browse through the hundreds of podcasts available. See sample screen shot (Figure 3.10).

There are several web-based podcast directories where you can also search for podcasts. Some of the most common used dictionaries include Podcast directory (www.podcastdirectory.com/), Yahoo podcasts (http://podcasts.yahoo.com/), Podcast Alley (www.podcastalley.com/), Podcast. net (www.podcast.net/), Odeo (http://odeo.com/), and Podcast Pickle (www.podcastpickle. com/).

Already existing podcasts are excellent for English language learners at all levels of language learning. At the preproduction and early production levels, students need to be provided with the opportunity to receive meaningful and comprehensible input. Podcasts can assist teachers in

providing students with meaningful and understandable language. In addition, podcasts can be played as many times as needed. Teachers can search the web, podcasts directories, and iTunes for already existing podcasts that accomplish the goal of providing the ELL with language in context. For example, if you are a grade 10 agriscience teacher and you want your ELLs to become familiar with "agriculture-speak," then go and find a range of podcasts specifically dealing with agriculture. Give them the task of listening to one episode a day and note down new vocabulary that they hear. An online translator is only a click away—have them create a vocabulary journal. After only a few days, the ELLs can have a healthy list of the meanings of many agriculture-specific words that they have listened to in context. The next step is to have them try to use these new words in your classroom.

How to Use Podcasts for Listening in the Classroom

A tenth-grade English teacher would like to teach a lesson using the poem "The Road Not Taken" by Robert Frost. The teacher would like to present this poem to his/her class and (s)he would like to include technology. Numerous poem readings are available as podcasts. People around the world read these poems, record them as podcasts, and post them online to share. The web page "Great Books ~ A Chapter a Day" posts one poem each week; this resource can be found at www. greatbooksaudio.com/. Each poem on this site is accompanied by a short paragraph, the audio file, and a picture interpretation of the poem (see Figure 3.11 for an example). The paragraph and



FIGURE 3.10.

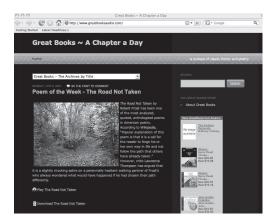


FIGURE 3.11.

the picture provided by the author of the above webpage can act as the warmup for this lesson. The ELL student can read the paragraph and look at the picture that depicts the poem prior to listening to the poem to access background knowledge. These prelistening activities will help the ELL student prepare for the poem, access previous knowledge that the student has on the topic, and help the student conjure up images in anticipation of the reading of the poem. In addition, the student can listen to the poem as many times as necessary or as desired. After listening to the poem, the class, including the ELL, can engage in a literary analysis. Students form a thesis in relation to the poem and explain and defend their thesis.

In addition to authentic podcasts, there are a plethora of podcasts that focus specifically on language learning. Teachers and students can search the web, the podcasts directories, or iTunes to find podcasts designed specifically for language learning.

One such site is www.eslpod.com/website/index.php. On this site, podcasts are designed especially for language learning and teaching and use strategies that assist in building listening skills as well as overall language learning. The author of these podcasts takes a topics approach to language learning. English language learners listen to communicative interactions with a real-life application such as shopping for furniture, discussion on Bigfoot, describing distances and giving directions, formatting a document, etc.

Teaching Tip

A word of caution: Many language learning podcasts are created by people around the world who may not specialize in language learning and thus may not apply the principles of best pedagogical practices in the making of these podcasts. Teachers should look for podcasts that provide students with plenty of input, meaningful language, real-world communication, and access to learn new information.

Vodcasts

A vodcast is similar to a podcast but, instead of only audio, a vodcast contains video. Vod is an acronym for "video on demand." The vodcast is comparable to the podcast, in the manner that it is posted on the internet and can be played back either on a mobile device or on a personal computer. This benefit is especially significant for the ELL student because (s)he can connect visuals to the audio.

News Vodcasts

Most news agencies have "gone digital" and now post special stories or news summaries as vod-casts. These news vodcasts can be used to enhance the teaching of various subjects in the class, but they are especially applicable to history courses. Beside the obvious, listening to news vodcasts allows ELLs to become familiar with the genre of reporting and the specialized ways in which language is used within this genre. A quick search of the internet reveals that most major news networks provide their audience with free news vodcasts on their web pages. Some of these are ABC news (http://abcnews.go.com/Technology/Podcasting/), CBS news (www.cbsnews.com/), CNN (www.cnn.com/services/podcasting/), and NBC (www.msnbc.msn.com/id/8132577/).

How to Use Vodcasts for Listening in the Classroom

Becoming familiar with academic discourse requires ELLs to learn about the way complex grammar structures are used. The language of comparing and contrasting, for example, is utilized in many content areas in schools. In order to learn the grammatical structures used to express comparing and contrasting, or any other discourse structure (such as analyzing, drawing conclusions, expressing opinions, listing, describing sequences, etc.), think about the way in which vodcasts can be pedagogically used. For example, let's look at how one can help ELLs learn the language of comparing and contrasting. First, find a news vodcast that reports on a topic in which something is being compared (when we went online, we found ample vodcast reports comparing the policies of the Democratic presidential candidates—this would fit nicely into a social studies lesson). Once you have found one, go and find another vodcast on the same topic delivered by a different news network. In this activity students listen to and discuss the language of comparing and contrasting within both news vodcasts as well as finding and discussing the similarities and differences in content presented in both vodcasts.

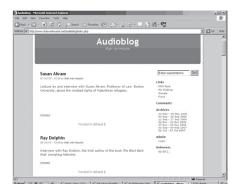
The lesson unfolds in the following way: The teacher divides the class into pairs, ensuring all ELLs are paired with native speakers. (S)he asks students to listen and watch two different vodcasts covering similar content and paying attention to the vocabulary and structures used including adjectives to describe the event. The teacher asks students to categorize the similarities and differences of vocabulary and structures using a Venn diagram. Invite students to present these diagrams to the class.

As an extension of this activity, the teacher asks the students to create a "headline news" story from their community. Students work with the media specialist in the school and create a vodcast of their own using the same vocabulary and language structures they have been practicing. The beauty of this type of activity is that, not only do students have opportunity to discuss, learn, and reflect on academic discourse, but they do so while learning content.

Audioblogs

Audioblogs successfully combine blog and audio file technology. Users can post audio files online, instead of or in addition to text files, and share these files with an audience. The entries are catalogued by date and time and are stored as an audio portfolio.

Audioblog services include www.audioblog.com/ and www.audioblogger.com/. Audioblogs are an excellent place for students to post their opinions and ideas. Figure 3.12 contains a sample audio blog. The author of this audioblog conducts interviews and posts these interviews on his audioblog.



How to Use Audioblogs for Listening in the Classroom

Look at the following example: A teacher would like to conduct a debate with her students in class. In preparation for the debate, students are asked to practice stating and defending their opinion using an audioblog. Students select a relevant topic. We had fun brainstorming the following suggestions, but use your imagination; we are sure you can come up with debating ideas specific for your class.

- Language Arts/English: students should wear uniforms, youths who commit crimes should be treated as adults, the death penalty should be abolished or kept, school personnel can conduct locker searches at any time, etc.
- *Science*: the government shouldn't interfere in scientific research, global warming is happening now, we are wasting our water resources, etc.
- *Social Studies:* the next president will stop the war in Iraq, the war on terrorism has eroded our civil liberties, give undocumented workers citizenship, etc.
- *Mathematics*: to run a household one needs to be a good mathematician, once I leave school I'll never need calculus, algebra is more important than geometry, etc.
- Music: Beethoven was an eighteenth-century rock star, music is the soul of humankind, contemporary subculture music is just as important as classical music, etc.
- Health and PE: parenting needs to be a compulsory course in high school to bring down divorce rates, schools spend too much energy prioritizing sports over academics, female and male students should be separated during sex education classes, etc.

Students prepare audio files that they post on their audioblogs. The audioblog is then shared with their peers in anticipation for the in-class debate.

The ELLs in this class benefit from this audioblog activity because they have the opportunity to practice and create multiple recordings before posting their recording. In addition, by listening to their peers' audioblogs, ELLs can use these samples as a model.

Video Sharing Libraries

In the last couple of years, several video sharing libraries have appeared on the internet. These video libraries contain short video clips uploaded and posted by viewers. Often viewers rate the videos and videos are categorized by most popular, most viewed, etc., typically using a star system. A word of caution: Although you can find excellent resources, many videos also contain inappropriate material. It is recommended that, if videos will be used, the teacher search for a specific video and provide the student with the video or the specific link.

Some of the most popular video libraries are http://video.yahoo.com/, www.youtube.com/, www.aolvideoblog.com/, and www.metacafe.com/. All of these video libraries have a search capability. The user enters a topic such as "rain forest" and several videos on rain forests will be available.

Teaching Tip

Video sharing libraries can contain inappropriate material. Teachers may want to direct students to previously screened videos or use a webquest to guide students to view particular videos and not others.

In this section, we have given you a way forward to think about ITs as listening-facilitative e-tools. What is there to transfer to your own lessons? What about the following?

An episode a day keeps the listening police at bay

Example 1: A journalist teacher works in an inner-city high school and has a high proportion of ELLs. All the ELLs are at different levels. The teacher is often struggling to reach all his students; in fact, he knows that he isn't reaching them all and it frustrates him terribly. Because of this, he feels many of his ELLs leave his lesson every day without really comprehending the main points of the lesson. After attending a workshop on podcasts, he is amazed to find so many different types of podcasts available through the web. He decides to use this fact to his advantage. During summer break, he searches as many podcast browsers as he can and compiles a list of serialized podcasts that precisely deal with, or are examples of, the topics he teaches throughout the semester. Consistent with his aim of helping his ELLs to better understand his lessons, he also creates exercises to accompany each podcast. These exercises vary from quizzing the ELLs on the content they heard in the podcast, through vocabulary exercises based on words used in the podcasts, to exercises that would help his ELLs with specialized grammatical structures. All of the exercises are created on an online exercise builder. When the new academic year begins, he has a compilation of serialized podcasts all related to topics in his class. Depending on the ELL's level, he has each ELL listen to a specific podcast every day and complete the accompanying exercise. Sometimes he has all ELLs listen to the same podcasts and then discuss them in class. By the end of the semester, all ELLs have not only learned more about journalism, but become much more proactive listeners.

A personalized listening library bank can supply your ELLs with opportunities to listen to exponentially more types of Englishes, more genres of language use, and more topics related to your content-area than you, as a teacher, have the ability to cover in your class

Example 2: Similar to the activity above, the suggestion made here for you is to advance your ELLs' listening comprehension skills by having your ELLs actively use the resources put together in a listening library that you have created. Remember, good listening is not achieved through listening alone. No one can just sit and watch Russian TV for a year and after a year understand and speak Russian fluently. Engaging with others about the piece you have listened to and thinking about it all must accompany the listening activity. Remember that a listening library is a collection of short online videos. YouTube is a well known listening library. How is such a library made? First of all, you need to create a platform to park all your listening files on (keep in mind that, when you access a video, say on YouTube, it has a URL address, a weblink. So whenever you want to see it again, use the video's www address rather than going to the homepage of, say, YouTube and doing a search). The platform can be your own webpage, a class virtual teaching environment (see Chapter 3.7) such as Ning at http://ning.com, or an e-portfolio site (see Chapter 3.6) such as Protopage at http://protopage.com. We prefer creating a webpage such as on googlepages. Once you have created the website as a platform, you can list as many topics within your subject area as you wish. Under each topic you can now add a link to associated online videos. Annotate them if you wish as well! Before you know it, you will have created a whole collection of subject-related video links for your students to look at. For your ELLs, this means that they now have access to a

full range of videos to listen to, all related to your subject area. More importantly, the videos you collate together will undoubtedly represent a wide range of genres. Guide your ELLs to become more proactive listeners: using two of Ragan's (2005) three questions as a guide (see Chapter 1.4), have your ELLs ask themselves:

- What do you know after listening to the video?
- What language in the video is difficult for you to understand?

In class, talk about their answers and, once you have unpacked both content and language of the video and the ELLs understand, use a digital camera and MovieMaker to get your ELLs to create a similar video. In this way, they not only proactively listen to the video, but use what they have learned to create something new.

Expand your knowledge of the discourse features of your contentarea

Example 3: Many teachers, because they see themselves as content-area teachers, have never seriously reflected on the language of their content area. Are you one of them? No matter. With listening-facilitative e-tools you now have the opportunity to improve your understanding of how discourse works in your content area. By improving your own knowledge of how language works, what the specialized and non-specialized academic vocabulary of your area is, and what functions of academic language are predominantly utilized, you will be better equipped to help your ELLs develop the same knowledge of academic language and help them improve their overall academic literacy skills as well. Try the above activities for starters. Use Ragan's (2005) three questions as guides to help you unravel the nature of academic discourse in your content area. Finally, use a digital recorder, find a colleague in the same field and record him or her when teaching. Make a podcast out of it and study the language patterns used. Record other colleagues if you like! Why not serialize it and call it "Listening to and Unpacking Academic Discourse in My Content-Area"?

Improve academic literacy skills through practicing focused listening

Example 4: In Chapter 1.4, we introduced you to Cummins' Quadrants. For ELLs this is a useful pedagogical heuristic to use to help any teacher scaffold their activities from being context-embedded to context-reduced and from being cognitively undemanding to cognitively demanding. In the same way, scaffold listening activities for your ELLs. As in the example above, use some type of online platform to host the audio files and/or links to audio files, podcasts, and videos you find. Next, find e-listening resources that are relatively easy and embedded in content that you have already taught. We would start off with videos, since the visual element that a video has helps scaffold an ELL's listening efforts. For the next level of e-listening resources, find equally easy but visually absent files such as audio podcasts. Next (fitting in Cummins' Quadrant 3), find e-listening resources such as videos that are cognitively more demanding than the first lot of videos you found. Last, find cognitively more demanding audio podcasts. By scaffolding your e-listening resources as above and arranging them according to content topic, you use this IT focused-listening technique to improve your ELL's listening skills, so that, when they engage in more cognitively more demanding listening in your classroom, they won't necessarily switch off.

Conclusion

In this chapter we have reviewed the pedagogical benefits of using e-listening tools to help ELLs learn more efficiently. These have included podcasts, vodcasts, audioblogs, and video libraries. We concluded the section by giving you some transferable ideas on how to use ITs in your classroom.

In the next chapter, we want to introduce you to IT tools that specifically promote assessment; tools that help you more appropriately assess the language and content knowledge development of your ELLs. In doing so, we will be focusing on principle 4 "Give ELLs opportunities to notice their errors and to correct their English" drawn from our *five principles for creating effective second language learning environments*.

3.6 **E-assessments**Portfolios, Quizzes, and Rubrics

Orientation

As teachers, we all know that assessment is important. Summative or formative assessment, criterion or normative referenced, traditional assessment or alternative assessment, or what about performance-based assessment, authentic assessment and self-assessment? Even computer-based testing or adaptive testing as well as achievement testing, diagnostic testing, and dynamic assessment are all worthy of mention here. But what do they mean? For the most part, assessments are given to measure students' learning performances and tests are the instruments through which this is accomplished (Bachman, 1990).¹ Assessment is all about giving teachers, parents, and students valuable feedback about a student's progress as well as a means for a teacher to evaluate his/her own instructional effectiveness. During the era of No Child Left Behind, tests have taken on a high-stakes quality: a level of accountability that has been unparalleled in the history of education in this country. Yet during this same period there has also been an explosion of alternative ways in which teachers have carried out assessment on their students.

The aim of this section is not to endorse one means of testing over another, but to look more closely at assessment strategies for ELLs, illustrate how ITs can support such strategies and how online assessment techniques can sustain equitable ways to evaluate the learning progress of ELLs in the classroom. With this in mind, we draw on principle 4, "Give ELLs opportunities to notice their errors and to correct their English," drawn from our *five principles for creating effective second language learning environments*.

Leveling the Playing Field: Assessment Strategies for ELLs

Mihai and Pappamihiel (2008) ask, "Would you give a blind student a written test?" Naturally the answer would be a resounding "No." However, the authors of this book *have* personally experi-

enced a teacher giving a non-verbal ELL special needs child a verbal language test just because the school county required it! A valid alternative test would have been to give the same child a comprehension test. So what do teachers need to be aware of when assessing ELLs and how can situations like that described above be avoided?

The first step is to acknowledge that *equal* does not mean *equitable* in terms of assessment. This argument is a cornerstone rationale for advocates of alternative assessment techniques, a point we shall return to later. So what makes an ELL different so that assessment procedures need to be modified to level the playing field?

The answer is language ability and cultural background.

Mihai and Pappamihiel (2008) explain how assessments for ELLs are only good if they are valid, reliable, considerate of an ELL's language level, feasible and take into consideration washback. For now, let's look at the term *validity*. "Validity is the extent to which a test score . . . is actually a true reflection of a person's level of skill in performing a specified behavior" (p. 255); for example, if a mathematics teacher were to give his/her heterogeneous class, a class that includes ELLs, a unit algebra test, and the test comprised many math word problems. Giving such a test to a preproduction or early production ELL would not be valid because the ELL would have comprehension difficulty with the language. Thus, whether the ELL understood the algebraic formula or not, the ELL would be impeded from showing this on the test because of the language stumbling block.

