



EU-Speak-3

A Compendium of Module Content

European Speakers of Other Languages: Teaching Adult Immigrants and Training Their Teachers

Editors
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Yvonne Ritchie
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Universidad de Granada



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The EU-Speak Team



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Yvonne Ritchie – Newcastle University – is assistant director and project administrator. She has considerable experience in education for adult learners and lifelong learning at the community level. An experienced project leader and founder of a successful learning centre in English for adults in Wallsend (Newcastle), she is particularly interested in the education support of adult migrants with little formal education.



Rola Naeb – Northumbria University– has a BA in English Language and Literature, and Postgraduate Diplomas in Linguistics and in Translation and Interpreting from Aleppo University in Syria. She relocated to the UK and completed an MA in Applied Linguistics at Durham University and a PhD at Newcastle University. Her main research interest is educational technology in second language learning for those with and without formal education.



Gareth Cooper – Newcastle - moved to England’s North East in 1995 to work as a software engineer with a medical imaging company. He fell in love with the area, spent eight years as an elected representative with cabinet responsibility in Newcastle and now is a freelancer with a special interest in mental health, media and technology-related projects. He has developed and supported the Moodle online learning platform and been EU-Speak videographer .



Rebecca Musa – Newcastle University –gained her masters and PhD in linguistics and English language at Newcastle University. Her main research interest is the orthographic influence on English pronunciation among L2 learners of English in northern Nigeria. She has been a teacher of English in Nigeria where English is the second and official language. She has also been a peer mentor on EU-Speak.



Patrick Lawrence – Newcastle - was born Detroit and moved to the UK in 2000, where he has since been teaching migrants, some of whom are LESLLA learners. He has also taught English in Bulgaria and Japan. He has a BA in English from the University of Michigan, a PGCE in FE from the University of Sunderland and an MA (TESOL) in Applied Linguistics from the University of Northumbria. He has contributed his creativity to the EU-Speak modules in his application of Storyline.



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Marcin Sosinski - University of Granada - did his PhD at this university and is professor at the Institute of Spanish. His research interests include phraseology, sociolinguistics and Spanish as a second language and his university work includes teaching as well as programme development at BA and MA level. In the last ten years he has also worked with adult migrants to help them develop their Spanish reading and writing skills.



Antonio Manjón-Cabeza Cruz – University of Granada – works on the second language acquisition of Spanish including of literacy skills. He is also interested in the structure of Spanish. He has participated in numerous projects on the acquisition of Spanish and works on an MA programme for future teachers of Spanish as a foreign and second language.



Andreas Rohde – University of Cologne - received his PhD at the University of Kiel. At Cologne, he teaches language pedagogy and linguistics at the English Seminar II. His research interests in second language acquisition revolve around tense and aspect, the lexicon, bilingualism, children in immersion programmes and the pedagogy of inclusive education.

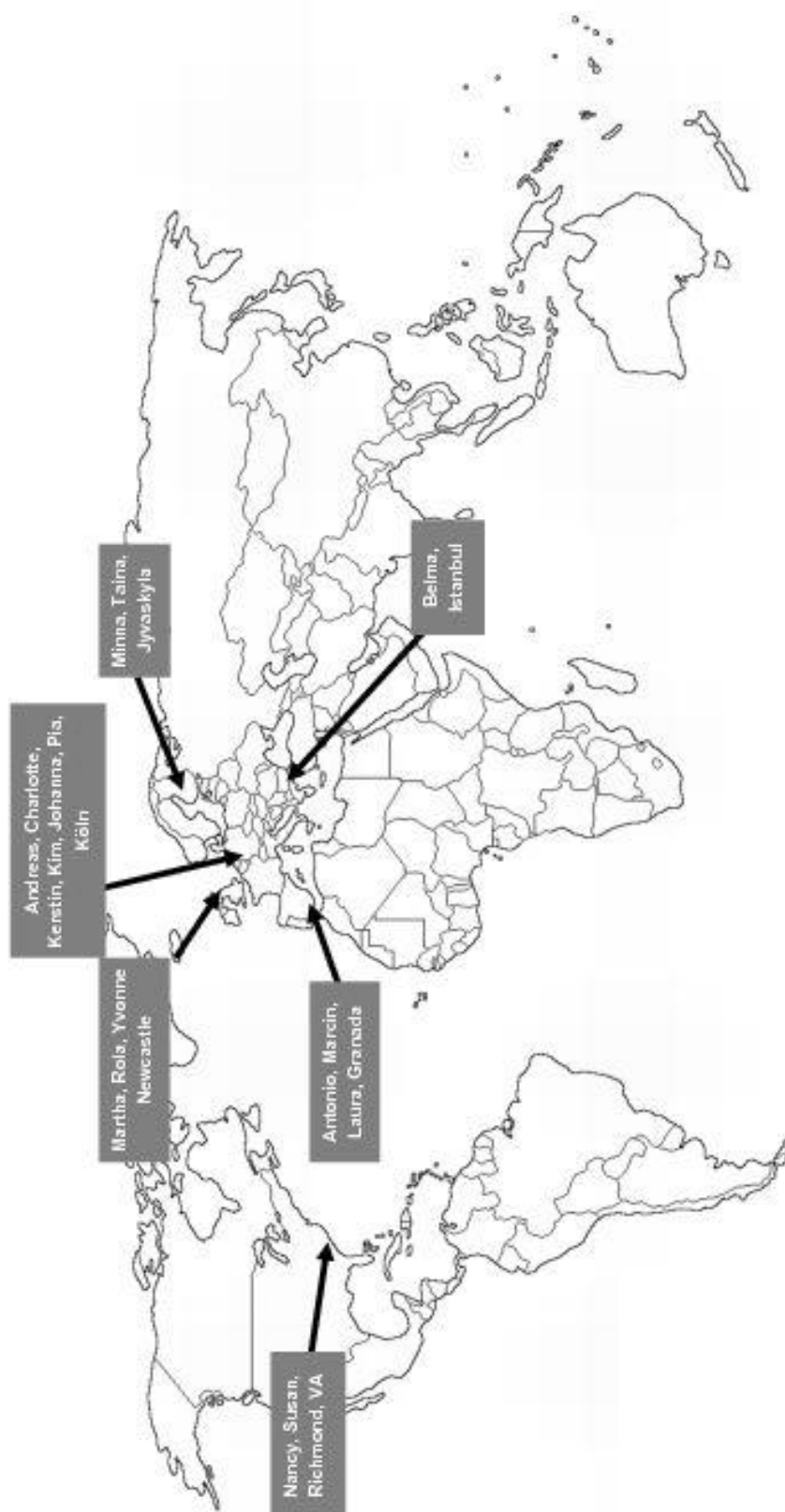


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Introduction

From many decades of research, we know that adult immigrants can reach high levels of oral proficiency even if they are not literate, and we know from more recent research that they can learn to read for the first time in a new language. But many adults with little or no formal education in their home language or any other language who try to learn to read in the language used where they have resettled struggle with this challenge (Condelli et al. 2003; Kurvers et al. 2010; Schellekens 2011; Tarone et al. 2009). In 2010, the EU-Speak project set out to see how this situation could be addressed. Workshops were held across Europe on curriculum, method, technique, materials, testing and assessment and teacher training/development in the context of six EU countries with different languages, culture, systems of education, provision and policy (2010-2012: Grundtvig 2010-1-GB2-GRU06-03528).

In EU-Speak 2 (2014-2015: Grundtvig 539478-LLP- 1-2013-1-UK-GRUNDTVIG-GMP) the project team agreed to focus on teacher training and professional development, taking into account the findings in Condelli et al. (2010) that working with well-qualified teachers improves such immigrants' chances of success. In the second phase of the three-phase EU-Speak project, surveys identified a set of skills and knowledge which those who work with low-literate adult immigrants wish to have but do not have and confirmed that there are few opportunities anywhere for practitioners to gain most of these skills and knowledge; see Young-Scholten, Peyton, Sosinski and Cabeza (2015). EU-Speak-3 (2015-2018: Erasmus+ 2015-1-UK01-KA204-013485) has sought to fill this gap, not in a single country, and not only through English, but across the globe, by offering free online modules in the five languages of the project team.

Each module was delivered twice from 2015 to 2018, and information about future deliveries will be available at: <http://www.leslla.org> This project volume contains the text from the six modules in the order in which they were initially delivered by the university shown in parentheses, although they are self-contained and can be taken in any order. For project reports: <https://research.ncl.ac.uk/eu-speak/eu-speak32015to2018/>

Chapter 1: *Working with LESLLA Learners*¹ (Virginia Commonwealth University, USA)
 Chapter 2: *Language and Literacy in their Social Contexts* (Jyväskylä University, Finland)
 Chapter 3: *Bilingualism and Multilingualism* (Boğaziçi University, Istanbul)
 Chapter 4: *Reading Development from a Psycholinguistic Perspective* (Granada, Spain)
 Chapter 5: *Vocabulary Acquisition* (Cologne, Germany)
 Chapter 6: *Acquisition and Assessment of Morphosyntax* (Newcastle and Northumbria, UK)

Modules have been taken by practitioners in the project team's countries, but also by an impressively wide range of those in other countries. During the project, nearly 1,000

¹ LESLLA = Literacy Education and Second Language Learning for Adults. LESLLA is used to refer to the organization as well as to the learners.

individuals – in full-time and part-time paid employment as well as unpaid volunteers - registered to take the modules, working in these countries.

Argentina	Ecuador	Japan	Sweden
Australia	England	Mexico	Switzerland
Austria	Finland	Morocco	Taiwan
Belgium	France	New Zealand	The Netherlands
Brazil	Germany	Nigeria	Turkey
Canada	Greece	Peru	UK
China	Hong Kong	Portugal	Ukraine
Colombia	India	Scotland	Uruguay
Czech Republic	Ireland	South Africa	USA
Denmark	Israel	Spain	Vietnam

Participants were also asked to evaluate – in the language in which they took the module - the module in a questionnaire upon completing the module to find out if: six weeks was appropriate, online distance learning was effective for them, objectives were clear, content was suitable and presented logically, and whether taking the module had an impact on their teaching. These and other results can be found on the EU-Speak website:

<https://research.ncl.ac.uk/eu-speak/>.

Martha Young-Scholten
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Chapter 1: Working with LESLLA Learners

Nancy Faux and Susan Watson

Virginia Commonwealth University

Who are literacy learners?

What does it mean to be a literacy learner?

You've probably heard the term literacy in various contexts. Literacy is sometimes used to refer to a student's basic reading and writing skills, regardless of whether or not they have difficulty in these areas. Literacy is also used to refer to special areas of second language (L2) learning, such as family literacy, in which teaching the L2 melds with teaching adult students about parenting and their children's school or school system. Similarly, you may hear the term financial literacy used to refer to teaching about money management. Of course, the term illiterate is used to refer to someone who cannot read or write in his or her native language. Literacy as we refer to it in this chapter matches most closely with the first definition given above. Literacy students have difficulty reading and writing in their native language, and they often have had little or no formal schooling in their native country. They may not be able to read or write at all in their native or any other language which they learned before immigration. They may even speak a language that does not have a written form, such as Mosuo spoken in China (Florez and Terrill 2003). Sometimes learners have experienced trauma in their native country; the trauma can affect the speed and facility with which they learn English. It may not surprise you to see the many students in your classes who come from the countries with higher illiteracy rates, as shown on this Adult Literacy Rate map.



Further on we will provide you with more specific details about who the literacy learners are. To avoid confusion due to the various ways that the word literacy is used, from here on we will use the terms “LESLLA learners” or “LESLLA students” in this course. LESLLA is the acronym for the organization Literacy Education and Second Language Learning for Adults, an international forum of researchers who share an interest in research on the development of second language skills by adult immigrants with little or no schooling prior to entering the country in which they have resettled. The goal of LESLLA is to share empirical research and information to help inform and guide further research on second language acquisition (SLA)

for the low-educated adult population. This research in turn will provide guidance to education policy development in all those countries in which immigrants settle and most need educational support. It will also inform instruction through the development of appropriate resources.

Types of LESLLA Learners

It may make your teaching a little easier to know that LESLLA students can be categorized into six different types of learners. If you know the category under which they fall, you can tailor your teaching plans accordingly. As you read the chart below (Burt, Peyton and Schaetzel 2008), think about your students and how you would categorize them.

Types of L1 (Native Language) literacy of learners

L1 Literacy	Explanation
Nonliterate	Learners have had no access to literacy instruction but it is available in native country.
Preliterate	The learner's first language has no written form or is in the process of developing a written form (e.g. many American indigenous, African, Australian, and Pacific languages have no written form).
Semiliterate	Learners have limited access to literacy instruction.
Non-alphabet literate	Learners are literate in a language written in a non-alphabetic script (e.g. Mandarin Chinese).
Non-Roman alphabet literate	Learners are literate in a language written in a non-Roman alphabet (e.g. Arabic, Greek, Korean, Russian, and Thai). Direction of reading varies
Roman alphabet literate	Learners are literate in a language written in a Roman alphabet script (e.g. French, German, and Spanish). They read from left to right and recognize letter shapes and fonts.

A child's first language vs adult second language

Second language acquisition researcher Elaine Tarone (2009), then Director of the Center for Advanced Research on Language Acquisition at the University of Minnesota in Minneapolis, notes that when learning their first language, children have approximately four to five years listening and speaking it before they begin to read and write in it. This is not the case for adult immigrants. They must learn to understand the new language orally while learning to read and write it. And in some cases, they must learn literacy at the same time. This additional burden makes the process of learning the new language even more difficult. Despite the disadvantages LESLLA learners may have, they also have some advantages over children learning to read and write in their native language. They have extensive and sophisticated knowledge of the wider and the immediate world compared to a five-year-old. Most importantly, they may be beginning learners, but they are long-time problem solvers. This skill undoubtedly helps them better master literacy in the L2.