Reliability is all about the ability of a test to provide the same result upon repeated administrations. However, what happens if over the summer an ELL has not used their English for three months? Given in September the same assessment if previously given in May would not be reliable. Again language is the stumbling block. Numerous studies have found significant links between an ELL's language ability and performance in content-area tests. For example, Abedi, Lord, and Plummer (1997) found that ELLs performed significantly lower on test items with longer wordcounts regardless of the content difficulty of the item. In addition, ELLs who were able to read through linguistically modified test items performed significantly better, as did ELLs who were able to complete the test in their home language. In a 2002 study, Abedi looked at the effectiveness and validity of using accommodations in tests for ELLs. His main question was whether or not accommodations provide an unfair advantage to the ELL. In other words, does the test become invalid? The jury is still out on this one. In other words, Abedi's results were inconclusive, but Abedi does suggest the following:

- 1. that new and more innovative assessment techniques be developed to more fairly represent what an ELL has learned;
- 2. that translating test items into an ELL may not automatically be an effective accommodation, especially in a context in which the ELL has learned the concept to be tested through English, or the ELL is not literate in the home language; in other words, the language medium used in any assessment should match the language medium used for instruction;
- that ELL background variables are strong indicators of achievement; for example, whether
 an ELL is a refugee with only limited formal schooling experience or a second generation
 American will make a significant difference in terms of test results;
- 4. that modifying language to reduce language complexity helps to narrow the performance gap between ELLs and native speakers of English.

Last, in a comparison of accommodation types, Abedi (2002) found that between no accommodations, modified English, using glossaries, extra time, and using glossaries plus extra time, "extra time and using glossaries" were the most effective assessment accommodations for ELLs.

Of course other accommodation types exist and should also be considered by the teacher. For example, Butler and Stevens (1997) list two sets of possible accommodations for ELLs: modi-

fications of the test and modifications of the test procedure. Modifications of the test include assessment in the native language, text changes in vocabulary, making accommodations to the linguistic complexity, using visuals, using glossaries (either in English or in the home language), linguistically modifying the test directions, and providing additional example items. On the other hand, Butler and Stevens propose the following modifications to the actual test procedure: extra time, breaks during the test, administrations of test in several sessions, oral directions in the home language, use of dictionaries, separate room administrations, reading aloud of test items in English, oral explanations of test items.

Again, getting back to the notion that "not one size fits all," much debate has occurred around the advantages of using alternative methods of assessing students. Especially in a context where

Implications for the Classroom

Assessing ELLs is sometimes not as easy as just deciding on a suitable test and administrating it. Throughout the United States, well defined state requirements mandate how ELLs are to be tested and how teachers are accountable. This is especially important in terms of identification and high-stakes testing procedures. For a listing of some state requirements see:

- California: www.cde.ca.gov/ta/cr/el/
- Florida: www.fldoe.org/aala/
- lowa: www.iowa.gov/educate/content/view/683/657/1/1/
- New York: www.emsc.nysed.gov/osa/nyseslat/nclbmemo8-4-06.htm
- Texas: www.tea.state.tx.us/student.assessment/admin/rpte/index.html
- Wisconsin: at http://dpi.state.wi.us/oea/ells.html

For a national perspective of states' assessment strategies for ELLs, see Rivera and Collum (2006).

teachers have gone out of their way to implement process-oriented curricula because as teachers we readily accept the notion that everyone has different learning styles (Gardner, 1993), why wouldn't we assess in ways that capture the unique abilities of each individual student in our classroom—ELLs included? On this point Moya and O'Malley (1994) add that

proponents of process-oriented curricula and instruction concur that traditional assessment techniques are often incongruent with current ESL classroom practices. Standardized testing is seen as particularly antithetical to process learning and has been attacked vigorously not only in ESL, but throughout the field of education. Because of the incompatibility of process learning and product assessment and the discrepancy between the information needed and the information derived through standardized testing, educators have begun to explore alternative forms of student assessment.

So, if we think of tests as standardized instruments conforming to measures of reliability and validity, in which students are usually accorded a numeric value for their learning achievement, we are talking about tests in quantitative terms. However, if as teachers we are more concerned with detailed descriptions of performance, we are talking about tests in qualitative terms. The latter can be more subjective but, as Black and William (1998) found, qualitative, performance-based assessment can provide holistic ways to measure a student's learning. Valdez Pierce (2002) indicates that well constructed performance assessments are more likely than traditional types of

assessments to provide comprehensible input to the student, use meaningful, context-embedded tasks through hands-on or collaborative activities, show what students can do through a variety of assessment tasks, support the language and cognitive needs of ELLs, allow for flexibility in meeting individual needs, provide feedback to students on strengths and weaknesses, generate descriptive information that can guide instruction, and provide information for teaching and learning that results in improved student performance.

Performance-Based Assessments

There are basically three types of performance-based assessments: performances, portfolios, and projects. The biggest difference between these types of assessment and standardized assessment is the idea that with performance-based assessment the student produces evidence of accomplishment of curricula objectives and this very evidence, which can be packaged in the form of a performance, project, or portfolio, can be archived and used at a later date with other pieces of learning evidence as a compilation of proof to demonstrate achievement. Such notions fit very well with the teaching tip below, but also with the philosophy behind Vygotsky's sociocultural theory, DI, PBL, and CP (see Chapters 2.1 and 2.2).

Performances, as the name suggests, refer to learning products that are performed, orally and/ or aurally presented, carried out, or recited. Let's see what these may be and how technology

Teaching Tip

The Center for Excellence of Learning and Teaching (SUNY) at www.celt.sunysb. edu/ell/tips.php#Strategy_11_ offers 12 strategies to help with teaching ELLs across the curriculum. Strategy #11 concerns recommendations for ELL assignments, assessments and testing. These include:

- Continually monitor an ELL's progress. Formal and informal assessment are necessary to see whether students show comprehension of the material being taught.
- 2. Vary the levels of the questions being asked according to the students' current level of speech production.
- Provide as many opportunities as possible for ELL students to demonstrate their skills and knowledge in different ways.

can actualize such performances; they include documentary reports and orally presented projects that are video recorded (use of Movie Maker) or aurally performed (use of podcasts), games that are created and then played and/or acted out (use of a recording device such as a digital video recorder and then posted on a classroom website, or use of an e-creation tool such as quia.com or secondlife.com), musical performances (recorded on a digital video and uploaded to an e-portfolio for archiving), plays, sports theater, dramatized stories, pantomime, poetry recital, puppet show, and dance productions (all electronically recorded and uploaded to a classroom website for future viewing, to an e-portfolio for archiving, or to a virtual learning environment such as nicenet. org or ning.com), and class demonstration (photographed with a digital camera and then using the still photographs made into a slideshow or a Jeopardy game on PowerPoint, or uploaded as a vidcast or made into a game using http://hotpot.uvic.ca/).

What project-based learning is has been explained in Chapter 2.2. Suffice to say that proj-

ects are learning experiences that usually transcend a solitary lesson and are completed over an extended amount of time. Examples include experiments, art work, research, inventions, journaling, model construction, and storyboarding, to name but a few. More importantly, both performance and project-based work lend themselves to tiering as advocated within the parameters of differentiated instruction. This means that ELLs can work at their immediate level of language ability, yet be pressed to use and learn language in ways that facilitate second language acquisition. We are reminded here of all five of our *principles for creating effective second language learning environments*:

- 1. Give ELLs many opportunities to read, to write, to listen to, and to discuss oral and written English texts expressed in a variety of ways.
- 2. Draw attention to patterns of English language structure.
- 3. Give ELLs classroom time to use their English productively.
- 4. Give ELLs opportunities to notice their errors and to correct their English.
- 5. Construct activities that maximize opportunities for ELLs to interact with others in English.

Through the very nature of performance and projects, ELLs can develop a rich repertoire of formulaic expressions and rule-based competence, they have learning space to use their "built-in syllabus," they have opportunity to interact and use English in a variety of ways, and they have pedagogical space for a teacher to assess free as well as controlled elicitations of English.

Portfolios can be used as an illustration of students' work, though Moya and O'Malley (1994) add that in order to be effective in a classroom every portfolio needs to accommodate informational needs and assessment requirements. On this point they say:

A portfolio used for educational assessment must offer more than a showcase for student products; it must be the product of a complete assessment procedure that has been systematically planned, implemented, and evaluated. The Portfolio Assessment Model . . . distinguishes clearly between portfolios and portfolio assessment. A portfolio is a collection of a student's work, experiences, exhibitions, self-ratings (i.e., data), whereas portfolio assessment is the procedure used to plan, collect, and analyze the multiple sources of data maintained in the portfolio. A portfolio that is based on a systematic assessment procedure can provide accurate information about the depth and breadth of a student's capabilities in many domains of learning.

Teaching Tip

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Moya, S. S. and O'Malley, M. J. (1994), retrieved on October 9, 2007, from www. ncela.gwu.edu/pubs/jeilms/vol13/portfo13.htm, provides a great account of how to use portfolios for assessment purposes by overviewing the Portfolio Assessment Model. It includes six levels of assessment activities: (a) identify a purpose and focus for the portfolio; (b) plan portfolio content; (c) design a portfolio analysis procedure; (d) platform for the portfolio's instructional effect; (e) identify procedures to verify portfolio content; (f) implement the model.

Using Technology and Multimedia to Assess ELLs

In the following sections, four technologies will be introduced that can be used to facilitate a performance-based assessment model such as that described by Moya and O'Malley above. What ensues is a description of how to create e-portfolios, e-surveys, e-rubrics, and an e-grading instrument.

E-portfolios

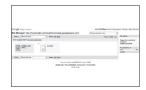
There are numerous free and commercial options to choose from when trying to find a suitable e-portfolio site. We have chosen two sites: Google because it is well-known and free and gives the user three e-portfolio options to choose from; and Protopage because it is also a free webpage space that enables a user to upload audio and video podcasts, blogs, sticky notes, widgets, images, and links to social network sites such as ning (see the section on Virtual Learning Environments). The three e-portfolio options provided by Google are the creation of a website (online website builder: see http://eportfolios.googlepages.com/home), the creation of a web document (an online word processor: see http://docs.google.com/View?docid=dd76m5s2_0fj4h9), and the creation of a web presentation (online interactive PowerPoint builder: see http://docs.google.com/TeamPres ent?fs=true&docid=dd76m5s2_51d4n4v4).

We have chosen to discuss the use of an e-portfolio through Google Pages, the online webpage builder option as well as the creation of a webpage through Protopage (www.protopage.com/).

Go to Google.com and create an account. Do this by signing in (top left corner) and follow the prompts—click on "Create an account now." Once you have done this, you can sign into Google. In the top left hand corner, you will see "My Account"; click on this to view your Google options.

You will see "page creator." Use this to start making your Google web pages. Go to http://eportfolios.googlepages. com/howto for a clear explanation and example on building an e-portfolio.





With Google Pages one has 100 MB of free space. This enables many items to be uploaded, such as pictures, audio files, video files, Word documents, and PowerPoints, as well as links to be posted.

Protopage can be a publicly accessible website or a private website. The website doesn't create video or audiopodcasts for you, but you can easily create a subscription to any podcast series or your own podcast and add it to your Protopage website.

Go to www.protopage.com. The page is self-explanatory, but the best approach is to play with the site and navigate through all its functions.



On the tabs at the top of the page, you will see a tab for podcasts. Clicking on this will take you to another page, which allows you to subscribe to podcasts. Of course you can also see the "register here" tab in the bottom left hand corner of the screen. Click on this so that you can register with Protopage and start making your own e-portfolio.

There is another tab at the top of the page for video podcasts. This is a great area to link to video podcasts of performance assessments as listed above.





Example Lesson Incorporating E-portfolios

The following lesson is a grade 7 or 8 science lesson that is intended to extend over one to two weeks. All ELL levels are also targeted. The topic of the lesson is "Learning about the effects of acid rain on the environment through e-portfolio work." Read through the lesson and think about the way an e-portfolio has been used to help the ELLs.

Content Objectives

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Students will (1) better understand the consequences of acid rain on the environment, (2) learn data collection and recording skills, and (3) correlate individual data and create a group presentation for the class.

Language Objectives

Level 1 ELLs will (1) learn 10 new high-frequency words centering on the environment and experimentation, (2) be able to learn and use conjunctions to utter simple sentences to express processes, (3) learn how to express plurality in English.

Level 2 ELLs will (1) learn 15 new high-frequency words centering on the environment and experimentation, (2) learn how to use adverbial time phrases to further enhance their explanation of processes.

Level 3 ELLs will (1) learn 10 new subject-specific/jargon words related to the environment and experimentation, (2) learn how to express opinion when describing processes.

Level 4 ELLs will (1) learn 15 new subject-specific/jargon words related to the environment and experimentation, (2) practice using these 15 new words in an oral presentation.

Materials

• Five tomato plants that were previously potted, seeded and watered by students in the class. The plants should be all four weeks old. Of the five plants one will be the control.

- A bottle of vinegar.
- One eye dropper per group (four in total).
- Litmus paper.
- Containers with lids, one per group of students.
- Container of pure water which has a pH of 7.
- Poster paper and markers/colored pencils/crayons as needed for each group's presentations.
- Electronic equipment includes: access to computer lab, digital camera/video recorder, scanner, LCD projector.

New Language for ELLs

Level 1	Level 2	Level 3	Level 4
Vocab: tree(s), plant(s), water, solution, die, measure, result(s), rain, pollution, poisonous Structures: and, though, yet, even, however, but	Vocab: tree(s), plant(s), water, solution, die, measure, result(s), rain, pollution, poisonous, difference, flora, fauna, kill, food Structures: then, after one day, on day two, following that, eventually, finally, still, today, yesterday, tomorrow	Vocab: flora, fauna, experiment, control, variable, acid, toxic, by-product, data, healthy Structures: I think, I believe, in my opinion, for me, I suggest, according to, I feel	Vocab: flora, fauna, experiment, control, variable, acid, toxic, by-product, data, healthy, diseased, distressed, vibrant, analyze, evaluate

How

Orientation Phase of Lesson

What

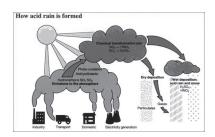
- Listen to the podcast below from NPR on acid rain in the high country in Colorado: www.podcastdirectory.com/podshows/ iphone.php?sid=1545189.
- As the podcast is playing, use the LCD projector to show pictures collected from google images on the damage caused by acid rain.
- Hand out a KWL organizer and have students complete it to gauge their prior knowledge.
- As the students listen to the podcast, give the ELLs a worksheet organizer (use the similes organizer at www.region15.org/ curriculum/graphicorg.html). As they listen to the podcast, they are to write down the words they do not understand (later within the groups a native speaker is to explain what the words mean, and the ELL is to
- ELLs at levels 1 and 2 can write their KWL in their home language, use a fluent bilingual ELL to help the ELL provide an answer to the teacher, when the teacher is summarizing student responses on the board.

write down a simile for each word).

continued overleaf

What How

- After the students have completed the KWL,
 have them share their knowledge—teacher
 to write responses on the board. Teacher
 then summarizes the information given
 by students and shows and discusses a
 UNESCO image of how acid rain is formed
 (Figure 3.13) taken from http://portal.
 unesco.org/education/en/ev.php-URL_
 ID=29442&URL_DO=DO_TOPIC&URL_
 SECTION=201.html.
 - When the teacher is paraphrasing the information on the UNESCO image, the teacher is to use communication strategies such as gestures (pointing to the sun and clouds), simplification to describe the acid rain process, redundancies to activate an ELL's prior vocabulary knowledge, and elaborations to scaffold comprehension.



- When students have an idea of what acid rain is and how it is formed, the teacher explains the parameters of the experiment, which revolves around students, dividing into groups, and watering the group's tomato plant over a two week period. Each group is to water their plant with a fixed mixture of vinegar and water. Beakers containing the water are sealed to avoid evaporation. The acidity of the mixture is to be consistent across time (though different groups have different acidity levels in their solutions) and students are to measure this using litmus paper before watering the plant every other day. Results are to be tabulated on an observation sheet.
- When the teacher explains the parameters of the experiment, (s)he hands out to the ELLs a pictorial representation of the experiment process. This sheet is to have visuals and targeted words for learning with glossary definitions.

Enhancement Phase of Lesson

What How

- Teacher explains that an e-portfolio is to be used as the basis for this project (students are already familiar with protopages.com).
- When each group constructs their Protopage e-portfolio in the computer lab, the ELLs sit at a separate computer and each ELL accesses a quia.com vocabulary activity to reinforce their learning of targeted vocabulary for this lesson. Over the 10 days, the teacher creates more complex language exercises on quia.com for the ELLs to practice. The quia exercises and the ELL responses are posted on each group's Protopage e-portfolio.