Literacy instruction: A balanced approach

Research on how to teach reading and writing in English often presents two approaches. The first, called bottom-up or the phonics or linguistic approach, encourages the teaching of letters, sound-symbol correspondence, syllables, words, and sentences. This approach focuses less on meaning and more on mastery of sound-symbol correspondence. The second approach, top-down, actually begins with words and sentences. Only after mastery of common sight words do students gain knowledge of syllables, followed by sounds and letters. The approach advocated here (and by many instructors) is a balanced approach that combines the best of both the bottom-up and top-down approaches. As we see later on, a balanced approach can be used effectively for collaborative learning in the classroom, such as for Language Experience Approach stories and project-based learning ideas that will also be discussed further on.

How can low literacy hold back our students and what can we do to help?

Beyond the classroom, a lack of literacy can affect students in a number of ways. Job applications, immigration forms, and a wealth of other paperwork (including even the online versions) can leave LESLLA students at a loss, so they have to rely on friends, family, and case workers. Or, they may avoid extensive writing altogether. Written memos at work, public transportation schedules, and signs in the neighbourhood or at the supermarket/grocery store cannot be comprehended. As many of the safety rules at work are written on signs or in circulated documents, low literate workers are more prone to work-related accidents. It may come as no surprise that a clinical study has shown that those with low literacy in their new language (English) are more likely to suffer from depression (Bennett et al. 2007).

One area where literacy skills can especially affect students is when they must go to the doctor or the hospital. Low literacy as well as limited numeracy (math) skills can affect patient compliance and may be linked to worse health outcomes, according to “Numeracy and Communication with Patients: They Are Counting on Us” published in the *Journal of General Internal Medicine* (Apter et al. 2008). “Low literacy is ubiquitous. Patients won’t tell you they have low literacy because that would probably make them more anxious,” lead study author Andrea J. Apter said in her address at the 2009 American Academy of Allergy, Asthma, and Immunology Conference. That said, written health instructions—and sometimes detailed numerical instructions regarding medication dosages and health risk percentages—may be lost on LESLLA learners.

Getting Started

Now that we have covered what it means to be a literacy/LESLLA learner and the six classifications are for literacy students along with some guidance for a balanced approach to literacy teaching and how learning to read and write in a new language can present challenges for adult learners in their varied life roles, we will now look into how to prepare in advance for your literacy class, how to help students feel comfortable, and how to conduct a needs assessment.

Preparing to work with your literacy learners

Teachers who are working with LESLLA learners for the first time often say they don’t know where to start. How do you adequately prepare for class (e.g. selecting supplies and materials)? How do you help students feel comfortable in the classroom or in private

tutoring—an important factor in any L2 class but particularly with students who may have had little or no formal school experience. How can you conduct a needs assessment with literacy students when they cannot express themselves very well? The next section will help you get started while providing you with some activities to use during the initial weeks in class.

Gathering materials

Gathering the materials, you might need for a literacy class could make you feel like you're packing your suitcase for a long trip. While you certainly need paper, pens and pencils, scissors, tape, and an overhead projector and/or a computer and screen for lesson presentations, LESLLA students require additional hands-on learning tools. Here's a list of materials you'll want to have for your instruction:

- Large cardboard strips or heavy paper for students to write their names and other basic words. When learners write both their first and last names, these strips can be cut to show word boundaries (Wrigley and Guth 1992).
- Coloured felt tip pens for writing practice.
- Magnetic letters and or Legos for letter formation. You can consider using other tactile objects to help students with letter formation, such as sandpaper.
- Digital camera to take pictures related to lessons.
- Computer access (if available). Computer practice can help expose literacy learners to a valuable work-related skill, and it gives them another way to practice letters and words.
- Appropriate textbooks, workbooks, readings, and picture dictionaries. You can ask publishers if they have reading texts for low-literacy, older learners.
- Even if your newest readers are only focusing on the pictures, they are involved in the act of literacy, and they are becoming more confident readers and learners through this practice.

Here are some quick guidelines on how to choose an appropriate text for a LESLLA class:

Characteristics of Texts That Support Reading

Yes	No	
		Are the materials authentic? Authentic materials are written to inform or entertain, not teach a grammar point or letter–sound correspondence.
		Are the materials predictable? Prediction is based on the use of repetitive patterns, cumulative patterns, rhyme, alliteration, and rhythm. Books are also predictable if students have background knowledge about the concepts presented.
		Is there a good text–picture match? A good match provides non-linguistic visual cues. Is the placement of the pictures predictable?
		Are the materials interesting, imaginative, or both? Interesting, imaginative texts engage students.
		Do the situations and characters in the book represent the experiences and backgrounds of students in the class? Culturally relevant texts engage students.

Additional Considerations for Older Students with Limited English Proficiency

Yes	No	
		Is the text limited?
		Are the pictures, photographs, or other art appropriate for older students?
		For context texts, are there clear labels, diagrams, graphs, maps, or other visuals?

	Is the content age-level appropriate?
--	---------------------------------------

Pack your suitcase: Materials for beginning literacy instruction

As you gather your materials, use the Pack Your Suitcase chart to organize what you need in class and why you need it.

Material	Why?	How many?
Writing tools		
Paper products		
Tactile objects		

Getting started and making students comfortable

First, keep in mind that LESLLA learners bring many unique strengths to the L2 classroom or learning situation. Vinogradov (2008) suggests tapping into these strengths which include rich and complex social networks, life skill problem solving, advanced strategies for learning without literacy, and possibly oral proficiency well above being able to read and write. Many of these students have secured jobs, enrolled their children in local school systems, and accessed social services (Wrigley and Guth 1992). Additionally, teachers who have previously worked with LESLLA students add that despite the trauma they may have experienced, the challenges in their daily lives and their lack of basic skills, they have a sense of humour and are open to learning all that they can learn. Nevertheless, LESLLA learners do bring some challenges to literacy learning. Some can be shy about others knowing that they have problems with reading and writing. They are intimidated by others who are more proficient in the second language. There are also cultural and religious differences that may result in reluctance by students to interact in certain ways with the teacher or with other students. Additionally, it can take a long time for LESLLA students to complete activities in class. To bring out students' strengths and minimize their challenges, it is crucial that students feel comfortable in the instructional setting. Your LESLLA students may not have participated in a structured classroom setting before. Like any student learning a new language, they may feel nervous about what they will have to do in class.