What How

- Teacher then takes the class into the computer lab, where each group creates a "group acid rain project page."
- The teacher sends to each group via email an electronic copy of the observation sheet to be used and posted on the Protopage site and explains what information the students are to write down when making their observations.
- In addition, each group is to digitally record their progress. They are to (1) take pictures of the plant and upload these to their Protopage website, (2) make a digital video recording as the group members interview each other to capture their thoughts and observations, and upload any suitable article they find and create links to any suitable website they find. Students are to make a podcast of their recordings and serialize these through http://podomatic. com.
- Each group are assigned a certain percentage water/vinegar mixture to make and shown how to measure this using a
- Students then go ahead and mix their solution of water/vinegar.

Every group will comprise native speakers of English and ELLs. The ELLs are to receive an adapted electronic observation sheet (both sets of observation sheets will be uploaded to a group's Protopage e-portfolio). The ELL observation sheet will be the same, except that, in the space where the observations are to be typed, the teacher has written in example sentences using the structures of English (conjunctions, adverbs of time, expressing opinion) that (s)he wants them to learn as they use sentences to describe the progress of the experiment.

Synthesis Phase of Lesson

What

- Each group then uses an eyedropper to water the plant with the same amount of solution (though each group has different mixture percentages.
- Groups then discuss, paraphrase, and digitally record what they have just done and write this as their first entry in their electronic observation logs on Protopage.
- Over the next two weeks, on every other day for the first 20 minutes, the group is to (1) measure the acidity level of their solution (if changed they are to add either water or vinegar), and then (2) with the eyedropper give the tomato plant the assigned measurement of the solution. The group is to (3) digitally discuss and record the changes they have observed in the plant and write these observations down.
- On the eleventh day, the students are to present their results and conclusions to the class by presenting their e-portfolio.

How

When the group is discussing their observations, the ELL is to show the native speakers in their group his/her adapted observation sheet and the types of words and structures the ELL is to practice during group discussions. Native speakers are given the task of helping the ELL practice their assigned English language structures and vocabulary. The effect of this peer teaching is measured in terms of the interview recordings made of the ELL and posted to the Protopage.

Reflection

The above lesson illustrates a number of pedagogical strategies beneficial to ELLs. Foremost, it represents best practice for differentiated instruction. The teacher breaks the class into flexible groupings of native speakers and non-native speakers; (s)he also pairs ELLs together at separate times during the experiment so that they can practice their English. On top of this the teacher also organizes a peer-buddy help system within each group so that native speaking students help the ELL to participate knowing that representations of each group member's work (podcast interview, observation worksheet) must be completed and included on the Protopage e-portfolio for the whole group to be successfully assessed. Group work also enhances the effect of tiered instruction and allows the teacher to visit with each group and provide individualized help as well as allow group members, such as the ELLs, to work at their cognitive level. By creating language objectives for each level of ELL the teacher is able to make aspects of their English language acquisition more salient, and by showing native speakers what aspect of English language the ELLs need to practice the group discussions also foster opportunities for the ELL to practice the English vocabulary/ structures (output), hear the native speakers use the same structures (input), and converse with their peers using it (interaction).

Last, the biggest difference between using Protopage and Google Pages is that podcasts can be loaded directly onto Protopage, whereas in Google Pages the podcasts need to be linked, for example at podomatic.com.

Teaching Tip

For an absolutely thorough pedagogical walk-through on how to create and use e-portfolios, look no further than Dr. Helen Barrett's website at www.electronicportfolios.com/. In addition, to see models of e-portfolios visit Dr. Barrett's wonderful webpage "Creating ePortfolios with Web 2.0 Tools" at http://electronicportfolios.com/web20portfolios.html.

The three remaining assessment tools, e-surveys, e-rubrics, and e-grading, are described below. Their pedagogical advantage is discussed in light of the above lesson on acid rain.

E-surveys

Imagine you have one computer in your classroom and you want to make sure that all your students are learning the basic concepts you are trying to teach through the above science lesson. You are unsure that the weaker students or the ELLs will readily participate in the group work observations and discussion sessions, so you want to confirm that they are learning by using an online survey tool. We have chosen http://surveymonkey.com because of its simplicity and user-friendly interface. Since this is a survey tool, it doesn't collate individual results, but collective results. In other words, rather than finding out what student A or student B knows or doesn't know, a teacher can gauge how a certain group of students (the ELLs) or how the class is going.

Our suggestion for the above lesson is to use surveymonkey.com at the end of each lesson as a type of bell work activity; before your targeted group is to leave they are to complete one of your surveymonkey surveys. In terms of differentiated instruction consider such a survey an exit card, in order to help you, the teacher, assign groupings and tiered activities for the next lesson.

Click on the *Join Now for Free* button and create a user account for yourself. Once done, you can create a survey by clicking on *Create Survey*.

Name your Survey and proceed by clicking on the yellow *Create Survey* button.

Now you have the choice of choosing the type of question you want your students to answer. We found the multiple choice, the rating scale, and the comment/essay box useful.

Once you have created your question(s), click on the *collect responses* button. This takes you to a screen where you have the option of placing your quiz on a webpage or giving your student a URL link within an email.









For the purposes of the lesson above, have each student copy the URL onto their Protopage e-portfolio. In order to scaffold learning, every other day the teacher can follow the same procedure and give the ELLs another, harder question to answer. By the end of the e-portfolio project, each group can also present their surveymonkey results.

E-quizzes

There are numerous e-quizzes available on the internet. The trick is to find one that is user-friendly. We recommend Quizstar at 4teachers.org (http://quizstar.4teachers.org/; see Figure 3.14). Teachers have the options of creating new quizzes, analyzing the results of quizzes, and making class quizzes open only to the class or selected students. Use Quizstar if you want to analyze the quiz results of individual students. With Quizstar, a teacher is able to create a tiered quiz for the different learning groups in a class. Linking back to the acid rain lesson above, a



teacher can create a quiz for each group in the class, as well as a quiz for each ELL level. Whereas the overall quiz content and questions would focus on the same concepts (acid rain, the effects of pollution, acidity and plant degradation, etc.) the teacher can incorporate for the various ELLs the types of accommodations listed at the beginning of this section: using glosses, simplified language, home language, visuals, extra time, elaborated language, etc.

As Quizstar is an online tool, links to the quizzes can be posted on each group's Protopage e-portfolio site. Additionally, there is always the motivational factor to consider when working with technology. Teachers may consider getting students from each collaborating group to construct a quiz themselves that members of other groups then take. Or, conversely, the native speakers in each group can construct a quiz focusing on the targeted language objective for each ELL in the group, post the quiz on the group's Protopage, and present the quiz results along with the experiment when the e-portfolio is presented to the class.

Teaching Tip

Go to Authentic Assessment Toolbox at http://jonathan.mueller.faculty.noctrl.edu/toolbox/rubrics.htm for a nice sequential overview of what rubrics are, how to create them, and how to use them.

E-rubrics

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Moya and O'Malley (1994) provide a model of assessing portfolios. Indeed, rubrics can act equally as an assessment instrument or as an instructional instrument that guides students throughout a piece of work. Take for example our e-portfolio lesson on acid rain. At many points throughout the extended science project, students could have been assessed on any number of skills and competencies, but first it is to the content and language objectives of the lesson that one needs to turn. As we can see, the ELLs in our acid rain lesson have slightly amended objectives, which are based on their level of English language proficiency. Our suggestion is to evaluate ELLs on an analytic rubric that articulates levels of performance for each criterion on the rubric. Furthermore, because the ELLs are carrying out slightly different work throughout the science lesson, in other words they are working at their level of competence, altering the rubric to a holistic scale accommodates, steers, and better captures the nature of an ELL's ongoing learning performance.

In terms of user-friendliness and adaptability for classroom use; we recommend two useful online rubric-creating tools:



Teachnology at www.teach-nology.com/web_tools/rubrics/general/

Rubistar at http://rubistar.4teachers.org/index.php

In our e-portfolio lesson, the following rubrics could be created to assess and simultaneously guide students at the various points of the science project:

Stage of lesson	Focus of rubric assessment	Form of rubric	
 Rubric used throughout lesson to guide students on use of technology 	Technology skills	Analytic	
 Rubric used to guide and assess group interaction 	Cooperative group work skills	Holistic	
 Rubric used to assess the layout and content of the Protopage website 	Protopage e-portfolio content	Holistic	
 Rubric for evaluating each group's oral/written presentation 	E-portfolio presentation	Analytic/holistic	
 Rubric used to assess the worthiness of each group's process of data collection, analysis/observations, and results 	Experiment process and results	Analytic	
 Rubric used to assess writing skills 	Written observations	Analytic	
 Rubric used to assess an individual's oral participation 	Oral discussion	Analytic	
 Rubric used to assess the quality of podcast interviews 	Podcast interviews	Holistic	
 Rubric used to guide and assess native speaker mentoring and peer tutoring of ELLs 	Native speaker mentoring of ELLs	Holistic	
 Rubric used to assess ELL language use of new structures and vocabulary 	ELL language use in groups	Holistic	
Rubric used to assess ELL global learning and comprehension	ELL language learning and development	Analytic	

As can be seen, there is a range of possibilities for rubric use. We are not suggesting that in such a lesson as ours all the above 11 rubrics be used; however, what we are saying is that, since rubrics can guide as much as they can assess learning and teaching and since such a lesson as the acid rain e-portfolio has students multitasking throughout this differentiated lesson, then it certainly would behoove a teacher to use multiple rubrics to better assess all the potential learning experiences that are going on. As with our ELLs, the use of multiple rubrics also enables a teacher to better assess and track an ELL's ongoing participation in classroom activities, especially in a context in which an ELL's language development is never at a standstill but always changing and improving.

Teaching Tip

The Education Project Asia at www.shambles.net/pages/learning/EnglishP/eslassess/ has compiled a list of ESOL and ELL tests, formal assessments, standards, proficiency measures, and scales used throughout many English speaking countries.

Transferable Ideas

Besides ideas from the lesson above, what other ideas can you now take to your classroom? Look at the following.

Think big and combine ITs to create even richer experiences for your ELLs

Example 1: Up to now, we have introduced you to a range of ITs. We have introduced them individually. At times throughout the book we have subtly hinted at the possibility of combining various ITs to create even more powerful learning accommodations for your ELLs. We have previously mentioned the necessity at times to create a virtual platform, such as a webpage or, as in this section, an e-portfolio to upload and link to other ITs on the web. Think of your e-portfolio (whether this be a webpage, e-portfolio, or, as you will see in Chapter 3.7, a virtual learning environment) as a department store window. To passersby, the window represents a taste of what is inside. Similarly, the first page of your e-portfolio is like a portal to other pages that you have created. As a teacher, you can store a different IT on each page. So, if you want your ELLs to practice their listening skills, send them to your listening-facilitative e-tool page with all the associated links and activities they may find there. Similarly, another page may contain all your activities derived from your writing-facilitative e-tools and so on. Remember, an e-portfolio can be as much a repository for student-made materials as it can be a repository for teacher-made materials.

Use e-portfolios to file, file ELL materials and then revisit them next academic year

Example 2: Do you remember principle 4, "Give ELLs opportunities to notice their errors and to correct their English," drawn from our *five principles for creating effective second language learning environments*? As mentioned above, an e-portfolio is a great way to archive students' work, but, even more, it becomes a great resource the older the archive gets. What we mean by this is that all the student-made materials stored on an e-portfolio lend themselves to becoming useful electronic materials for your ELLs to re-look at and investigate how language was used. Think about storing penultimate draft electronic copies of students' work on a page within the e-portfolio. Then design an activity in which your ELLs click to the webpage, pick a penultimate draft of a student's essay, look at the language, and correct the faulty language to the best of their ability. Now think of a similar activity in which you have sorted the penultimate drafts of students' work into such categories as works with faulty cohesion/cohesiveness, works with faulty spelling, works with faulty embedded clauses, unfinished works, works with simplistic language, etc. Ultimately, you can use your former students' filed e-assignments as a great way for your ELLs to learn about language as they are correcting language. We would also recommend that you pair your ELLs either together

or with native speakers of English so they have opportunity to talk through language errors that they find in the filed e-assignments and correct them. The beauty is that, in this type of language corrective activity, ELLs are reading through content-related material. Furthermore, in efforts to correct the e-assignments, ELLs can use the tracking tool on Microsoft Word, or upload the whole document into such ITs as Writeboard, which was described in Chapter 3.5.

Conclusion

In this chapter we have investigated assessment in a context of teaching ELLs and using ITs to help evaluate them. The ITs that we have discussed were e-portfolios, e-quizzes, e-surveys, and e-rubrics. We concluded the section by providing you a lesson plan in which these ITs were implemented. We hope that in reading through the lesson you take some ideas back to your own classroom.

In the next chapter, we want to introduce you to IT tools that specifically look at ways to use virtual learning environments (VLEs) to enhance the learning experience of your ELLs. In doing so, we will be focusing on principle 2, "Draw attention to patterns of English language structure," drawn from our *five principles for creating effective second language learning environments*.

3.7 **Managing Teaching through Virtual Learning Environments**

Orientation

Virtual learning environments (VLEs), otherwise known as electronic course management tools, are web spaces that permit teachers to organize their work as well as their students' work electronically. Although these websites can be open and made available to the public, we suggest that each space be limited to access by the participants in the class or group. The VLE can be password-protected and only participants you select can access the space. That way, learners and their parents will feel confident that they can participate openly on all aspects of the course.

There are different purposes for virtual learning environments. First of all, teachers can use the space to take the place of or support paper record keeping in the classroom. As a result, parents and students can access these sites from home to view calendars and assignments, syllabi and announcements, and therefore have a clear understanding of the teacher's expectations and how the learning process is organized. Second, participants can post their ideas or opinions on the discussion forums or conferencing sections within these VLEs, thus reducing the social distance of interaction between teacher and student, between the students themselves, and between teacher and parents. Some VLEs allow posting of links to the internet so that the interactivity encompasses an even wider range of documents. For example, if the space hosts a class's creative writing project, a link to famous poets can be posted. Through VLEs, ELLs are guided to a particular space and this makes the assignment more manageable. This posting of a particular link also allows the teacher to check the link's appropriateness before recommending it to the learners. Finally, students can post homework as a means of handing in a document to the instructor or of sharing their work with their classmates. In short, a VLE is a tool that permits collaboration in any given classroom endeavor.

This chapter suggests sound pedagogical ways of using course management tools to provide spaces for classes, groups, small groups or even individuals to post, store, or exchange infor-

mation. Last, we discuss how a VLE can be used to facilitate an ELL's inclusion in the learning process. On this note, we want to point out this section and VLEs are an appropriate e-tool to foster principle 2, "Draw attention to patterns of English language structure," drawn from our *five* principles for creating effective second language learning environments.

Two types of ITs will be described in this section, the first being Nicenet (http://nicenet.org) and the second being a social network site called Ning (http://ning.com).

Nicenet: Nicenet is an example of a free VLE. Nicenet allows teachers around the world to electronically organize their work at no cost to them or their school. Recently, Nicenet became a not-for-profit organization that accepts tax-deductible donations to support further creation and maintenance of the site. A Nicenet page can also be used by a group of students to post their work so that other group member and or parents can access their work. Nicenet is password-protected and only members of the class can enter the space. This capability makes Nicenet safe to use for any teacher wishing to create a closed and private classroom virtual community.

Ning: This is a tool that serves to create a social network that is controlled by the moderator or creator of the network. The network can be either open to the public or closed, allowing only specific participants. This tool creates a space that is similar to a website, but the moderator can choose from different functions to include in the network. Functions available include adding Word documents, pictures/images, PowerPoints, podcasts, audio files, videos, and/or blogs. Social networks tend to usually focused on a particular theme or topic. In a school context, a Ning site could focus on a content-area unit of work or a collaborative group project, or serve as a class communication tool between school and home.

How to Create and Use a Nicenet Learning Environment

Nicenet contains many functions that a teacher can use to facilitate collaborative learning. These include conferencing, link sharing, document posting and sharing, as well as the ability to post a class schedule or syllabi. The conferencing function allows participants to communicate asynchronously through messages posted in the conference space. The teacher or the students can create a topic for discussion and post a prompt in the conferencing space. All messages will be saved to the main page of the conferencing function.

Another function of Nicenet is the email function. Once a participant, either a student or a teacher, has joined the course, his or her email address will appear on the list of participants. Using this list, an email can be easily sent to an individual, a group of individuals, or all participants of the course.

Teaching Tip

techLEARNING (http://techlearning.com) deals with the use of VLEs to promote multiculturalism.

The first step to using a VLE is to create an account. The teacher can visit nicenet.org (Figure 3.15), and select the "create a course" option. You will be asked to provide the company with an email address, and to create a username and a password for your account. The company will send you a course key code via email. This code is a unique set of characters that identifies your course. Now that you have created your VLE, the next step is to invite students and parents, if you choose to do so, to join your site. Students and parents go to nicenet.org and they select "join a course." Students and parents will be asked to enter the unique code for the course, and to create a username and a password.



FIGURE 3.15.

Once your course is created and all participants have joined, you can begin the process of adding content. You can use the schedule to list events, post assignments, and provide other class-room scheduling details. Parents can use this space to plan and keep track of assignments due in your class.