Here are some suggestions to keep in mind to help make students feel more comfortable in your classroom or tutoring session:

Be aware of culture- and language-specific challenges

Although generalizations don't always apply, LESLLA students from particular countries or who speak specific languages may have needs that are common. Somalian, Moroccan, Ethiopian, Eritrean, Pakistani, and Afghani students may need to be taught how to form letters and how to hold a pencil and handle a notebook because of different character formation from their alphabet to another alphabet, e.g. English, Spanish, German. Asian students at this preliterate level struggle more with oral and listening comprehension skills.

The dynamics are different for each group of students but are essential for teachers to understand, or else time is wasted, no real progress is made in each area of struggle, and a

bigger feeling of frustration and incapacity builds progressively in these students and the classroom as a whole.

View the class as a gateway to a new culture and opportunities for students

The instructor can incorporate practices that make the beginning L2 class a lifeline and a gateway into a new culture and a means to greater opportunities for students. Learners can go from feeling isolated and helpless to establishing significant social connections as well as a sense of personal agency. Thus, the beginning adult L2 class is much more than alphabet practice, grammar drills, and vocabulary memorization. It is about opening up mental, emotional, and social doors so that students become encouraged, motivated, confident, and engaged as they learn to communicate in a new language.

Get to know students and encourage them to get to know each other

This will help create a welcoming community in the classroom. Have students use nametags or name cards so you will know their names (and they will learn each other's names). The teacher will need to write out their names or write them down and have the students copy them. This helps students feel less isolated and more connected to their new classroom community. Spend some time on name pronunciation if necessary (especially if students are from a variety of countries). Find out why they are taking L2 classes.

Use conversation and interview grids so students can find out where classmates are from, where they live now, and other things they may have in common.

Below is a basic example of an information (conversation or interview) grid.

What is your name?	Where are you from?	Where do you live?	What's your phone number?

Using a copy of the information grid, the students mill around asking others their names, where they are from, etc. The student that asks the information writes in the appropriate spaces the answers the other students provide. Later the students can tell the rest of the class about one person that they interviewed sharing what they have written.

Finding out what your students want to study

When your class starts, you'll want to find out what students want to study — this is called a **needs assessment**. Perhaps your program or your country has a set curriculum to indicate what students will study in class. Or, you might use a life-skills curriculum, where students choose from a few survival-based topics such as work, transportation, health, and community services. Depending on where you teach, what you study in the classroom may be more free-flowing. In the latter situation, you may find that students' needs vary greatly. Some students simply want to sign their name on documents. Others want to hold a Bible and read a special verse they already knew by heart. Others want to write out their social security number on a form or read a note from their child's teacher. Of course, if you are just tutoring one student, doing a needs assessment becomes far easier. You will want to use special tools, such as pictures, however, to guide them in their choices of study. No matter what approach you

take, connecting students with what they want—or need—to study helps keep learners motivated.

For students that can't read anything yet, or lack basic vocabulary, pictures can provide an easy visual way to gather information about students' learning needs. For example, pictures from magazines or drawings that represent common curriculum themes (e.g. community, housing, transportation) can be discussed with students and then used for voting what the students want to do in class. The pictures can be displayed around the classroom, with students making a checkmark beside the picture(s) that best represent what they want to learn. Or, students can "vote with their feet" by standing beside the picture of the subject area that they want to study most, though the teacher should make a decision in response to the needs assessment so this will, for practical purposes, be a group/class activity.

If you use picture dictionaries, students can pick out the pages that best depict what they want to study in class. The student(s) can identify the pages that are selected most often to determine the focus for class. Make sure you (or your program) decide in advance how many curriculum topics to cover in any given class cycle. For example, if your class meets two nights a week for two hours for twelve weeks, one or two themes should be adequate. Theme based teaching might be different from what you have experienced in foreign language learning or in any teaching you have done where the syllabus may revolve around grammar.

On a day-to-day level, a reading file can help students select the learning areas that best meet their needs:

[Their reading file] might contain a variety of forms: photographs of street signs, illustrated newspaper or magazine articles, extracts from want(ed) ads, food packaging, recipes, short stories and articles on a wide range of subjects, cartoons, maps, medicine labels, comic strips, schedules, instructions, pamphlets, and menus. Wherever possible, such items should have illustrations, or a format which provides a clue to the content (Bell and Burnaby, 1984, p. 29).

For an excellent and interactive method to assess your learners' needs, take a look at an approach described by Trudie Aberdeen and Elsie Johnson in their presentation in 2013; see www.leslla.org. Aberdeen and Johnson describe an action-research methodology to prioritize topics of interest that might be of interest to LESLLA students in class. The authors discovered that this method also allowed learners to focus on personal learning goals as well as informing instructors for future unit/lesson planning.

Easing into the first few lessons

You may have your supplies ready, have selected a good approach to conduct a needs assessment, and feel confident that you can make students feel comfortable in your class and with you. Yet you still may not be sure what to cover in the first few lessons. In some countries teachers begin by teaching the alphabet (phonics), while in others instruction begins with whole words (whole language). The first method is considered bottom-up (small to larger elements) and the second is referred to top-down (large to small elements). One way to help students realize how difficult it can be to read and write in another language is by asking a volunteer student to write a short phrase in their native language on the board (It should be in a language that you do not know). Then, the class watches as you copy that phrase. This brief but enlightening activity could help break the ice in your class. Marina Spiegel and Helen Sunderland (2006) who work in London discuss in their book, *Teaching Basic Literacy to ESOL Learners in the United Kingdom*, that you even as a skilled writer in a language experience a

lot of difficulty and frustration as you try to copy the new words correctly taking much more time than you imagined.

Another easy place to start is with name recognition. Tanya Conover (2008) recommends a sign-in sheet where students write down their names and their time of arrival (if they know how to do so). At the sign-in area, students can pick up their name card, nametag, or similar object. "The instructor wears a nametag as well to communicate that they are a member of the learning community," Conover recommends.

Following name recognition, eliciting personal information about students' lives and families is another ideal place to start in the LESLLA classroom. Some strategies and activities that you can do are:

- Focus on each student's personal information, basic personal history or experiences.
- Establish classroom routines such as: put the date and weather on the board, allow students to copy a couple of sentences from the board, orally greet each other, pose a question or activity that gets everyone out of their seats and warmed up for class.
- Model short dialogs before letting students work on their own
- Go over the class schedule and any supplies that the students might need to bring each day, e.g. notebook.

Finding out personal information about students is an ideal way to orient students to their new class. Teachers can use information or interview grids, where students ask each other basic questions about themselves or about specific topics. Because only a small amount of information is being exchanged at one time, even students who are not able to write at all can participate by having their classmates write their information on the grid for them.

One example of an activity within the first few lessons using an information or interview grid can be seen below.

Fawzia: What is your name?

Karim: My name is Karim.

Fawzia: Where are you from?

Karim: I am from Algeria.

Fawzia: What is your phone number?

Karim: My phone number is 703-555-1234.

Fawzia: What is your job?

Karim: I am a valet.

What is your name?	Where are you from?	What is your phone number?	What is your job?
Karim	Algeria	703-555-1234	Valet

To elicit personal information from students, you can also have students do a picture story about themselves that is hung up on the wall. Students can use drawings, magazine pictures, or actual photos as part of their picture book and provide as much or as little text as they would like. Some more advanced students may also write a short story. Here are some examples:

- | | |
|-----------------------------------|------------------------|
| 1. What is your name? | My name is Betsy. |
| 2. Where are you from? | I am from Ottawa. |
| 3. How many children do you have? | I have one son. |
| 4. How old are they? | He is five years old. |
| 5. What grades are they in? | He is in kindergarten. |

Example of a short story:

My name is Mehmet Bezen. My address is 4398 Oxford Road, Birmingham. I have two children. My son's name is Birkan. He is five years old. He is in kindergarten. My daughter's name is Farah. She is nine years old. She is in fourth grade.

Beyond personal information it is important for students to learn in those initial lessons how to express emotional and physical feelings in the oral L2. Once those phrases are taught, students are encouraged to greet each other and find out how they really feel. Students may reveal that they are tired, that their head hurts, or perhaps that they feel depressed. Others can respond with sympathy and encouragement which helps to build relationships and community all while using their new language.

Print Awareness

As you have discovered, lesson plans aren't the only important component of class preparation. Gathering the right materials to effectively teach your students is also an important step, especially with LESLLA learners. LESLLA teachers also play a critical role in helping students feel comfortable in a classroom setting or in a tutoring session and with adapting to a new culture. Conducting a good needs assessment is another step covered in this chapter that helps to provide a focus on strengthening the classroom community or one-on-one sessions. Now, we'll transition from getting students—and teachers— comfortable in class and focus on the important concept of print awareness.

What is print awareness?

Once LESLLA students have a basic introduction to your class, you'll want to focus on developing print awareness. This includes:

- recognizing the functions and uses of print,
- becoming comfortable with using a writing instrument, and
- being able to sight-recognize letters of the alphabet and, eventually, words.

Print awareness provides the stepping stone for students learning to read in English to acquire sound/symbol correspondence and to be able to read sentences and paragraphs. As Burt, Peyton and Schaetzel (2008) report, once teachers use preliteracy exercises that give students practice with directionality of writing and reading and the recognition of shapes and sizes, they can then move on to teaching the alphabet, consonants, vowels, sight words, and eventually longer utterances such as sentences.

Developing print awareness activities

The importance of print awareness in literacy classes is evident in some tasks that literacy learners are asked to do. For example, they need to complete personal information (e.g. names, addresses, phone numbers) in the classroom on simplified forms (e.g. sign-in sheet, registration form). They need to be able to use upper and lowercase letter conventions (e.g. Tom vs. tOm); use page conventions (i.e. left to right, top to bottom, and front to back) and use manipulatives/shapes to spell words, write words and numbers, and sequence words in sentences related to relevant tasks. Because they did not grow up in a literate environment, a LESLLA learner will not have been read to by their parents and they will not have observed adults and older children engaging in literacy practices. They will not have the print awareness that children in literate societies have when they start school and start learning to read and write.

There are three areas you'll need to address to develop your students' print awareness abilities:

- 1) Recognizing the functions and uses of print,
- 2) Using a pencil with ease (It is important for students to use a pencil at the start so they can erase things.), and
- 3) Learning the alphabet.

Recognizing the functions and uses of print

Although the development of pencil skills and alphabet recognition are important parts of print awareness with LESLLA learners, researchers emphasize that these activities must have a topic-based context. To that end, use your print awareness activities within the context of what you are studying in class, be it family, work, health, transportation etc. One initial step in developing print awareness is helping students get a sense of the functions and uses of print.

The teacher helps them to develop a sense of what print looks like, such as how it is different from a picture or the wallpaper, which merely exists as decoration. Students who are not familiar with the Roman alphabet may also need to develop a global sense of the shape and look of those languages that use it (e.g. English, Spanish, German) before focusing on individual words and letters (Wrigley and Guth, 1992). Along these lines, students need to know that written texts have a beginning, middle and end; that English, for example, is read from left to right and from the top of a page down; and that written words can represent a story or message (August and Shanahan, 2006, as cited in Burt et al. 2008). One way to develop print awareness, as suggested by Wrigley and Guth is with the help of real-world objects or realia. You can bring in food packages, signs, a tube of toothpaste, money and other commercial items with print on them. The class can work together to discuss what these objects are used for, and they also can guess what the print on the packet might say. The teacher supports all good guesses and ultimately reveals what the package specifically says. In addition, teachers need to show learners the innumerable places where print can be found and why it is found there (e.g. instruction, warning, description, decoration, advice, poetry, etc.).

Using a pencil with ease

Helping LESLLA students feel comfortable with writing is not easy. Learning to write in any language takes fine motor skills that literacy students may or may not have. Some may have these if, for example, they are experienced as seamstresses or tailors or with similarly detailed work. LESLLA students also may find practice with using a pencil (or any writing instrument) difficult for the following reasons, according to Schwarz (2008):

- They are not accustomed to copying words or letters.
- They likely have trouble writing on unlined spaces without some sort of structure.
- They may have trouble writing on lines or, as shown in some textbooks/workbooks, within boxes and on lines under sentences.
- They do not know that they should make capital letters bigger than lowercase letters.
- They do not know proper spacing between words and letters or proper punctuation use.

It's also helpful to remember that LESLLA students are likely not familiar with terminology that characterizes written text in the L2 or in their first language, as Schwarz (2008) says. So, words such as sentence, question, capital letters, and punctuation may be new concepts for our students. Alternatively, some of these students may speak languages that are not written or have only been written for a short period of time, so words that describe written text may

not exist in their language. However, your learners may have already learned to speak another language without any rules or references to grammar.

Hands-on activities (i.e. activities that go beyond just writing on paper) will help strengthen students' writing practice as they initially develop print awareness. Considering that some students' predominant learning style is visual, others' auditory, and yet others' kinaesthetic, hands-on practice making letters will help reach your kinaesthetic learners and serve as a great precursor (or supplemental activity) for pencil practice. One supplemental activity to help students feel comfortable with a writing instrument is colouring, as Schwarz (2008) recommends. Although colouring in an adult class may seem childish, there are colouring books designed for older children (such as ones with detailed museum drawings) that give practice with the precise fine motor skills needed for writing letters. Another way to boost print awareness is to start with learners' names, as Spiegel and Sunderland (2006) suggest. You can ask students what their names mean, who gave them those names, and why they were given those names. Then, students can focus on writing their names in the L2; you can also point out letters that look similar—for example, an h and an n in the name Khan.