How to Use Nicenet in the Classroom

Nicenet is a great tool for long-term projects. In addition, Nicenet provides you with an opportunity to synthesize all that you have learned about discussion boards, webquests, instant messaging, and searching the internet. Let's imagine you are teaching an English language class and you have several ELLs in your class. You would like your students, specifically your ELL students, to develop their academic language skills, vocabulary skills, and grammatical skills. You decide that a writing assignment that includes a reading-to-write activity, a listening-to-write activity, a brainstorm activity, a peer-editing activity, and individualized feedback from you is beneficial to all your students. By using the many functions of Nicenet, you can include all of these activities in one assignment in a password-protected environment.

First make a list of the components of this assignment and the due dates: read an article, listen to an article, conduct a pre-writing activity, write and post your first draft, read your peer's paper, provide your peer with feedback, write your second draft, post your second draft, etc. Post the components of your assignment on the calendar of Nicenet. This will allow students to schedule and keep track of the assignments due.

Then you use your searching capabilities to find webpages that contain stories using the past tense. Examples can include http://library.thinkquest.org/20619/Past.html, a site that contains immigration stories including some from children. Through this reading-to-write activity, students receive examples of good stories. Next, you would like your students to listen to a story told in the past tense. You ask your students to visit a site such as the "Story Corps" site at www. storycorps.net/ where students can listen to several stories told in the past tense.

Now that your students have read and listened to several stories using the past tense, you would like them to begin working on their own story. You decide that a good prompt for this writing assignment is: "Think about a specific time in the past where you had an amazing experience. Describe the incident and allow the readers to experience this event, 'show' more than 'tell' the details of the experience." You post the prompt on the Conferencing section of Nicenet. You ask your students to brainstorm and post two or three events that they remember and provide some detail about these events in the conferencing section of Nicenet. Peers can then read the postings and add comments about the stories that interest them and that they would like to read.

Next you ask your students to select one of the events in the past and write a first draft of the assignment. Students then post their first draft under the document-sharing portion of Nicenet. In this section of Nicenet, peers can provide feedback on published papers and make comments. Pair up students, ensuring that each ELL is paired up with a native speaker of English, and ask students to provide feedback to their peers on the paper. You want to ask the students to focus on specific things such as past tense, the content, cohesive devices, etc. Set up a time when students will chat to discuss the feedback. Use the personal messaging function of Nicenet for students to communicate and discuss in detail the feedback they provided and received. Using this specific feedback, students can include suggestions on their new draft of the assignment. Students write a second draft of the assignment and post this assignment on the document-sharing portion of Nicenet. This document sharing will allow students to view their peers' papers and thus learn from each other. The teacher can then read the revised paper and provide personalized feedback using the functions of Nicenet.

Ning

Ning provides a virtual space where members can share information about a common interest or project. If the network is private, a membership is necessary to access the space. Once a person opens a Ning social networking site, that person becomes the site's manager. Only a Ning site manager can invite people to his/her site. Accessing a private Ning social network necessitates a password. The tools to create a network description, activities, and groups are part of the template. Forums for interactive discussions simulate question—answer conversations. Ning differs from Nicenet in that it operates like a social network rather than a courseware management tool.

Read the following to learn about setting up a Ning account.

Teaching Tip

- http://englisheducation.ning.com/ is a Ning site devoted to teaching English as a second language. It is an open site.
- http://elemenous.typepad.com/ describes a teacher's use of Ning to increase virtual interaction.

Click on *ning.com* to set up an account on Ning.

Fill in the information required to create the network and then name your new network.





Create the network. Be sure to make it private, so only the people you want to be in your network can access your network.

Set the features of your network. You need to drag these features from the left margin to the middle page.





How to Use Virtual Learning Environment Tools in the Classroom

VLEs offer the opportunity to create virtual learning communities in which learners of different levels are able to scaffold each others' learning. These VLEs focus on the integration of language use and content knowledge. The activities described below exemplify how VLEs provide a space for learners to make meaning of their language use.

Create a parent information tool in which ELLs practice writing skills in their native language to build an information page for their parents. For example, get students to work in groups according to their native language. Remember, that although ELLs are able to use social language to interact, their writing skills in English may be more limited. Have intermediate fluency and speech emergence students be the liaison between the English and native language information. Have students who are literate in their native languages proofread the information. This is also a good opportunity to involve parent volunteers in the creation of the VLE in the parents' native language. If you do not speak/read/write the native language, have a colleague or friend who does know the language check the page for both language and content. First of all, have students brainstorm the information they need to include on the VLE. Tell them to create a list of upcoming school events and write any text that is needed for the site. Have students create the Nicenet page. Have them add their parents' email addresses and their own to the members list. Also, remind them to add your name to the members list.

Teaching Tip

If ELL parents do not have an email address, have the students create one for their family. Remind them that they will need to explain to their parents how the Nicenet page and email works.

Also have them include links to the school page and other general educational sites. Also, have students create links to pages that explain the school system and curriculum. Last, have your students surf the web to locate sites specifically designed for school parents. For example, the national PTA and state multicultural organizations offer lots of useful advice for ELL parents.

So what can we take away from this chapter? One obvious fact is that a VLE, acting as a course management tool or a social network tool, offers an IT platform where one can combine many other ITs together in one site. A second though more interesting function that a VLE can perform is something that may not necessarily directly benefit the teacher or the ELL, but the administra-

tion of a school, the ESOL teacher, who often acts as the advocate for a school's ELLs, and any school-based committee that oversees the cognitive development and social welfare of its ELLs. It is:

Let the VLE Take on a Life of its Own

Often as teachers we are too focused on what goes on in our own classrooms. But what happens to the ELLs when they go to other classrooms and sit in the classrooms of other teachers? Sure, school administrations have various structural mechanisms in place to track a student's progress, but these usually confine themselves to grades on an electronic grading system. Or there is a guidance counselor that oversees the students' social development. Our question is: With schools often having student populations of over 2,000, how adequate is such monitoring? We are of course not suggesting that an IT such as a virtual learning environment is the answer, but what we are saying is that using a VLE as sites established by individual ELLs, and then having the ELLs post their own school materials there, as well as post concerns, takes us one step closer to establishing an intra-classroom device for any teacher of any specific ELL to visit the site and speak to other teachers about the ELL's progress across content areas, for the ELL to express what he or she finds difficult in specific subjects or what he or she finds easy and let teachers read this and then make pedagogical adjustments or even learn from the success of other teachers. At the very least it gives the ELL a voice and a platform for empowerment. From the teacher/school perspective, it helps a teacher see an ELL's progress beyond the confines of his/her own classroom. Last, letting the VLE take on a life of its own can let teachers see an ELL's progress as (s)he moves from one grade level to the next.

We would like to finish by saying that in the space of a semester or a year, whatever amount of time an ELL is with us in the classroom, we are often not privileged to see an ELL grow in English language prowess or become even more socialized into an American school system. By letting a VLE expand in the range of "school stuff" that an ELL can place on it over the years, a teacher can witness a far more rewarding life snapshot of the cognitive and linguistic growth of an ELL and in some small yet by no means inconsequential way know that (s)he had something to do with it.

Conclusion

This section has focused on spaces that permit participants to exchange and share information on a particular subject. These management sites can store documents, links, and planning information that allows successful organization of projects or lessons.

These online resources can be accessed any time from any computer that has an internet connection; therefore, they fill in the gaps in communication between parents, students and the teacher. In addition, the creation of a course management site allows the student to develop strategies for monitoring and developing his/her learning process. Use of these tools can support the creation of a student-centered learning process.

In the next part of this book, Part 4, we place at your disposal an annotated list of websites that we feel will help you further explore the richness of ITs and their potential for being used in the classroom to help ELLs.

Resources

The following are ELL teaching resources that can be found on the Internet. Annotations have been provided to assist you in your selections. The sites have been selected for accuracy, credibility, and durability. We have tried to give priority to sites whose sponsors have longstanding reputations for service to the public good (e.g. professional organizations). Nonetheless, keep in mind that, because the internet is fluid, you will need to review content carefully. Remember, too, to check individual sections for content-specific web sites.

WWW Resources

Troubleshooting: Specific Issues and Challenges

The following aims to provide a one-stop shop to help with some of the pedagogical problems teachers face in the classroom with ELLs. Each issue has been identified as being of particular concern to content teachers. The issues are accompanied by selected annotated websites that endow teachers with a wealth of handy hints and guides to best practices.

Mainstreaming ELLs: Meeting Individual Needs

www.celt.sunysb.edu/ell/tips.php

Created by the Center for Excellence in Learning and Teaching at Stony Brook University. The site offers readers a range of tips on how to accommodate individual ELL needs in the classroom.

www.thirteen.org/edonline/concept2class/mi/index.html

Created by the Educational Broadcasting Corporation. This site offers a range of detailed work-

shops to do online. This particular site allows readers to explore through online demonstrations and explorations how multiple intelligences can be used to accommodate ELLs.

Teaching and Learning English Using Online Tools

www2.alliance.brown.edu/dnd/dnd_links.shtml

Created by the NYC Board of Education & Office of English Language learners as well as the Education Alliance at Brown University. This site offers viewers a gateway compendium to sites that allows teachers to think about how to incorporate and embed language learning for ELLs into their content classes.

www.usingenglish.com/

This site provides resources to learn English for ELLs.

www.sitesforteachers.com/

This site is a gateway compendium of ELL resources for content teachers.

http://eslwritingtech.wikidot.com/2006-latesol-cool-online-tools

This is a wiki site that is dedicated to using online tools to aid ELLs in their writing development. Useful information about how to use blogs and wikis.

The One-Computer Classroom and Creating Work-Stations

www.thirteen.org/edonline/concept2class/webquests/index.html

Created by the Educational Broadcasting Corporation. This site offers a detailed online workshop to explore the use of webquests to accommodate ELLs.

www.esl-galaxy.com/worksheetmakers.htm

This is a site created by Futonge Nzembayie Kisito. It provides online downloadable activity templates to use with ELLs to help them build on their English skills.

Project-Based Work

www.techlearning.com/db_area/archives/TL/2003/01/project.php

techLEARNING is not necessarily specific for ELLs, but it does provide an interactive website to explain how to use project-based learning in a classroom. Easily adapted for ELLs.

www.pbl.cqu.edu.au/content/online_resources.htm

This is a compendium gateway site created by Central Queensland University in Australia on problem-based learning. Lots of useful links, examples and simulation role plays. Teachers can adapt for ELLs.

www.bie.org/pbl/pblhandbook/tools.php

Provides downloadable rubrics to use in assessing project-based learning.

Differentiated Learning

www.frsd.k12.nj.us/rfmslibrarylab/di/differentiated_instruction.htm

This site provides information on understanding your heterogeneous classroom as well as providing teaching strategies to facilitate learning in a heterogeneous classroom.

http://members.shaw.ca/priscillatheroux/introduction.html

Created by P. Theroux, a teacher in Alberta, Canada. There are over 100 pages on how to effectively use technology to cater to a heterogeneous classroom.

Not Understanding Your ELL and Making Yourself Understood

www.thirteen.org/edonline/concept2class/inquiry/index.html

Created by the Educational Broadcasting Corporation. This site offers an online workshop designed to assist teachers with principles of inquiry-based learning. This particular site allows readers to explore through online demonstrations and explorations how inquiry-based learning can be used to facilitate an ELL's understanding of the curriculum.

Questioning and Discussion: Making Modifications

http://eslinfusion.oise.utoronto.ca/index.asp

A site developed by the Ontario Institute for Studies in Education. This site offers a practical guide for content teachers on how to infuse their curriculum to meet the needs of ELLs.

Evaluation Strategies: Ideas for Traditional, Alternative, and Authentic Assessment

www.thirteen.org/edonline/concept2class/assessment/index.html

Created by the Educational Broadcasting Corporation. This site offers an online workshop designed to assist teachers with principles of assessment. This particular site allows readers to explore through online demonstrations and explorations how inquiry-based learning can be used to measure an ELL's learning trajectory.

www.ncela.gwu.edu/resabout/assessment/

This site was created by the National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs. It offers handy resources about assessment and accountability for ELLs.

www.fairtest.org/nattest/NCLB_assessing_bilingual_students.pdf

A PDF link that leads to a document detailing the problems and solutions associated with assessment of ELLs under NCLB legislation.

Cooperative Learning: Learning with and from Peers

www.thirteen.org/edonline/concept2class/coopcollab/index.html

Created by the Educational Broadcasting Corporation. This site offers an online workshop designed to assist teachers with principles of cooperative learning. This particular site allows readers to explore through online demonstrations and explorations how cooperative and collaborative learning can be used effectively with ELLs.

www.thirteen.org/edonline/concept2class/constructivism/index.html

Created by the Educational Broadcasting Corporation. This site offers an online workshop designed to assist teachers with principles of constructivism.

Study Skills and Homework: Getting Assignments Done

http://a4esl.org/q/h/

This site is a part of the Internet TESOL Journal. It is dedicated to providing online activities for ELLs to improve their English independently.

Connecting with the Home: Parents and the Home Culture

www.missouri-pirc.org/esol_downloads.html

A compendium gateway site created by the Missouri Parent Information and Resource Center. This site offers a range of downloadable resources in English and in Spanish for parents and the facilitation of home-school communication.

www.isbe.state.il.us/bilingual/htmls/ellparents.htm

Created by the Illinois State Board of Education. It details resources for schools and parents on how to promote home-school communications.

http://education.state.mn.us/mdeprod/groups/EnglishLang/documents Announcement/007884.pdf

This site links to a resource of videos available in nine languages on helping the parents of ELLs understand their local school.

The Law and School Policies: Informing Yourself

www.aft.org/topics/nclb/downloads/QAELL0404.pdf

Created by the American Association of Teachers to inform through question & answers what the legal requirements to assessing ELLs are under NCLB.

www3.ksde.org/sfp/esol/federallawandenglishlanguagelearners.htm

This website details the legislative acts that govern ELLs in education.

www.elc-pa.org/english/policy.html

Created by the Education Law Center and the Pennsylvania School Reform Network. This site details the laws and regulations governing ELLs in education.

E-teaching Tools

The following sites and software programs have been listed because they provide teachers with ready-made activities, pedagogic ideas, or templates for integrating technology to aid in their teaching of ELLs across the curriculum.

Content-Specific Sites Useful for Teaching ELLs

Science

www.csiro.au/csiro/channel/pchar.html

This provides a collection of over 60 science experiments, games, and more for grades 3-8.

www.eduplace.com/search/activity2.html

Activity Search from Houghton Mifflin is a curriculum database for K–8 teachers who want to find lesson plans/activities by grade level (look especially under technology and cultures).

www.sciencefriday.com

Science Friday is a weekly radio show on technical topics.

Mathematics

http://highered.mcgraw-hill.com/sites/0072532947/student_view0/interactive_math_applets.html

This site offers a series of digital math problems.

http://connectedmath.msu.edu/teaching/ell.html

A website devoted to teaching ELLs math through selected strategies—good examples and links.

http://askeric.org/cgi-bin/lessons.cgi/Mathematics

This is from AskERIC and offers a collection of math lesson plans contributed by K–12 teachers on a wide range of mathematics topics.

Social Studies

http://ofcn.org/cyber.serv/academy/ace

Academy Curricular Exchange includes over 200 social studies lesson plans for all levels of schooling. Not all lessons are modified for ELLs.

www.neat-schoolhouse.org

A gateway site that offers a compendium of links to lesson plans representing all areas of the K-12 social studies curriculum as well as other areas.

www.issuesdirect.co.uk/

Issues Direct is a series of resource e-books on contemporary social issues that can be downloaded to your computer. Thirty e-books are currently available to download, with another six to be added in September 2007. Issues Direct is suitable for advanced-level English language reading, contemporary issues, cultural background, culture projects, bilingual education, international schools, and general interest.

Language Arts

http://askeric.org/cgi-bin/lessons.cgi/Language_Arts

From AskERIC, this offers a collection of lesson plans contributed by K-12 teachers on a wide range of language arts topics.

www.atozteacherstuff.com

A website dedicated to providing hundreds of lesson plans devoted to teaching literacy in the elementary school, this is associated with http://LessonPlanz.com, which is a search engine with over 4,000 lesson plans.

www.coollessons.org

This provides an extensive list of webquests and lesson plan sites.

ESOL-Specific Gateway Sites

www.colorincolorado.org/index.php?langswitch=en

An exceptional site with lots of strategies, tips, webcasts with ELL experts. Constantly updated.

http://iteslj.org/links/

A very good site with a wide variety of useful links.

www.englishclub.com/index.htm

An exceptional site with hundreds of teaching tips, ideas and activities for ELLs.

www.eslcafe.com/

The internationally renowned Dave's ESL Café is a large site for teachers and students of ESL/EFL.

www.teachers.net/mentors/esl_language

ESL and Language Teachers' Chatboard offers chat with other teachers.

www.eslmag.com

An online magazine for ESL educators.

http://a4esl.org/

Online activities for ESL students from the Internet TESL Journal.

www.cln.org/subject_index.html

Community Learning Network offers curriculum resources and online instructional materials for ELLs.

ELL Starter Kit for the Teacher

www.colorincolorado.org/guides/sampler

Teaching Tip for ELLs

www.colorincolorado.org/educators/brightideas

educators from across the country have discovered excellent ways to tackle some common class-room stumbling blocks concerning ELLs. Here are their step-by-step suggestions on how to handle such issues.

Games, Activity Generators and E-templates for Instructional Tasks

www.quia.com

Offers activity generators as well as access to a database of hundreds of activities.

http://iteslj.org/links/ESL/Games

Offers online activities and templates as well as additional links for ELLs to learn English.

www.classroominc.org

Computer software simulations that place students in virtual workplaces where they assume a managerial position and use literacy, math, and other skills to make decisions and solve problems.

www.socialimpactgames.com/

Lists over 500 serious online games for educational purposes.

www.arcademicskillbuilders.com/

An academic skill builder through online educational games that offer a powerful approach to learning basic math, language arts, vocabulary, and thinking skills.

Blogs

www.firstmonday.org/issues/issue9_6/huffaker

A short article with links on how to use blogs to promote literacy.

http://schoolblog.epals.com

ePALS SchoolBlog lets you manage a safe place on the internet that enables collaboration and participation among teachers, students and parents.

http://blogger.com

Associated with google.com and podomatic.com, this allows users to set up a free blog account.

Concept Mapping Software

www.inspiration.com/productinfo/inspiration

Inspiration is a tool students can rely on to plan, research and complete projects successfully. With integrated diagram and outline views, they create graphic organizers and expand topics into writing.

www.inspiration.com/productinfo/kidspiration

As above but for younger students.

www.socialresearchmethods.net/mapping/mapping.htm

An online gateway site for concept mapping.

Flashcards

www.esl-library.com/

Over 2,000 flashcards on a variety of topics.

Generic Online Multimedia Resources (All Adaptable for ELLs)

www.pbs.org/teachers/

This website has more than 4,000 free lesson plans and activities, as well as online professional development opportunities for teachers.

www.teachersdomain.org/

Teachers' Domain is an online educational service with two related components—Collections and Courses—that help teachers enhance their students' learning experiences and advance their own teaching skills. Included are high-quality multimedia from NOVA, American Experience, and other public television productions and partners; video and audio clips, interactives, images, and documents; correlations to state and national curriculum standards; media-rich lesson plans.

www.englishdatabase.com/Default.aspx

Lessons draw on all forms of modern multimedia: TV, video and DVD, radio, newspapers, magazines, music, and the internet. The aim is to create original, innovative materials that provide useful and practical lessons to deliver in the classroom. Materials are ready to use in the classroom; simply print out and off you go!

Graphics Editing and Drawing Programs

www.openoffice.org

OpenOffice.org is a multiplatform and multilingual office suite and an open source project.

Compatible with all other major office suites, the product is free to download, use, and distribute.

www.ThinkQuest.org

ThinkQuest inspires students to think, connect, create, and share. Students work in teams to build innovative and educational websites to share with the world. Along the way, they learn research, writing, teamwork, and technology skills and compete for exciting prizes.

Lesson Plan Ideas and Strategies

www.newhorizons.org/strategies/multicultural/freed.htm

New Horizons for Learning provides an example of a culturally responsive lesson plan in science that centers on Myths, Legends, and Moon Phases.

www.lab.brown.edu/tdl/tl-strategies/crt-research.shtml

The Education Alliance, Brown University, provides a list of research-based strategies to promote cultural responsive instruction and learning.

www.alliance.brown.edu/tdl/tl-strategies/crt-principles.shtml

In addition, this website also offers a succinct account of what culturally responsive pedagogy is.

www.mhhe.com/catalogs/0072408871.mhtml

This book helps teachers plan lessons for today's diverse classrooms and learn to create and use such lessons in their classrooms. It is the first book to provide well-developed content-specific lesson plans that reflect cultural diversity in the United States.

www.ankn.uaf.edu/standards/standards.html

This website is an illustration of standards developed by Alaska Native educators to provide a way for schools and communities to examine the extent to which they are attending to the educational and cultural well-being of the students. These "cultural standards" provide guidelines or touchstones against which schools and communities can examine what they are doing to attend to the cultural well-being of the young people they are responsible for nurturing to adulthood.

www.learnnc.org/lessons/search?phrase=ELL

LEARN NC provides a database of 23 lesson plans across a wide range of curriculum areas that have been modified for ELLs.

www.download-esl.com/

Download-ESL is a great site to download PowerPoints, podcasts, MP3 and MP4s, videos, audioslides, worksheets, and quizzes for ELLs.

www.jason-ism.com/english.html

English Teaching Program is a very good site that provides a host of ELL activities, drama workshops, roleplays, projects, discussions, etc.

www.englishlanguagespacestation.com/

English Language Space Station provides online PowerPoints, grammar lessons, reading lessons, lesson topics, and listening quizzes as well as web links for teachers and students, all of which are arranged for ELLs at various levels.

www.esl-galaxv.com/

ESL-Galaxy provides an extraordinary amount of free PowerPoints, activities, language lessons, games, and teaching downloads, all for ELLs.

www.eslmonkeys.com/teacher/lessonplans.html

Share and use lesson plans from ESL teachers around the world. Contribute to the wealth of teaching strategies, conversation starters, reading and writing activities. Find materials to teach grammar, control classrooms, assess student progress, and teach general English language skills

Open Source Software

www.edubuntu.org

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Edubuntu is a complete Linux-based operating system, freely available with community-based support.

http://openclipart.org

A project that aims to create an archive of user-contributed clip art that can be freely used.

http://audacity.sourceforge.net/

Audacity is free, open source software for recording and editing sounds.

www.merlot.org

Share advice and expertise about education with expert colleagues.

http://download.cnet.com/downloads/0-10154.html

A database of freeware, shareware and demos available for download. Searchable database by curriculum area.

Podcasts

www.china232.com/index.php

Learn English for free through English learning podcasts, videos, and free written lessons. Listen and learn the way English is spoken by real native speakers.

http://australianetwork.com/learnenglish/

English Bites from Nexus, the educational wing of the Australian Broadcasting Commission, gives vibrant daily content about life 'down under' with a whole assortment of activities to complete as you watch streamed media direct from Australia.

PowerPoint Games

http://it.coe.uga.edu/wwild/pptgames/index.html

Fifty-one PowerPoint games in a variety of subject areas.

www.elainefitzgerald.com/powerpoint.htm

PowerPoint templates for teachers.

Reviewing Sites and Software

www.ncrel.org/engauge/resource/resource/index.html

Reviews of a variety of classroom resources organized by discipline, as well as a resource evaluation tool that includes a handy evaluation form.

http://hagar.up.ac.za/catts/learner/eel/Conc/conceot.htm

Offers a process for evaluating software and its effect on learning.

www.kn.pacbell.com/wired/bluewebn/

A database of excellent educational learning sites that have been reviewed for high-quality content.

www.childrensoftware.com

Provides comprehensive reviews, tips, ratings, and articles on software programs. Reviews of over 4,000 titles available.

Rubrics

http://rubistar.4teachers.org

Make exemplary rubrics in a short amount of time.

Teaching Strategies

www.learnnc.org/search?phrase=teaching%20strategies

LEARN NC offers 1,523 teaching strategies across the curriculum with accompanying lesson plans with over 380 lessons dealing with technology use.

Screen Capture

www.tucows.com

Offers many downloadable products.

Using Television Online

www.pbs.org/frontlineworld/educators/index.html

Adaptable for ELLs, FRONTLINE activities are designed to take up no more than one or two class periods. Activities are tied to national standards and can be customized or adapted to your particular needs. Activities are offered in the following categories: culture, geography, economics, history, and politics.

www.abcnews.go.com

ABC News offers chats and audio news live.

Video Editing Software

www.apple.com/imovie

iMovie '08 makes viewing and working with videos as intuitive as enjoying your photos.

www.microsoft.com/windowsxp/using/moviemaker/default.mspx

See how to create, edit, and add special effects to your home movies and then how to share them with friends and family.

Video and Film Trailers

www.mymovies.net/

One of the best independent movie sites is My Movies. Not only does it have most of the current films but it also has an enormous archive of classic ones too. Generally you will find a selection of clips for each film, often including interviews with the actors and behind the scenes footage.

www.english-trailers.com/index.php

Film trailers can be viewed purely for enjoyment or students can be given some task. You could ask students to watch three trailers and compare them; or watch a trailer and tell someone else about it. In case you don't have time to work out your own lessons some clever teachers in Japan have designed a site (English Trailers—www.english-trailers.com) where you can watch a trailer and complete a range of cloze and quiz activities they have designed to go with the movie clip. All the hard work is done for you.

www.filmeducation.org/

For more in-depth analysis of complete films, try out some of the ideas on the Film Education website. This charitable organization from the UK has been producing professional educational materials to accompany films for 20 years. Many of their materials are now available online.

Webcasts

www.colorincolorado.org/webcasts/

Webcasts offer an exciting new way to learn about teaching ELLs. Each webcast features a 45-minute video program, which includes recommended readings, suggested discussion questions, and a PowerPoint presentation accompanying the video.

Webquests

http://webquest.sdsu.edu/about_webquests.html

Provides useful ideas about constructing webquests.

http://projects.edtech.sandi.net/staffdev/buildingblocks/p-index.htm

Outlines, with examples, the building blocks of a webquest.

http://webquest.org/search/

A searchable database of hundreds of webquests in languages such as English, French, Spanish. Especially useful for ELLs because they can complete content-specific webquests in their home language.

http://webquest.sdsu.edu/designpatterns/all.htm

Provides an extensive list of different design patterns to build your own webquest.

http://projects.edtech.sandi.net/staffdev/tpss98/patterns-taxonomy.html

Provides a taxonomy of different webquest possibilities to use with students.

http://webquest.sdsu.edu/taskonomy.html

Another taxonomy of webquest types.

Sites that Build Language, Literacy, and Grammar Skills for ELLs

www.breakingnewsenglish.com/

We have placed this site first because it is an absolutely exceptional resource for ELLs and teachers, well worth bookmarking on your computer. This site offers a plethora of newsworthy items (for listening with audio files and reading) with all types of accompanying grammar activities and tests. Can be adapted for ELL use in social studies, health, geography, economics, history, language arts, music, and art classes.

Dictionaries

www.yourdictionary.com

Your Online Dictionaries has dictionaries for over 150 languages.

Fostering Speaking

www.kidlink.org

Matches students from all over the world for email and chat. The chat rooms are supervised.

Grammar

www.mansioningles.com

La Mansión del Inglés is an excellent site to learn English. This site contains a lot of free exercises and materials.

www.english-the-easy-way.com

English Grammar: The Easy Way is an excellent site to learn English grammar. This site explains English so that everyone can understand.

http://netgrammar.altec.org

NetGrammar provides extensive grammar practice through a great variety of reading, writing, and listening activities.

www.1-language.com

Language.com—The ESL Site offers lots of resources including worksheets, listening modules, quizzes, and more.

Idioms

www.tesl.iastate.edu/510/F02/idioms/index.htm

This website contains lists of idioms with ideas for lessons for ELLs.

Journaling

www.livejournal.com

LiveJournal lets you express yourself, share your life, and connect with friends online. It can be used in many different ways: as a private journal, a blog, a discussion forum, a social network, and more.

Language Play

www.magictheatre.com/language.html

Captures the attention and motivation of children as they get engrossed in a thrilling animated story. With over 1,000 interactive exercises for comprehension, vocabulary, composition, and pronunciation, Language Adventure teaches the most useful words and phrases. The program teaches ESL, Spanish, French, Japanese, German, and Italian.

Listening

www.headsupenglish.com/

A good site with four 30-hour listening units with activities.

www.eslpodcards.com/country-index.php

This site offers a host of PodCards with accompanying worksheets. Listen to a variety of English accents. PodCards are audio postcards that you can download to your iPod, your MP3 player, or your computer. You can also burn the files to CD to use in class, at home, in the car—wherever you want. They contain information about a particular town or city from different countries around the world and biographies of famous people, inventions, films, or events that make these places famous.

www.elllo.org/

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ELLLO is a free online listening resource of over 1,000 listening activities designed especially for ESL and EFL students and teachers. Most listening activities include images, an interactive quiz, transcript of the audio, and downloadable MP3.

www.esl-lab.com/

An amazing archive of short audio clips designed to replicate real-life situations. All the clips come with a nice selection of pre-, during, and post-listening activities. Clips are divided into listening for academic purposes and everyday speech.

www.esldesk.com/esl-links

The ESL Links Site offers some thematic listening activities which incorporate native listening materials via RealAudio.

www.EnglishListening.com

In the English Listening Lounge an ELL can listen to real people speaking English.

www.voanews.com

On Voice of America one can listen to international news in English and many other languages.

Literacy

www.literacycenter.net

Provides safe learning activities for parents and teachers to share with young children. All online lessons are free of advertising and free of charge.

www.bbc.co.uk/skillswise/

The BBC in the UK provides factsheets, worksheets, quizzes, and games to help improve an ELL's skills.

Pronunciation

www.esl.net/pronunciation_power.html

A CD-ROM tool for both Windows and Macintosh that teaches proper pronunciation of all 52 American English sounds. This program is designed by ESL language professionals. It reinforces the learning through interactive drills and many exercises. It has QuickTime movies to illustrate proper tongue and lip position.

Reading

www.colorincolorado.org/educators/teaching

An extremely useful site with many reading activities designed for the bilingual student and family.

www.learnnc.org/lp/editions/ell-readcomp0708

From the LEARN NC site, this provides a very user-friendly overview of preparing ELLs for reading comprehension.

http://w2.byuh.edu/academics/languagecenter/CNN-N/CNN-N.html

CNN Newsroom and WorldView for ESL Students includes news stories with ESL exercises.

www.er.uqam.ca/nobel/r21270/NOVA_SCOTIA/comenius_fables.htm

Achieving fluency through fables for use in reading comprehension.

http://english-zone.com/index.php?ID=6

Reading Zone offers lots of reading activities.

www.geocities.com/Athens/Academy/1929/ESLquiz.htm

The ESL Quiz Zone offering vocabulary and reading comprehension exercises.

http://home.earthlink.net/~eslstudent/read/read.html

Online Reading Exercises offers a variety of reading activities.

wwwedu.ge.ch/cptic/prospective/projets/anglais/exercises/welcome.html

English Exercises Online provides extensive reading activities for all levels of ESOL.

www.ohiou.edu/esl/english/reading/activities.html

Ohio ESL is a gateway site for reading and offers lots of websites to choose.

Spelling

http://iteslj.org/links/ESL/Spelling/

Gateway site to lists of links to sites that promote spelling for ELLs.

Vocabulary

www.insightin.com/esl/

The 6,000 most frequently used words in English.

www.bbc.co.uk/worldservice/learningenglish/teachingenglish/plans/witn_2007.shtml

The BBC offers word-building and grammar-learning lessons through newspaper articles.

Writing

www.writely.com

An online writing sharing facility by Google.

http://writeboard.com

Shareable, web-based text documents that allow edit saves, rollbacks to any version, and change comparisons. Very good for writing process practice; peer-reviewing, drafting, and editing.

www.epals.com

ePals is the leading provider of school-safe collaborative learning products for K–12 across 200 countries and territories.

$http://free-game-downloads.mosw.com/abandonware/pc/educational_games/games_s_z/storybook_weaver.html$

An excellent edutainment title from MECC, Storybook Weaver is an incentive for developing writing skills, allowing children to express their creativity with pictures and sounds. Storybook

Weaver is designed for kids who want more than just a sheet of paper to jump-start their creative writing. Young writers choose between themes such as outer space, a king's castle, oceans, and more, and then pick from a variety of characters available to fit with the almost never-ending choices of scenery.

www.zianet.com/jkline/orgcomp.html

Organizing Compositions helps ELLs to structure and organize parts of a composition.

www2.actden.com/writ_den/menu.htm

Writing Den offers writing topics with background information.

www.ohiou.edu/esl/english/index.html

Writing Resources offers tips on the mechanics of the writing process.

www2.actden.com/writ_den/tips/contents.htm

Lets ELLs look up grammar rules, helper words, and other writing tips.

Professional Discourses

Bilingual Education

www.estrellita.com/bil.html

Bilingual Education Resources on the Net: links to information or resources on the internet related to bilingual education.

www.ed.gov/about/offices/list/oela/index.html?src=mr

The Office of English Language Acquisition, Language Enhancement, and Academic Achievement for Limited English Proficient Students (OELA) sponsored by the U.S. Department of Education.

www.ncela.gwu.edu/

National Clearinghouse for English Language Acquisition (NCELA) highlights English Language Instructional Education Programs.

www.kn.pacbell.com/wired/espanol/

Especially Español includes lists of great educational sites in Spanish.