As students become familiar with reading and directionality of the L2, remember to design your documents so they're easy to read, perhaps with a larger font, double spacing, and lots of white space. Consider drawing a red line down the left margin to help focus on directionality. Cover up additional text in the classroom (for example, text on the board written by another teacher who uses the room) with large poster board paper, to avoid extra visual distraction when students read from the board. Take occasional breaks from reading and writing to practice with oral work in order to prevent eyestrain.

Learning the alphabet

In many English-speaking countries teaching the alphabet at the beginning stages of literacy learning has become the norm. This may not be so in other countries where teaching the alphabet is delayed until the learner can sight read over 300 words or so. This is the case in the Netherlands. Teaching or not teaching the alphabet takes us back to the debate between whole language and phonics-based instruction. Some countries may use a balanced approach, combining the two, as suggested by Patsy Egan Vinogradov in various publications. You must follow, nevertheless, what you believe is correct or what the current approach in your country is in this regard. However, at some point in literacy instruction you will have to expose the learners to the alphabet. The following sections will give you numerous activities that you can use

to

do

this.

Provide a concise copy of the entire alphabet

Students should receive a copy of the alphabet that they can refer to and study. This could be as simple as a sheet of a paper that shows the alphabet in both uppercase and lowercase letters. Depending on your program, you could even create an alphabet reference booklet for students, such as the Read and Write booklet created at the Arlington Education and Employment Program (REEP) in Virginia, USA. The booklet presents one page of the alphabet in capital letters followed by lowercase letters. Consonants appear in black and vowels in red. The booklet provides examples of long- and short-sounding vowels along with visual images (for example, cat and cake for the letter a)—an important component to help with students' sound/symbol correspondence. The booklet also introduces consonants, giving students the chance to circle a letter a few times in a string of random letters (i.e. letter matching) and then write each letter a few times on practice lines. The latter exercises within the booklet present letters both in upper- and lowercase. As the booklet progresses, students match short

words that look the same—for example, they see the word gas and then must circle where the word appears again from these options: gaz, gas, gaz, gos, gas.

Alphabet bingo and flashcards

Another way to practice the alphabet is with Alphabet Bingo. You can easily make this game with grid-like laminated cards. Students can use coins, dry beans, or as place holders on the cards or even dry-erase markers. In addition to teachers calling out letters, students can form pairs or small groups to call out letters. Alphabet Bingo (and Word Bingo, which you could use once students are more comfortable with the alphabet) is a fun way to increase letter sight recognition and boost sound/symbol awareness.

Alphabet flashcards have a variety of uses in a literacy classroom. You can use them for general alphabet practice or for games where students sequence letters. For example, the flashcards are scrambled, and each student takes a different letter. Students must then line up in the correct order of the letters. Or, if students are sitting, they can call out letters in the correct order based on the card that they have. If they can spell words, you can dictate a word and the people with the correct letters can line up together.

Using songs

Songs are always a fun way to learn a new language, and they will especially appeal to your auditory learners, e.g. by using The Alphabet Chant (Conover 2007). Once students become familiar with the alphabet, practicing a song such as this can help reinforce what they have learned. Another classic US book is *Jazz Chants* by Carolyn Graham (2001) which provides a series of exercises for students to rhythmically repeat words and short phrases in English to music.

Kinaesthetic ways to help students learn letters and words

These include letting them form letters out of sandpaper, modelling clay, or string, or with the help of magnetic letters. Students can even form letters and words in the air with their fingers or touch their feet to letters and words on papers taped to the floor—two great low-stress ways to provide practice. Another idea is to have learners throw balled-up pieces of paper at particular words or letters that have been taped up to the wall of the classroom.

Handwriting without tears

Another US program, *Handwriting Without Tears*, focuses on handwriting skills and takes measured approaches to help students learn how to write the alphabet. Although the program is geared toward school-aged children, it has potential as a resource for LESLLA students. For example, the program sells wooden manipulatives such as curved lines and straight lines students can use to form letters. The program emphasizes hands-on practice making letters versus copying letters repetitively, and in the USA, it is widely used in pre-kindergarten through fifth grade classrooms.

Sample practice activities for developing print awareness

This section will introduce you to sample activities that help LESLLA students increase their ease with using writing utensils and boost their sight recognition of letters and, eventually, words. On a practical level, certain print-awareness activities may seem repetitive, but they provide necessary practice with the use of a writing instrument as well as practice with new letters and words. Again, consider the themes you are studying in class, as they can provide a context for the letters and words you will use in the following activities. Note that although many of the sample activities focus on letter recognition, you can adapt them for word recognition as your students' knowledge and skills progress.

Tracing/Connect-the-Dots

Students have a model of letters on paper that they trace. Each letter appears with interrupted lines that students connect (think of the letter- tracing models you might see for young children). The concept is the same for connect-the-dots. Students form letters that are represented with a series of dots. These activities are particularly good for students who need more mechanical practice with a pencil.

Copying Letters

Students copy a series of letters that is on the board or on their worksheet. This is great practice for learners, but remember that copying may take them a long time. Keep the text that they will copy to a minimum, and give them a sufficient amount of time to copy.

Wipe clean whiteboards

Instead of students copying everything on to paper that might be thrown away anyway at the end of the class, many teachers are using letter-sized wipe clean whiteboards. Anything you or the students do on the general large whiteboard, your students can do on these hand-held whiteboards. They are portable and easy to share. For classrooms without a whiteboard, these are a life saver. Some of them have lines on one side, an added bonus for those that are trying to master writing on lines. *Whiteboards Stimulate Student Learning* provides some tips for using them. Other uses for them are:

- Spelling tests (read out words; then everyone flashes the answers)
- Answers for listening tasks (students can do a reveal and discuss)
- Games (anagrams, countdown (students show their longest word), writing a word beginning with a certain letter)
- Drawing a picture while another student describes it
- Collaborative writing
- LEA in the first stages (brainstorming words)

Matching Letters

Students must match two letters or two words that look the same from several options. If your students aren't writing letters or words, they can practice matching shapes such as circles and squares. Your matching words can focus on high-frequency words such as the words that students might see on forms (e.g. FIRST and NAME).

Letter Dictation

Two students (or the teacher and student) work together. The first person says the name of a letter, including whether it is upper- or lowercase. The second person finds that letter from a list of three or four different choices on their paper, and then circles it. This helps students with both sight recognition and sound-symbol correspondence. Each pair of students could receive two different coloured pieces of paper—one colour for the person reading letters aloud and the other colour for the person who will find the letters.

Making a Picture Dictionary

Several teachers are putting technology in students' hands and letting them build their own picture dictionary. Students take pictures of the visual representation of the words they are learning and then copy the words beneath the pictures. Aside from the hands-on practice this gives LESLLA students, it also offers a counter to picture dictionaries, which sometimes have too many visual representations on one page for LESLLA students, who generally need clean, non-cluttered pages of text.