Bilingual Special Needs Help

http://clas.uiuc.edu/

CLAS (Culturally & Linguistically Appropriate Services)

http://ericec.org/digests/e501.html

Duran, E. (1991, May). Functional language instruction for linguistically different students with moderate to severe disabilities. The ERIC Clearinghouse on Disabilities and Gifted Education. The Council for Exceptional Children.

www.cde.state.co.us/cdesped/SD-ELL.asp

English Language Learners with Exceptional Needs (ELLEN)

www.ncela.gwu.edu/resabout/sped/

Resources on Special Education and Culturally and Linguistically Diverse Students

www.cise.missouri.edu/

Center for Innovations in Education

www.blss.portsmouth.sch.uk/sen/filterq.shtml

Initial Assessment: Special needs or English language

www.cal.org/resources/digest/0108ortiz.html

Ortiz, A. (2001) English language learners with special needs: Effective instructional strategies.

www.hoagiesgifted.org/eric/minibibs/marchives/eb4.html

Selected Resources: Preparing teachers to serve culturally and linguistically diverse populations, 1993–1996

Conferences

Although most curriculum and subject-specific disciplines have their own national organizations holding their own conferences, which usually in turn include SIGs and conference strands on technology, there are a number of technology-specific conferences that target the use of technology in facilitating language learning in the classroom. These include:

- CALICO, a national technology and language-orientated conference held in the first half of every year (https://calico.org/p-308-Conferences.html);
- International Association for Language Learning Technology, hosted every two years, focuses on administrating language learning programs;
- National Educational Computing Conference (NECC) focuses on classroom-based technology use;
- AsiaCALL concerns itself with computer-assisted language learning through integration and interaction with technology in educational settings and can be found at www.asia-call.org/ index.php;
- EUROCALL, the European Association for Computer Assisted Language Learning, provides a European focus for the promulgation of innovative research, development, and practice relating to the use of technologies for language learning (www.eurocall-languages.org/index. html).

Journals

Not all journals are the same, obviously! What is listed below is a selection of journals and magazines, some of which are primarily intended for a university readership and others are primarily intended for a school readership. All aim for best pedagogic practice in the integration of technology into the classroom.

- Electronic School at http://electronic-school.com is an award-winning K-12 magazine about technology integration in classrooms.
- International Association for Language Learning Technology (IALLT) Journal readers are administrators or technical support staff of language technology centers, ESL and language labs, and other centers in which technology is applied to language teaching and learning; the readership also includes language faculty and teachers who use technology.
- Journal of Computing in Teacher Education (JCTE) focuses on training and certification issues.
- Journal of Research on Technology in Education (JRTE) focuses on educational computing.

- *Learning & Leading with Technology (L&L)*, a magazine specifically for teachers that provides ideas on how to integrate technology in the classroom, is published through ISTE.
- Technology and Learning at http://techlearning.com is written to inform teachers about new developments in technology and how to use these in the classroom.
- Language Learning & Technology at http://llt.msu.edu/ is a refereed journal that began publication in July 1997. The journal seeks to disseminate research to foreign and second language educators in the United States and around the world on issues related to technology and language education.

Online Professional Development Gateways

Undoubtedly, technology is changing the face of education. Below is a selection of top-rated websites that highlight the future potential of technology in education. www.marcprensky.com/

Marc Prensky is an internationally known expert on digital gaming in education. His website acts as a gateway portal to numerous professional development leads focusing on the use of games for learning in education.

www.infotoday.com/MMSchools/oct00/sargent&armstrong.htm

The George Lucas Educational Foundation has initiated a project entitled "Teaching in a Digital Age." The project highlights what is needed to bring about change at the school, district, and system levels.

http://vr.coe.ecu.edu/otherpgs.htm

A resource site with a links database of everything you want to know about virtual worlds and education.

Organizations

There are quite a few organizations that are dedicated to fostering the integration of technology in education. Besides providing many online resources for teachers, they also publish a host of journals. These journals include a wide range of articles that run along a continuum from the scholarly to the pedagogic in orientation.

- Association for Educational Communications and Technology (AECT) www.aect.org
- Computer Assisted Language Instruction Consortium (CALICO) http://calico.org
- International Association for Language Learning Technology (IALLT) http://iallt.org/
- International Society for Technology in Education (ISTE) www.iste.org
- Society for Information Technology & Teacher Education (SITE) http://site.aace.org
- European Association for Computer-Assisted Language Learning (EUROSLA) www.eurocall-languages.org/index.html
- Computers, Language and Education in Asia (AsiaCALL) www.asia-call.org/index.php

For other organizations that focus on technology use in educational settings, go to www.educational-software-directory.net/organizations.html.

Print and Associated Materials for Teachers

There is a wealth of resources available to teachers offering practical research findings and advice on teaching ELL students. Below is an annotated list of some reader-friendly research articles and

texts for teachers who would like to read more on specific subjects/topics. Also provided is a list of instructional materials that teachers can use in classrooms to help accommodate ELLs. The following list has been compiled by Barbara Cruz and Stephen Thornton.

Audio-Visual Materials

- Pinnegar, S., Teemant, A., Mason, B., and Harris, C. The Adolescent Literacy Case: A Video Ethnography of Teaching Second Language Students Content Through Literacy Development. CD-ROM (2002)
 - Teachers of English, science, social studies, and mathematics attending to literacy to promote greater academic achievement in their disciplines.
- Pinnegar, S., Teemant, A., and Tharp, R. *The Craig Cleveland Case*. CD-ROM (2002)

 Instruction of high school Mexican American history in a Spanish/English bilingual classroom.
- Teemant, A., Pinnegar, S., and Graham, R. *The Second Language Literacy Case: A Video Ethnography of Bilingual Students' Literacy Development*. CD-ROM (2003)

 This allows mainstream teachers to see and hear the second language literacy accounts of nine

diverse second language learners, their teachers, and families. The cases explore who second language readers and writers are, their literacy needs, and their experiences in and outside school.

- The SIOP Model: Sheltered Instruction for Academic Achievement. Video (VHS) (2002)
 - This 77-minute video illustrates the eight components of the SIOP Model for sheltered instruction in detail. The video presents extended footage from middle and high school classrooms. It features interviews with six outstanding teachers and SIOP researchers. It is designed especially for use in sustained programs of staff development and teacher education and is to be used in conjunction with *Using the SIOP Model: Professional Development for Sheltered Instruction*.
- Helping English Learners Succeed: An Overview of the SIOP Model. Video (VHS) (2002)

 This 26-minute video provides an introduction to a research-based model of sheltered instruction. The video uses classroom footage and researcher narration to concisely present the eight components of the SIOP Model. This video will be useful to administrators, policymakers, or teachers. It also serves as a fitting supplement in teacher methodology courses.

Best Practice in ELL Instruction

- Association for Supervision and Curriculum Development (no date). *Differentiated instruction resources*. Retrieved July 10, 2007, from www.ascd.org/portal/site/ascd/menuitem.3adeebc67 36780dddeb3ffdb62108a0c.
- Echevarria, J. and Goldenberg, C. (1999). *Teaching Secondary Language Minority Students*. Center for Research on Education, Diversity & Excellence. Retrieved March 21, 2007, from www.cal. org/crede/pubs/ResBrief4.htm.
- Faltis, C. J. and Wolfe, P. M. (Eds.) (1999). So much to say: Adolescents, bilingualism, and ESL in the secondary school. New York: Teachers College, Columbia University.
 - Resource for secondary teachers on how to improve education for language minority students. Practical suggestions for content-area teachers are based on research findings.
- Fern, V., Anstrom, K., and Silcox, B. (no date). Active learning and the limited English proficient student. *Directions in Language and Education*, 1 (2). Retrieved August 9, 2007, from www. ncela.gwu.edu/pubs/directions/02.htm.
- Genesee, F., Lindholm-Leary, K., Saunders, W., and Christian, D. (Eds.) (2006). *Educating English language learners: A synthesis of research evidence*. New York: Cambridge University Press.

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- Lewis-Moreno, B. (2007). Shared responsibility: Achieving success with English language learners. *Phi Delta Kappan*, 88 (10): 772–775.
- Linquanti, R. (1999). Fostering academic success for English language learners: What do we know? Retrieved June 20, 2007, from www.wested.org/policy/pubs/fostering/index.htm#sect5.
- Tambini, R. F. (1999). Aligning learning activities and assessment strategies in the ESL classroom. *Internet TESL Journal*, 5 (9). Retrieved date, from http://iteslj.org/Articles/Tambini-Aligning. html.
- TESOL (1997). ESL standards for preK-12 Students. Alexandria, VA: TESOL.
 - In conjunction with *Integrating the ESL standards into classroom practice: Grades 6–8* and *Integrating the ESL standards into classroom practice: Grades 9–12*, the standards can help content area teachers plan for instruction.
- Thomas, W. P. and Collier, V. P. (2002). *A national study of school effectiveness for language minority students' long-term academic achievement.* Berkeley, CA: Center for Research on Education, Diversity & Excellence.
 - Findings of a longitudinal study that examined the long-term academic achievement of students who participated in different language support programs.
- Walqui, A. (2000). Strategies for success: Engaging immigrant students in secondary schools. Retrieved June 21, 2007, from www.cal.org/resources/digest/0003strategies.html.

Cultural and Newcomer Information

- Axtell, R. E. (1997). *Gestures: The do's and taboos of body language around the world.* New York: John Wiley and Sons.
 - Informational guide about gestures and signals, organized by country.
- CultureGrams (2006). New York: Ferguson Publishing Company.
 - Concise cultural reports covering 25 categories, including history, religion, family, and economy.
- Dresser, N. (1996). *Multicultural manners: New rules of etiquette for a changing society*. New York: John Wiley and Sons.
 - An overview of the correct behavior to use in a wide range of cross-cultural situations.
- Flaitz, J. (2006). *Understanding your refugee and immigrant students: An educational, cultural, and linguistic guide.* Ann Arbor, MI: University of Michigan Press.
 - The focus of this book is focused on the 18 countries that contribute a majority of refugees and immigrants to the United States and includes interviews with students, information about specific schooling traditions, and country profiles. Also provided is information about teacher–student relationships, discipline and class management, and appropriate non-verbal communication, taking into account refugee and immigrant students' cultural and educational backgrounds.
- Henze, R. and Hauser, M. (2000). *Personalizing culture through anthropological and educational perspectives*. Washington, DC: Center for Research on Education, Diversity & Excellence. The premise of this book is that teachers can use students' prior knowledge and skills as rich resources for teaching and learning, helping to create culturally responsive schools.
- Ioga, C. (1995). The inner world of the immigrant child. Mahwah, NJ: Lawrence Erlbaum and Associates.
 - Incorporating the voices and artwork of immigrant children, this book is a teacher's description of the cultural, academic, and psychological adjustments that these students must make.
- Levitan, S. (Ed.) (1998). *I'm not in my homeland anymore: Voices of students in a new land.* Toronto, ON: Pippin Publishing.

- Collection of short stories written by immigrant students, reflecting on their experiences.
- Mace-Matluck, B. J., Alexander-Kasparik, R., Queen, R. M. (1998). *Through the golden door: Educational approaches for immigrant adolescents with limited schooling*. McHenry, IL: Delta Systems Publishing Group.
 - This book examines the needs of recent immigrant students who enter middle school and high school with little or no prior formal schooling and with low literacy skills. The critical features of successful secondary school programs for these students are described and guidelines for school administrators and teachers are provided.
- Padrón, Y. N., Waxman, H. C., and Rivera, H. H. (2002). *Educating Hispanic students: Obstacles and avenues to improved academic achievement*. Berkeley, CA: Center for Research on Education, Diversity & Excellence.
 - This report examines factors that must be considered when planning for effective instruction of Hispanic students.
- Short, D. (2004). *Creating access: Language and academic programs for secondary school newcomers.* Washington, DC: Center for Applied Linguistics.

ESOL Textbooks

- Brisk, E. (2006). Bilingual education: From compensatory to quality schooling. Mahwah, NJ: Lawrence Erlbaum Associates.
- Carter, Ronald and Nunan, David (2001). *The Cambridge guide to teaching English to speakers of other languages*. London: Cambridge University Press.
 - Leading figures in the field contributed to this book on applied linguistics and language studies with particular emphasis on TESOL.
- Diaz-Rico, L. T. and Weed, K. Z. (2006). *The crosscultural, language, and academic development handbook*, 3rd edn. Boston: Pearson Allyn and Bacon.
- Garcia, E. (2002). *Student cultural diversity: Understanding and meeting the challenge*, 3rd edn. Boston: Houghton Mifflin Company.
- Gonzalez, Virgina, Yawkey, Thomas, and Minaya-Rowe, Liliana (2006). *English-as-a-second-language (ESL) teaching and learning*. Boston: Pearson Allyn & Bacon.
 - Provides theoretical and practical discussions of best approaches and strategies for increasing the academic achievement of at-risk English language learners. Authors include pertinent case studies, thought-provoking questions, and activities in each chapter. Especially interesting is the history of immigrant ESL students in the United States.
- Govoni, J. (2006) *Perspectives on Teaching K–12 English Language Learners*, 2nd edn. Boston: Pearson Custom Publishing
 - Provides a hands-on approach to many ELL-related teaching issues and how best to resolve them. Many activities and projects accompany every chapter.
- Ovando, C. J., Combs, M. C., and Collier, V. (2006). *Bilingual and ESL classrooms: Teaching in multicultural contexts*. New York: McGraw-Hill.
 - Richard-Amato, P. A. (2003). Making it happen: From interactive to participatory language teaching, theory and practice, 3rd edn. New York: Longman.
- Zainuddin, Hanizah, Yahya, Norchaya, Morales-Jones, Carmen A., and Ariza, Eileen N. (2002). *Fundamentals of teaching English to speakers of other languages in K–12 mainstream classrooms*. Dubuque, IA: Kendall Hunt.
 - This book includes discussions on culture shock, how language influences culture, differences in verbal and non-verbal communication, and teaching and learning styles.

Home-School Collaboration

Chang, Ji Mei (2004). Family literacy nights: Building the circle of supporters within and beyond school for middle school English language learners. Berkeley, CA: Center for Research on Education, Diversity & Excellence.

Exploration of successful strategies for improving home–school collaboration and educational opportunity for linguistically and culturally diverse students.

Gonzalez, N., Moll, L., Floyd-Tennery, M., Rivera, A., Rendon, P., and Amanti, C. (1993). Funds of knowledge for teaching in Latino households. *Urban Education*, 29 (4): 443–470.

Moll, L., Armanti, C., Neff, D., and Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory and Practice*, 31 (2): 132–141.

Legal Issues

González, J. M. (2002). *Bilingual education and the federal role, if any* Tempe, AZ: Language Policy Research Unit, Education Policy Studies Laboratory, Arizona State University. Retrieved February 10, 2004, from www.asu.edu/educ/epsl/LPRU/features/brief1.htm.

Office of Multicultural Student Language Education (OMSLE) (2000). Consent decree: League of United Latin American Citizens (LULAC) et al. v. State Board of Education Consent Decree, United States District Court for the Southern District of Florida, August 14, 1990. Tallahassee, FL: Florida Department of Education. Retrieved June 21, 2007, from www.fldoe.org/aala/cdpage2.asp.

U.S. Department of Education, Office for Civil Rights (2000). *The provision of an equal education opportunity to limited-English proficient students*. Washington, DC: Author. Retrieved June 21, 2007, from www.ed.gov/about/offices/list/ocr/eeolep/index.htm.

Publishers

Alta Books (www.altaesl.com)

Benchmark Education Company (www.benchmarkeducation.com)

Cambridge University Press (www.cambridge.org/us/esl)

Center for Applied Linguistics (www.cal.org/)

Delta Publishing Group (www.delta-systems.com/deltalinks.htm)

Heinemann (http://books.heinemann.com/categories/11.aspx)

Oxford University Press (www.oup.com/us/corporate/publishingprograms/esl/?view=usa)

Pearson ESL (www.longman.com)

Thomson English Language Teaching (http://elt.thomson.com/namerica/en_us/index.html#)

Teacher Training and Professional Development

González, Josué and Darling-Hammond, Linda (2000). Programs That Prepare Teachers to Work Effectively With Students Learning English. Retrieved June 21, 2007, from www.cal.org/resources/digest/0009programs.html

Haynes, Judie (2004). *Tips on communicating: Show your school's mainstream teachers and students how to communicate with your newcomers from the very first day.* Retrieved June 21, 2007, from www.everythingesl.net/inservices/tipsoncommunicating.php.

Howard, Elizabeth R., Olague, Natalie, and Rogers, David (2003). The dual language program

- planner: A guide for designing and implementing dual language programs. Berkeley, CA: Center for Research on Education, Diversity & Excellence.
- This guide offers a collection of tools (discussion prompts, graphic organizers, and quizzes) to be used by those who are in the process of planning or implementing a new dual language program.
- Jameson, Judith (2002). *Professional development for bilingual and ESL paraprofessionals*. McHenry, IL: Delta Publishing Group.
 - Paraprofessional training handbook to support students' language development and academic learning.
- Northwest Regional Educational Laboratory (2001). Supporting bilingual and minority teachers: How administrators, teachers, and policy makers can help new teachers succeed. Retrieved June 21, 2007, from www.nwrel.org/request/may01/bilingual.html
- Short, D. (2000). *Training others to use the ESL standards: A professional development manual.* Alexandria, VA: Teachers of English to Speakers of Other Languages.
- Short, Deborah J. and Boyson, Beverly A. (2004). *Creating access: Language and academic programs for secondary school newcomers.* Washington, DC: Center for Applied Linguistics. Designed especially for recent immigrants with limited English proficiency, this book is intended to help district personnel create a newcomer program or enhance an existing program.
- Short, D., Hudec, J., and Echevarria, J. (2002). *Using the SIOP model: Professional development manual for sheltered instruction*. Washington, DC: CAL
- Snow, M. (Ed). (2000). *Implementing the ESL standards for pre-K-12 students through teacher education*. Washington, DC: ERIC Clearinghouse on Languages and Linguistics.
- Tarone, Elaine and Tedick, Diane (2000). *Conversations with mainstream teachers: What can we tell them about second language learning and teaching?* Retrieved June 21, 2007, from http://carla.acad.umn.edu/esl/minnetesol2000.html.

Teachers' Manuals and Guides

- Akhavan, N. (2006). *Help! My kids don't all speak English*. Portsmouth, NH: Heinemann. This book explains how to set up a "language workshop" that helps to expand students' language skills and thinking strategies. Although it has an elementary focus, the sample lesson plans, classroom-tested units of study, and ready-to-use graphic organizers included are none-theless helpful and can be modified for older students.
- Brownlie, Faye, Feniak, Catherine, and McCarthy, Vicki (2004). *Instruction and assessment of ESL learners: Promoting success in your classroom.* Winnipeg: Portage & Main Press.
 - This handbook for teachers provides suggestions for orienting the ELL to a new school, how to assess the ESL learner, how to modify lesson plans, and how to involve parents. Dozens of useful black line masters are provided as well as suggestions for children's literature and internet resources.
- Cary, S. (2000). Working with second language learners: Answers to teachers' top ten questions. Portsmouth, NH: Heinemann.
 - This easy-to-use book explores topics such as students' cultural backgrounds, encouraging reluctant speakers, and teaching grade-level content to ELLs.
- Echevarria, J., Vogt, M., and Short, D. (2007). *Making content comprehensible for English learners: The SIOP model*, 3rd edn. Boston: Pearson Allyn & Bacon.
 - Using a sheltered instruction approach, the authors offer guidelines for implementing their program. An accompanying CD features classroom clips, reproducible resources, and interviews with the authors.

- Einhorn, K. (2001). Easy & engaging ESL activities and mini-books for every classroom: Terrific teaching tips, games, mini-books & more to help new students from every nation build basic English vocabulary and feel welcome! New York: Teaching Resources.
 - Useful collection of ideas for assessing your ELL students' needs, communicating with family, and creating engaging activities.
- Forte, I. (2001). *ESL active learning lessons: 15 complete content-based units to reinforce language skills and concepts.* Nashville, TN: Incentive Publications.
- Forte, I., Pangle, M. A., and Drayton, M. (2001). *ESL content-based language games, puzzles, & inventive exercises.* Nashville, TN: Incentive Publications.
 - Entertaining strategies to use with ELL students.
- Gorea, L. (2005). ESL games and classroom activities: An interactive activity book for all ages. Tamarac, FL: Llumina Press.
 - Learning activities for various grade levels and differing levels of language ability.
- Helmer, S. (2003). Look at me when I talk to you: ESL learners in non-ESL classrooms. Toronto: Pippin.
 - Exploration of the underlying fundamentals of communication and how culture influences messages sent.
- Herrell, A. and Jordan, M. (2004). *Fifty strategies for teaching English language learners*, 2nd edn. Upper Saddle River, NJ: Pearson Education.
- Josel, C. A. (2002). *Ready-to-use ESL activities for every month of the school year.* Hillsboro, OR: Center for Applied Research in Education.
- Kendall, J. and Outey, K. (2006). Writing sense: Integrated reading and writing lessons for English language learners. New York: Stenhouse.
 - Includes dozens of teacher-tested, writing-based lessons for students at all levels of language acquisition.
- Law, B. and Eckes, M. (2000). *The more-than-just-surviving handbook: ESL for every classroom teacher.* Winnipeg: Peguis Publishers, 2000.
 - Written for both elementary and secondary school teachers, this book provides strategies for working with ELL students in the regular classroom.
- O'Malley, J. M. (2002). Authentic assessment for English language learners: Practical approaches for teachers. Reading, MA: Addison-Wesley.
 - Offers alternative assessment strategies for ELL students that can also be used with all students.
- Peitzman, F. and Gadda, G. (Eds.) (1994). With different eyes: Insights into teaching language minority students across the disciplines. White Plains, NY: Longman.
- Reiss, J. (2005). *Teaching content to English language learners*. White Plains, NY: Pearson. This practical book helps content-area teachers to apply second language learning theories in their classrooms. Emphasis is on making content more accessible, strengthening vocabulary, and increasing student participation.
- Samway, K. D. and McKeon, D. (1999). *Myths and realities: Best practices for language minority students.* Portsmouth, NH: Heinemann.
 - This book dispels common myths related to ELL students by providing basic background information on issues such as second language acquisition, legal requirements for educating linguistically diverse students, assessment, and placement.
- Short, D. J. (1991). How to integrate language and content instruction: A training manual. Washington, DC: Center for Applied Linguistics.
 - This manual, intended for teachers, administrators, and teacher educators, presents strategies for integrating language and content. Topics include materials adaptations, lesson plan development, and assessment issues.

Walter, T. (2004). Teaching English language learners: The how to handbook. White Plains, NY: Longman.

This user friendly book includes discussions on culture, language acquisition, literacy development, and academic/content area development. A list of resources is also included.

Technology-Orientated Print Materials

Chappelle, Carol (2003). *English language learning and technology*. Philadelphia, PA: John Benjamins.

Dudeney, Gavin (2000). *The internet and the language classroom*. Cambridge: Cambridge University Press.

Gee, James Paul (2004). What videogames have to teach us about learning and literacy. New York: Palgrave Macmillan.

Levy, Mike, and Stockwell, Gary (2006). *CALL dimensions*. ESL & Applied Linguistics Professional Series. Mahwah, NJ: Lawrence Erlbaum.

Pesce, Mark (2000). *The playful world: How technology is transforming our imagination*. New York: Ballentine.

Postman, Neil (1995). The end of education. New York: Alfred A. Knopf.

Prensky, Marc (2001). Digital game-based learning. New York: McGraw-Hill.

Prensky, Marc (2006). Don't bother me mom—I'm learning. New York: Paragon House.

Schank, Roger (1997). Virtual learning. New York: McGraw-Hill.

Sheldon, Lee (2004). *Character development and storytelling for games*. Philadelphia, PA: Muska and Lippman.

Resources for Students

In addition to the resources presented here, note that each of the chapters in Part 3 also lists useful resources that may be utilized by students.

Dictionaries

Agnes, Michael E. (Ed.) (1998). Webster's New World Basic Dictionary of American English. New York: John Wiley & Sons.

Cambridge Learner Dictionaries (www.cambridge.org/elt/dictionaries/cld.htm)

This collection includes beginners' and advanced learners' dictionaries. Pronouncing dictionaries and grammar resources are supplemented with CDs to aid comprehension. *English Grammar in Use* is a self-paced study and reference guide for intermediate and above language learners.

Hill, J. and Lewis, M. (Eds.) (1997). *The LTP Dictionary of Selected Collocations*. Sydney: Language Teaching Publications.

Designed for intermediate and advanced learners; frequently used collocations are grouped by nouns, adjectives, verbs, and adverbs.

Kauffman, D. and Apple, G. (2000). *Oxford Picture Dictionary for the Content Areas*. New York: Oxford University Press.

Color illustrations are used to define over 1,500 vocabulary words from the subjects of social studies, science, and math. Although it is intended primarily for elementary and middle school students, this resource can nonetheless be very useful to recent arrivals. Ancillary materials include a teacher's book, student workbook, wall charts, overhead transparencies, and sound recordings.

Lea, D. (2002). Oxford Collocations Dictionary for Learners of English. New York: Oxford University Press.

This unique dictionary provides over 170,000 common word combinations to help students speak and write English more naturally and fluently.

Longman Learner Dictionaries (www.longman.com/ae/dictionaries)

This collection offers dictionaries for beginning, intermediate, and advanced language learners. Basic picture dictionaries, pronunciation dictionaries, and bilingual dictionaries are all included in this series. Additionally, the *Longman American Idioms Dictionary* helps students understand common American expressions.

Longman Dictionary of American English (2004). Upper Saddle River, NJ: Pearson Education. Intermediate-level dictionary including full-color pictures and interactive CD-ROM.

Online Dictionaries

The following is a collection of free-access dictionaries on the World Wide Web.

- Alpha Dictionary (www.alphadictionary.com/index.shtml)
- Cambridge Dictionaries Online (http://dictionary.cambridge.org)
- Dictionary.com (http://dictionary.reference.com/)
- Die.net Online Dictionary (http://dict.die.net/)
- Encarta World English Dictionary (http://encarta.msn.com/encnet/features/dictionary/dictionary/ome.aspx)
- Lexicool (www.lexicool.com/)
- Merriam-Webster Dictionary (www.m-w.com/dictionary.htm)
- Omniglot (www.omniglot.com/links/dictionaries.htm)
- One Look Dictionary Search (www.onelook.com/)
- Oxford Dictionaries (www.askoxford.com/dictionaries/?view=uk)
- Word2Word (www.word2word.com/dictionary.html)
- Your Dictionary (www.yourdictionary.com/)

Student Online Support: Learning English for ELLs

EFL/ESOL/ESL Songs and Activities (www.songsforteaching.com/esleflesol.htm)

Lyrics and sound clips are offered for a variety of songs that help students learn vocabulary for things such as colors, shapes, and food, among many other topics.

English Forum (www.englishforum.com/00/students/)

Online study resources, interactive English language exercises, online dictionaries, and other tools. Full texts of popular novels are also included.

English Online (E. L. Easton) (http://eleaston.com/english.html)

In addition to language instruction and support, this site offers quizzes, tests, and links to many social studies topics.

ESL Connect (www.eslconnect.com/links.html)

Student visitors to this gateway site can access links to Homework Help, Crosswords and Puzzles, and other activities that support English language learning.

ESL: English as a second language (www.eslgo.com/quizzes.html)

Tests students' knowledge of subject-verb agreement, prepositions, punctuation, and vocabulary.

ESL Independent Study Lab (www.lclark.edu/~krauss/toppicks/toppicks.html)

The ESL Center, housed at Lewis and Clark College in Portland, Oregon, contains speaking and listening exercises and activities that promote learning English as a second language.

ESL Partyland (www.eslpartyland.com)

Billed as "the cool way to learn English," this website allows users to enter depending on whether they are a teacher or a student. Students can access interactive quizzes, discussion forums, a chat room, and interactive lessons on a variety of topics.

eViews: English Listening Exercises (www.eviews.net)

Although there is a fee associated with this site, there is a free trial available. The listening exercises are designed for intermediate to advanced English students. English is recorded at normal speed and comprehension checks are included.

Grammar Safari (www.iei.uiuc.edu/student_grammarsafari.html)

This site provides "grammar safari" activities wherein students "hunt" and "collect" specific common words as they are used in documents accessible on the internet.

Intensive English Institute: Internet English Resources (www.iei.uiuc.edu/student_internet_res. html)

Listening resources, oral communication resources, and a movie guide for English language learners are just a few of the helpful links provided on this site.

Interesting Things for ESL/EFL Students (www.manythings.org)

This website is for people studying English as a Second Language (ESL) or English as a Foreign Language (EFL). There are quizzes, word games, word puzzles, proverbs, slang expressions, anagrams, a random-sentence generator, and other study materials.

Internet Treasure Hunts for ESL Students (http://iteslj.org/th/)

Links to scavenger hunts on the Internet that develop language skills.

iTools (www.itools.com/)

Language tools, translation services, and researching resources.

Learn English (www.learnenglish.de)

Online games, tests, quizzes, and pronunciation guides assists students learning English.

Longman English Language Teaching (www.longman.com)

In addition to free access to the *Longman Dictionary of Contemporary English Online*, the ELT Teens Resource Library includes online activities, support materials, and free resources for teenage learners of English.

OWL (Online Writing Lab) (http://owl.english.purdue.edu/handouts/esl/eslstudent.html)

Help with idioms, grammar, spelling, and vocabulary. Links to quizzes, tests, and interactive sites.

Randall's ESL Cyber Listening Lab (www.esl-lab.com)

Listening lab that allows students to practice listening skills, develop a natural accent, and understand slang.

Resources for English as a Second Language (www.usingenglish.com/)

The English Language Reference section provides a glossary of grammar terms, English idioms, and irregular verbs.

Self-Study Quizzes for ESL Students (http://a4esl.org/q/h)

These self-paced quizzes allow ELLs to test their understanding of language features such as vocabulary, homonyms, grammar, and idioms.

To Learn English (www.tolearnenglish.com/)

Online Student Publication Sites

www.telenaut.com/gst

Global Show 'n' Tell exhibits created by children aged up to 17 years.

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www.kidpub.org/kidpub

KidPub is another site where both classes and individual children can post their work.

www.cs.ucf.edu/~MidLink

Midlink is an online magazine for students that accepts submissions from students for publication.

Sources for Structured Internet Projects

www.Jasonproject.org

JASON Project sponsors a yearly expedition for students and teachers involving science and technology.

www.gsn.org/GSH/project/newsday

Newsday helps students to create their own newspaper.

http://onesky.engin.umich.edu

One Sky, Many Voices is an environmental-centered project that encourages students to use technology to study issues related to the weather.

www.thinkquest.org

ThinkQuest is a yearly contest about students creating online projects. The projects are then archived in an online library and shared as educational materials for the www community. Projects are up to eight weeks in length.

Online Translation Services

AltaVista Babel Fish (http://world.altavista.com/)

Applied Language Solutions (www.appliedlanguage.com/free_translation.shtml)

Google Language Tools (www.google.com/language_tools?hl=en)

Im Translator (http://freetranslation.imtranslator.com/lowres.asp)

Omniglot (www.omniglot.com/links/translation.htm)

World Lingo (www.worldlingo.com/en/products_services/worldlingo_translator.html)

Glossary

- **Active vocabulary** is the word repertoire that a person uses intuitively and actively as he or she communicates within language situations throughout the day.
- **Adjustable questioning** refers to the changing of question complexity. Often teachers use Bloom's taxonomy as a guide to scaffold question types from cognitively undemanding to questions that necessitate higher-order thinking.
- **Anchor activities** are used in differentiated instruction. They are ongoing tasks that students can work on throughout a unit and afford an approach for teachers to manage "staggered finishers," that is, when students complete work at different times.
- **Asynchronous** is a term used in technology when communication between two or more interlocutors takes place in delayed time.
- **Audioblog** is an online interactive communication tool in which messages are in real time and audible rather than written.
- **BICS** stands for *basic interpersonal communication skills* and refers to speech that is informal, everyday, and colloquial.
- **Blog** is an online interactive communication tool where messages are in real time. The mode of communication can be through video, audio, or writing.
- **CALP** stands for *cognitive academic language proficiency* and refers to speech that is formal, academic, and subject-specific jargon.
- **Chain writing** is an activity in which a student keeps adding onto a sentence or text; sometimes called "Chinese whispers" or "round-robin," though chain writing is a written not a spoken activity.
- **Circumlocution** is a communication strategy used when a person who doesn't know a specific word talks around the word and uses other words to explain it.

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Clarification request is an appeal made in response to someone's utterance to further clarify a prior statement.

Cloze procedure is a text-based activity in which a sequence of words, or every fifth word, or every verb, etc. is taken out of the text and a student needs to fill in the appropriate missing word.

Cognitive demand refers to the mental complexity of a task.

Constructivism is an approach to teaching that advocates developmentally appropriate teacher-supported learning that is initiated and directed by the learner.

Context-embedded is about the provision of many situational and environmental clues.

Course management tool is an online software tool that allows a user to organize, administer, and manage many aspects of teaching.

Cummins' Quadrants are a heuristic tool invented by Jim Cummins to describe and sequence activities from those that provided a high degree of scaffolded help to those that did not.

Cultural adjustment is the term used to describe an immigrant's stages of adjustment to life in a new country.

Culturally responsive pedagogy is teaching that is mindful, inclusive, and respectful of the cultures of students from other countries.

Culture shock is a stage of cultural adjustment. It refers to the period of time when a new immigrant withdraws from, criticizes, dislikes, and is negative toward the host country while simultaneously exalting the country of origin.

Curriculum compacting is a strategy of differentiated instruction in which a student has mastered a concept while others have not and (s)he is given extension work to move ahead.

Desktop publishing is the term referred to making a web page and publishing it to the World Wide Web.

Differentiated instruction refers to teaching that allows a heterogeneous class of students to work at their own level while still engaging with the same concepts.

Discussion board is a type of asynchronous online communication tool whereby one can post a comment and have others respond to it, thus starting a threaded conversation.

Dual language education is a form of bilingual education in which 50 percent of students in a class are native speakers of one language and 50 percent of students are native speakers of another language. The mediums of instruction are both languages.

Early production is the term used to refer to the first level of language development of English language learners. At this stage ELLs speak little if any English.

Elicitation is a type of feedback strategy in which one person starts a sentence and stops midway for the other to finish it.

ELL is the acronym for *English language learner*.

Email is an asynchronous form of online communication.

English language learner is the term used in the United States to describe individuals who are in the process of learning English. Formerly such terms as Limited English Proficient (LEP) were used.

E-portfolio is an online application that allows a student's work to be displayed in a variety of ways.

ESOL refers to English to speakers of other languages.