When students are having trouble

You may have certain LESLLA students who have so much trouble writing, they find it hard to focus on other learning activities. In this case, you may want to consider working as a scribe for these students when practical. If you have a class volunteer or aide, they could work as the scribe for the students who are the most writing-challenged. Group work also gives writing-weary students the chance to take turns with writing.

Before moving on to the next topic of sound-symbol correspondence, review the functions and uses of print, how to help your learners become comfortable with a writing instrument, and all the hands-on activities for your learners to be able to sight-recognize letters of the alphabet and, eventually, words.

Sound-symbol correspondence

What is sound-symbol correspondence?

Now that we have learned how to help develop your students' print awareness, both in a meaningful subject-based context and with practical "pencil practice", we can move on to developing your learners' skills to work with discrete sounds and writing symbols or letters. Sound-symbol correspondence—which you also may hear referred to as grapheme-phoneme correspondence, sometimes called the alphabetic principle, is the ability to connect individual abstract sounds – phonemes – with symbols (graphemes). This skill set falls under the umbrella of *phonological awareness*, or the ability to distinguish certain abstract parts of words, that is syllables and their onsets and rimes and the smallest phonological unit, phonemes, and the knowledge of how they come together to form words. Phonological awareness is the awareness of sound patterns. Graphophonemic awareness is the ability to link sounds with letters. Here we will keep it simple and refer to sound-symbol correspondence.

Although at an instructional level, activities to promote sound-symbol correspondence are often integrated with print awareness activities, here the two skills have been separated, to point out the specific challenges each task poses for LESLLA students. Sound-symbol correspondence can be a hard concept for LESLLA students. ESOL consultant Robin Louvrien Schwarz (2008) spoke about concepts of which preliterate learners are not aware (or inadequately aware) in her presentation at the Commission on Adult Basic Education (COABE) Conference:

- how speech sounds are represented by text or that there are individual words in sentences
- individual sounds in words—and the concepts of beginning, middle, end sound
- similarity and difference in speech sounds

In the above bullets, it is important to point out that there are cross-language differences. In English, the sounds for individual symbols can vary, depending on placement in words, the addition/absence of other symbols/letters, grammatical function, and meaning. However, in other languages, such as Dutch and Spanish, the sounds related to symbols are pure. Each phoneme represents a grapheme. In Dutch, *kat* (cat), *maan* (moon), and *kip* (chicken) are pure. You may want to think about this in relation to your own language and how there is a relationship between the sounds and the symbols used to represent these sounds. To see a comparison of the sounds of several languages visit the website of the Digital Literacy Instructor, a project from the European 'Lifelong Learning Program' Multilateral Program. The sound bar for each of the 15 exercises shows where there are just single correspondences and where there are multiple ones. There are lots of these for English. If you access the site: <http://diglin.eu/> you can use for Login: diglin, and Password: diglin.

The skills that LESLLA students need to learn to read and write, according to Schwarz (2008), include an awareness of individual words at the sentence level, followed by an awareness of internal phonemes within words, the ability to manipulate phonemes (e.g. Mary Poppins versus Parry Moppins), and advanced rhyming and nonsense word repetition. A phoneme is the smallest contrastive sound unit in a language that can convey a distinction in meaning, for example, the sound of the m in *mat* and the sound of the b in *bat*. Writing systems are based on phonemes, not sounds. For example, the final sound in *hats* is [s] and in *scarves* it's [z] but the plural is spelled as <s>.

If you've ever watched young children learn how to read, you may notice that they have some of the same emerging skills as those Schwarz (2008) describes. Activities that promote syllable awareness, first sound (in the word) awareness, sound difference/similarity, and rhyming will help non-literate/LESLLA students build what we call phonological awareness. Additionally, it's important to build these skills, as students learn to read and write because they did not learn them as children. Just like young pre-school children, non-literate adults find awareness of syllables, rhyming and alliteration easier than awareness of phonemes.

Developing sound-symbol correspondence awareness in learners

To give you a better idea of how to integrate sound-/symbol awareness activities into your classroom or one-on-one tutoring, here are some examples used in various settings.

Posters around the classroom that show visual examples of certain common sounds (for example, pictures of a cat and an apple for the short "a" sound and pictures of an apron and a cake for the long "a" sound), are helpful for LESLLA students. *Read and Write* has a number of visual representations of different sounds in English. You may even want to laminate such posters, in case you need to make notes on them while you're teaching—you can always go back and erase the notes for future use.

Matching and categorizing activities give students practice recognizing and identifying the sounds on the posters. Have additional pictures that represent the sounds you are working on. After sufficient modelling, students can categorize the pictures based on initial consonant sound or vowel sound. You can also introduce the concept of same and different by having students match sounds that are the same. These types of activities build students' 21st century skills that allow them to transition to the workplace (categorizing, comparing and contrasting, etc.).

Hands-on practice learning the sounds of the L2 also helps reinforce those sounds when they are read in print. For example, you can have students put their hand up to their mouth when they say the 'h' sound, or even the 'th' sound to detect aspiration.

The Language Experience Approach (LEA)

We discussed the Language Experience Approach (LEA) earlier, and it's also a great method to help students develop sound-symbol relationships as well as other skills. The LEA promotes reading and writing with the use of students' personal experiences and oral language. LEA involves a student telling his or her personal experiences to her teacher or a classroom aide, who transcribes what the student says. The text that is created is then used for reading, vocabulary development, pronunciation, and even grammar activities.

LEA stories are sometimes used with one common theme, but with each student telling his individual story—for example, students describe their job. Other times, students take part in an activity such as a field trip, and, with the teacher's facilitation, the class collectively writes an LEA story about the activity. One idea is to take a class on field trips to a local library and near-by tourist or historical sites, among other locations. You can take pictures while on the field trip and then use them the next day in the classroom to create an LEA story about the experience. You can also do this with a small group or one student, if you are able to take the students on a field trip. Students generate sentences to describe the pictures, which can then be used for subsequent practice activities, such as reading, cloze activities, grammar activities, phonics related activities, sequencing activities, dialogue practice, etc.

LEA stories can be used at all levels in second language teaching, and they are a great way to spark students' motivation and create authentic lessons that match students' abilities. Visuals

can be added as necessary and are usually a good idea in the LESLLA classroom. In fact, some LEA stories may be created based solely on visuals—say, a student creating a story based on a picture.

Another approach to LEA stories is having your LESLLA students work on them in small groups to generate words or sentences to go with a meaningful picture or series of pictures that are given to them. Each group can discuss and then write down the L2 words or phrases that describe the images. Collectively the students can generate many more words than they could working alone.

Your LESLLA class may be able to do something similar with your public transportation system, the local supermarket, or their children's school. If you teach in the USA and you are focusing on health, you may want to use the picture stories available online from Kate Singleton's *Picture Stories For Adult ESL Health Literacy*. These are wonderful concrete, non-cluttered pictures that create simple stories for learners to add their comments, based on their own experiences. Many activities can be developed that use the words produced by the students.