ESOL endorsement is an award/recognition given to those teachers who have completed ESOL courses to better serve the needs of their ELLs.

Exceptionalities refers to special needs and/or gifted individuals.

Exercise builder is an online tool that provides templates to create an array of different activity types.

Explicit correction is a strategy used in response to an incorrect utterance by a student in which the teacher provides the student with the correct answer.

Feedback is about responding to a linguistic cue. The type of feedback can vary.

Flexible grouping is organizing groups of students according to cognitive level, language level, behavior, learning style, etc. and varying the membership of groups according to task type and students' readiness to learn.

Form–function mapping refers to a linguistic form being matched to its meaning according to its use in any given situation.

Graphic organizer is a means to manage and explain new information.

Information gap activity is a task in which two students receive different information but need to collaborate and share this information in order to finish the task.

Input is the linguistic term used to refer to what a language learner hears.

In-service education refers to professional development activities undertaken by teachers who have completed their initial licensure in teaching.

Instant messaging is a form of online synchronous communication.

Interaction hypothesis is a theory in second language acquisition (SLA) that maintains that a second language learner needs comprehensible input, opportunity for output, interaction, and opportunity to negotiate meaning if second language learning is to be facilitated.

Interlanguage is a term in SLA that refers to the developing second language of a learner. Interlanguage is highly regular and systematic.

Intermediate fluency refers to the third stage of ELL development. At this stage ELLs are beginning to be more fluent in BICS, but still have a lot of trouble with CALP.

Jigsaw activity is a type of cooperative learning task.

KWL is the abbreviation for a graphic organizer task which gets the participant to write down what they know, what they want to know and what they have learned about any given topic.

Language experience approach is a way to get students to be creative with their writing, in which the focus is on expressing meaning rather than on grammar.

Listservs are online mediated forums where groups of people sharing a common interest post questions and comments and receive responses from members of the same listserv community.

Mainstreaming is the term referred to placing exceptional children (ELLs, special needs students) in the same class as kids with no handicaps.

Mediated activity is a Vygotskian term used to describe how all forms of learning are reconciled through the psychological or physical tools we use.

Metalinguistic clues is a feedback strategy whereby a teacher, without providing the correct form, asks questions or makes a comment to a student in order to help him or her utter the correct response.

Monolingual is a person who speaks only one language.

Movie Maker is a software that allows a user to edit a video.

Multiple intelligences is a term coined by Howard Gardner to describe different learning styles. He proposed eight such intelligences: interpersonal, intrapersonal, linguistic/analytic, spatial, musical, environmental, kinesthetic, and logical/mathematical.

Multiple modalities refers to listening, speaking, reading, and writing skills.

Negotiated meaning is a term used in SLA to refer to an interaction between people who work at making meaning sense of what is being said in order to avoid communication breakdown.

Nicenet is the name of a free online software that provides users with a course management system, otherwise known as a virtual learning environment.

Other-regulation is a term used in Vygotskian sociocultural theory to refer to an individual's need for assistance to complete a task.

Output refers to any linguistic utterance made by a person.

Passive vocabulary is the word repertoire that a person does not use intuitively or actively as he or she communicates but can comprehend their meaning when they are heard.

Peer teaching is a strategy used when students are buddled with each other in order to help each other (also called the buddy system).

Podcast refers to the online serialization of video and/or audio files.

Portfolio is a method of presenting and assessing students' performed work output.

PowerPoint is an online presentation software tool.

Preproduction is the first stage of an English language learner's development.

Preservice education refers to a teacher's initial licensure.

Project-based learning is a form of extended assignment learning that can be individual or group based.

Realia refers to authentic materials or manipulatives.

Recast is a feedback strategy in which a teacher, *without* directly showing that the student's utterance was incorrect, implicitly reformulates the ELL's error, or provides the correction.

Receptive vocabulary is a different term but has the same meaning as passive vocabulary.

Redundancy is a communication strategy in which a given utterance is rephrased in different ways to aid comprehension.

Regulation is a Vygotskian sociocultural theoretical term used to describe the level of mediational help a person needs to accomplish a task.

Repetition is a communication strategy in which an utterance is said again.

Rubric is a scoring tool that lists the criteria for a piece of work and the grading associated with each category.

Second language acquisition is the discipline that investigates how second languages are learned.

Self-regulation is a term used in Vygotskian sociocultural theory to refer to an individual's level of need for assistance to complete a task. A self-regulated person can do a task alone.

Semantic mapping is a type of organizing tool that helps to build vocabulary and ideas on any given area.

Sound file is a computer file that stores audio sound.

Speech-emergent is the fourth level of ELL development. At this stage ELLs have great BICS but are still struggling with CALP.

Standards (indicators) refers to national and state benchmarks for learning.

Synchronous refers to the "real time" exchange of online communication.

Technology refers to any electronic device used in a classroom.

Tiered activities ensure that students with different learning needs work with the same essential ideas and use the same key skills but through slightly different activity types.

Vidcast is a podcast that uses video.

Virtual learning environment is another way to describe an online course management system.

Voice over Internet Protocol (VoIP) refers to using the computer as a telephone system.

Webquest is an online inquiry-based activity that has five stages (introduction, task, process, product, and evaluation).

Wiki is a piece of server software that allows users to freely create and edit web page content using any web browser.

Work-station is another word for learning station. These serve groups or individual students to carry out targeted activity.

Writeboard is an online tool that enables process writing (drafting, editing, and redrafting text).

Zone of proximal development (ZPD) is a Vygotskian term to refer to a person's potential learning.

Appendix A

ISTE NETS National Educational Technology Standards

I TECHNOLOGY OPERATIONS AND CONCEPTS

Teachers demonstrate a sound understanding of technology operations and concepts. Teachers:

- A: demonstrate introductory knowledge, skills, and understanding of concepts related to technology
- B: demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

II PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES

Teachers plan and design effective learning environments and experiences supported by technology. Teachers:

- A: design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- B: apply current research on teaching and learning with technology when planning learning environments and experiences.
- C: identify and locate technology resources and evaluate them for accuracy and suitability.
- D: plan for the management of technology resources within the context of learning activities.
- E: plan strategies to manage student learning in a technology-enhanced environment.

III TEACHING, LEARNING, AND THE CURRICULUM

Teachers implement curriculum plans, that include methods and strategies for applying technology to maximize student learning. Teachers:

- A: facilitate technology-enhanced experiences that address content standards and student technology standards.
- B: use technology to support learner-centered strategies that address the diverse needs of students.
- C: apply technology to develop students' higher order skills and creativity.
- D: manage student learning activities in a technology-enhanced environment.

IV ASSESSMENT AND EVALUATION

Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies. Teachers:

- A: apply technology in assessing student learning of subject matter using a variety of assessment techniques.
- B: use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.
- C: apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.

V PRODUCTIVITY AND PROFESSIONAL PRACTICE

Teachers use technology to enhance their productivity and professional practice. Teachers:

- A: use technology resources to engage in ongoing professional development and lifelong learning.
- B: continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
- C: apply technology to increase productivity.
- D: use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

VI SOCIAL, ETHICAL, LEGAL, AND HUMAN ISSUES

Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice. Teachers:

- A: model and teach legal and ethical practice related to technology use.
- B: apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
- C: identify and use technology resources that affirm diversity
- D: promote safe and healthy use of technology resources.
- E: facilitate equitable access to technology resources for all students.

Appendix B

ISTE NETS Performance Indicators

(Numbers in parentheses following each performance indicator refer to the standards category to which the performance is linked. The categories are: I: Technology operations and concepts, II: Planning and Designing Learning Environments and Experiences, III: Teaching, Learning, and the curriculum, IV: Assessment and Evaluation, V: Productivity and Professional Practice, VI: Social, Ethical, Legal, and Human Issues)

- 1. assess the availability of technology resources at the school site, plan activities that integrate available resources, and develop a method for obtaining the additional necessary software and hardware to support the specific learning needs of students in the classroom. (I, II, IV)
- 2. make appropriate choices about technology systems, resources, and services that are aligned with district and state standards. (I, II)
- 3. arrange equitable access to appropriate technology resources that enable students to engage successfully in learning activities across subject/content areas and grade levels. (II, III, VI)
- 4. engage in ongoing planning of lesson sequences that effectively integrate technology resources and are consistent with current best practices for integrating the learning of subject matter and student technology standards (as defined in the ISTE National Educational Technology Standards for Students). (II, III)
- 5. plan and implement technology-based learning activities that promote student engagement in analysis, synthesis, interpretation, and creation of original products. (II, III)
- 6. plan for, implement, and evaluate the management of student use of technology resources as part of classroom operations and in specialized instructional situations. (I, II, III, IV)
- 7. implement a variety of instructional technology strategies and grouping strategies (e.g., whole group, collaborative, individualized, and learner centered) that include appropriate embedded assessment for meeting the diverse needs of learners. (III, IV)

- 8. facilitate student access to school and community resources that provide technological and discipline-specific expertise. (III)
- 9. teach students methods and strategies to assess the validity and reliability of information gathered through technological means. (II, IV)
- 10. recognize students' talents in the use of technology and provide them with opportunities to share their expertise with their teachers, peers, and others. (II, III, V)
- 11. guide students in applying self- and peer-assessment tools to critique student-created technology products and the process used to create those products. (IV)
- 12. facilitate students' use of technology that addresses their social needs and cultural identity and promotes their interaction with the global community. (III, VI)
- 13. use results from assessment measures (e.g., learner profiles, computer-based testing, electronic portfolios) to improve instructional planning, management, and implementation of learning strategies. (II, IV)
- 14. use technology tools to collect, analyze, interpret, represent, and communicate data (student performance and other information) for the purposes of instructional planning and school improvement. (IV)
- 15. use technology resources to facilitate communications with parents or guardians of students. (V)
- 16. identify capabilities and limitations of current and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs. (I, IV, V)
- 17. participate in technology-based collaboration as part of continual and comprehensive professional growth to stay abreast of new and emerging technology resources that support enhanced learning for PK-12 students. (V)
- 18. demonstrate and advocate for legal and ethical behaviors among students, colleagues, and community members regarding the use of technology and information. (V, VI)
- 19. enforce classroom procedures that guide students' safe and healthy use of technology and that comply with legal and professional responsibilities for students needing assistive technologies. (VI)
- 20. advocate for equal access to technology for all students in their schools, communities, and homes. (VI)
- 21. implement procedures consistent with district and school policies that protect the privacy and security of student data and information. (VI)

Appendix C

Flexible Grouping Chart

FLEXIBLE GROUPING CHART

#	Name	Animals	Colors	Countries	Flowers	Cities
		Grouping by language level	Grouping by cognitive level	Grouping by introvertedness/ extrovertedness	Grouping by four by behavior/ responsibility	Grouping by four by boy/girl
1	Jose	Lion	Blue	Mexico	Daisy	Sydney
2	Maria	Lion	Brown	Mexico	Daffodil	Paris
3	Eduardo	Lion	Blue	Germany	Rose	Beijing
4	Ishmail	Lion	Brown	Germany	Rose	Santiago
5	Juanita	Beaver	Brown	Mexico	Daisy	Toronto
6	Greta	Beaver	Blue	Germany	Carnation	Toronto
7	Chang	Beaver	Blue	Mexico	Daisy	Beijing
8	Thomas	Eagle	Gold	Australia	Carnation	Sydney
9	Bob	Eagle	Gold	Japan	Lily	Santiago
10	Barbara	Eagle	Gold	Australia	Daffodil	Paris
11	Tony	Eagle	Gold	France	Daffodil	Beijing
12	Gabi	Panda	Green	France	Lily	Paris
13	Andrea	Panda	Sliver	Australia	Daffodil	Santiago
14	Stephen	Panda	Green	Australia	Lily	Sydney
15	Peter	Panda	Silver	Japan	Carnation	Santiago
16	Jeff	Panda	Silver	France	Rose	Beijing
17	Lauren	Shark	Green	Japan	Carnation	Paris
18	Rocio	Shark	White	Sweden	Lily	Toronto
19	Stefanie	Shark	White	Sweden	Rose	Toronto
20	Werther	Shark	White	Sweden	Daisy	Sydney

Class Student Profile: #1-7 are ELLs; #1-4 are level 1 or 2 ELL, #5-7 are level 3 or 4.

NB: The teacher now has the class divided into ready-made flexible groupings. Each group serves a particular purpose. Students are never in the same grouping. Thus a student, for example Maria, will be a lion, brown, Mexico, a daffodil, Paris, Maine, a table, a boat, butter, a bridge, and Kennedy. To make it easy for students to remember their groups, the teacher could have sticker representations of each group category stuck at the top of each student's desk as well as a large poster of the above chart hung on the wall of the classroom. Cognitive and language/literacy groupings need to be reviewed every three to four months as student development occurs.

^{#1–11} are below grade average in literacy skills (reading and writing), #12–16 are on grade level, and #17–20 are above grade level.

^{#1, 3, 6, 7, 12, 14, 17, 18, 19, 20} are cognitively very sharp, #2, 4, 5, 13, 15, 16 are average, and #8, 9, 10, 11 are slow learners.

^{#1, 2, 5, 10, 11, 12, 16} are introverted; #3, 9, 15, 17, 18, 19, 20 are extroverts; the rest, depending on the activity, can be either.

^{#4, 9, 11, 15, 20} can be naughty and talkative and get off-task easily, whereas #5, 8, 10, 18, 19 are very responsible and always on-task.

States	Furniture	Vehicles	Food	Professions	Structures	Presidents
Random pairing	Pairing for ability	Pairing for language level	Random groups of three	Groups of four based on readiness	Mixed grouping of four by ability level	Half class grouping
Dakota Maine Florida Georgia Ohio Indiana Illinois Arizona Idaho Utah Utah Idaho Arizona Illinois Indiana Chio Georgia Florida Maine Dakota	Chair Table Stool Fridge Bed Oven Dryer Lamp Cupboard Cupboard Lamp Sofa Table Sofa Fridge Bed Oven Dryer Chair Stool	Boat Boat Plane Plane Car Car Train Train Tram Truck Truck Ship Ship Bike Bike Scooter Scooter Glider	Bread Butter Apple Juice Cheese Plum Cereal Bread Butter Apple Juice Cheese Cereal Plum Butter Bread Apple Juice Cheese	These groupings will always change based on the students' level of readiness to learn, which is based on regularly doing exit cards, quizzes and surveys	House Bridge Statue Skyscraper Tower Bridge Tower Statue Skyscraper Bridge House Tower House Skyscraper Statue Skyscraper Statue Skyscraper Statue Bridge House	Lincoln Kennedy

Notes

Introduction

1 Wisconsin Educational Association Council (WEAC) (1999) Although some doubts, advocates say differentiated instruction can raise the bar for all learners. Retrieved September 21, 2007, from www. weac.org/kids/1998–99/march99/differ.htm

1.1 Orientation

1 Proposition 227 was part of a referendum in California to abolish bilingual education for ELLs in favor of more instruction in English. The No Child Left Behind legislation is a federal initiative to oversee teacher performance and student improvement in literacy and numeracy through such accountability measures as standardized testing in schools.

1.7 Not All Parents are the Same

1 Two research studies from the Center for Research on Education, Diversity & Excellence (CREDE) have recently been published through the Center for Applied Linguistics. The two books, arising out of a four-year and a three-year study respectively, center on the solidification of home-school ELL communication. The first, entitled Creating Access: Language and Academic Programs for Secondary School Newcomers, describes the ins and outs of an effective education model—newcomer programs for immigrant students—and is designed to help district personnel create a newcomer program or enhance an existing program. The second book, called Family Literacy Nights: Building the Circle of Supporters within and beyond School for Middle School English Language Learners, discusses a project to improve students' education through a home–school collaboration called "Family Literacy Nights." The program brought parents of linguistically and culturally diverse students together with teachers and students, resulting in greater parental involvement and improved student learning. This report offers practitioners strategies for implementing similar programs.

3.1 Orientation

- 1 One can think of a lesson comprising three phases: an orientation phase, an enhancement phase, and a synthesis phase. The orientation phase is all about activating the students' schema and/or introducing the topic of the current lesson. It includes any number of the following instructional activities: revision of work from the prior lesson, demonstrating, modeling, brainstorming, displaying/showing/viewing an introductory video, story, text or visual, making links through questioning, etc.
- 2 The enhancement phase of the lesson is all about guided practice. This is the part of the lesson in which a teacher provides students with close-ended exercises, drills, tasks, and activities that help a student practice the topic that has just been introduced in the orientation phase of the lesson. Instructional activities in this phase may include answering questions, focused inquiry, summarizing, discussion, and other reinforcement-type tasks.
- 3 The synthesis phase of the lesson is when a teacher allows the students to apply what has been newly learned, but in an open-ended way. In this phase the students create, use, demonstrate, explore, show, build, and transfer knowledge and/or skills to new situations. Each phase is intended to guide a student in the process of internalizing new material.

3.6 E-assessments

1 For Bachman (1990), assessment typically comprises (1) *evaluation*, which is the systematic collection of learning data, (2) *measurement*, which is all about the quantification of evaluation results, and (3) *tests*, which are the instrument used to elicit and collect specific learned information.

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