Using textbooks

Your program may have a regular textbook that it uses with LESLLA students and a picture dictionary. Although this module does not advocate a particular textbook over another, we will detail here usage of a book called *Sam and Pat* (Hartel, Lowry and Hendon, 2006). The Sam and Pat series is geared toward LESLLA students in North America (though there are teachers in other English-speaking countries who use it). It is a collection of stories that follows a sequence of phonics skills. The stories in the book focus on Sam and Pat, who are husband and wife, and some of the challenges that they face. According to the book's introduction, the phonics sequences in the book have been adjusted for ESOL learners who have difficulty pronouncing and distinguishing certain words. The book uses simplified grammar, words, and themes.

A sample story from *Sam and Pat* Book 1 (2005) is the following, from Lesson 11: Pat Shops on Saturday:

1. Pat shops on Saturday.
2. Today she has to get eggs, milk, and chicken.
3. She has to get a ham for Sunday lunch.
4. Chips are on sale. Six bags for \$1.00.
5. Pop is on sale. A six-pack for \$2.00.
6. Pat gets six bags of chips.
7. She gets a six-pack of pop.
8. But the chips are not good for Sam.
9. Sam is too fat.
10. Pat puts the chips and the pop back.

As you'll notice, certain sounds are practiced repeatedly, such as shops/pop and Sam/fat/Pat. The lesson is followed up with five comprehension, vocabulary and writing activities. You'll also notice that the story has numbered lines beside each sentence. Book 1 begins with stories that are 10 lines long, and it ends with stories that are 20 lines long. As students' progress through story practice, teachers or volunteers could type the text into prose style, so students get the experience of reading a paragraph with a more regular appearance.

Sentence strips

Using familiar words and phrases, you can make sentence strips. Write out sentences on a piece of paper. Cut out each individual word (you may even want to make each punctuation

mark separate), and hold them together with a rubber band. Students can work together to reassemble the sentence. When you do this activity, don't be surprised to see a lot of collaborative work going on and a lot of pronunciation/sound practice as students try to see if the sentence sounds right. You can typically give student groups three to four sentences to practice at a time.

Sentence strips give students hands-on practice with word order and pronunciation. They also help to build student confidence because, although they might initially struggle with a sentence, they will proudly repeat it again and again once they have determined its correct order.

Filling in the missing letter, finding the correct sounds, and listening to songs

Students have a piece of paper with a few words that they have learned. However, each word has the initial letter missing. The teacher says each word, and students write in the missing letter. You can also turn this activity into a full-blown dictation, where students write down a word or words that they hear is missing from the phrase or sentence. This is called a **cloze** activity (see below).

Another activity is to give students a list of similar sounding words (say, for example, pit versus bit), and students circle the word that the teacher says. Instead of circling, students can instead put dry beans on the word they hear or even hold up a card with the letter P or B, depending on the correct answer.

Language learners – even adults - enjoy songs, and LESLLA students are no exception. With LESLLA students, you may want to focus less on teaching each and every word in a song and concentrate more on the oral practice of stress, rhythm, and rhyming within particular tunes. Can you identify and share with other participants songs that you think your learners would like to hear in class? You can easily download songs and find lyrics for them on the Internet via YouTube but please remember copyright.

These activities, using sentence strips, dictating minimal pairs, listening to and singing songs are simple but effective ways to build sound/symbol correspondence, along with using posters for phonics practice, the Language Experience Approach and textbooks with a phonics focus. Sound/symbol correspondence works in tandem with print awareness. Often, effective activities for sound/symbol correspondence include integrated practice of reading, writing, speaking, and listening which you should try to incorporate in every learning session. Of course, doing this is easier said than done, especially if your students are at different learning stages. In the next section, we will address these concerns and how you might find some solutions.

Multilevel Strategies

Applying many of the principles for teaching print awareness and sound-symbol correspondence while using the activities that we have highlighted is relatively straight forward in a homogenous class, one in which all the learners are at the same level of literacy and L2 proficiency. This becomes problematic in a learning situation where the learners do not have the same literacy needs. Many of you have many students at various levels of literacy and proficiency in the L2 that you are teaching. You want to employ all the instructional activities described above, but you wonder how you can do that when your students have different needs. By adapting your activities, managing the classroom to suit individual or group needs, and allowing for your learner's strengths to surface, you can tailor instruction without extra burdens on time or effort.

Multilevel classes

The formal definition of the L2 class level you are teaching may be a far cry from what you actually see in a classroom. For example, you may have a High Beginning class with some students who can speak relatively rapidly in the new language yet have weak or non-existent reading and writing skills. You may have other students whose reading and writing shows a good command of L2 structure and grammar but whose speaking skills are not yet well developed. The challenge for you as the teacher is to meet the learning needs of all of your students!

To properly manage multilevel classes, you'll need to get a good sense of your learners' backgrounds, needs, abilities, interests and goals (Wrigley and Guth, 1992). This was previously discussed in the value of doing a needs assessment. Activities that you use should give all learners a chance to showcase their strengths. All students should also have time in class for self-directed learning. To that end, here are some possible class models for working with LESLLA students, including pull-out or dedicated classes. There are also some ideas to better address the needs of LESLLA students if a separate, dedicated class is not possible. Some suggested various grouping strategies and projects that are appropriate for multilevel classes are included as well.

Pull-out/dedicated classes or small groups

There are some definite advantages to maintaining a separate group of LESLLA learners within your program. Even though there will be diversity within that class setting, the various concepts that you will address—the alphabet, print awareness, and sound-/symbol correspondence—will be better tailored to students' needs. You can focus on meeting learners at their specific knowledge base versus introducing grammar and other concepts that may still be unfamiliar to them (Schwarz, 2009). It also makes class planning easier, as a multilevel class typically requires extra planning time.

Many programs may have a catch-all beginning class that usually includes all students who are just learning to speak the new language—a portion of these students will usually also be LESLLA learners. However, other programs recognize that literacy challenges can occur at nearly any proficiency level, so they are starting to offer classes for students whose speaking level is higher but whose writing skills need extra support. If you have a multilevel class, you can use a classroom aide or even a volunteer to meet with your LESLLA students and go over the skills that they need to specifically practice at certain times during your class. Another option could be what are referred to sometimes as pull-out classes. Students are pulled out of their regular class and taught by trained volunteers who provide focused literacy instruction for a half hour each day to small groups of LESLLA students at similar levels.

The pull-out classes are conducted as “cold literacy”—students focus exclusively on reading, writing, and phonics skills, and there may or may not be coordination with the regular teachers to match with the life skills curriculum used in the regular classroom. A typical pull-out class will include practice with phonics and the alphabet and use of a textbook such as *Sam and Pat* (Hartel, Lowry and Hendon, 2006). Volunteers are given a lesson plan so they know what to cover in any given session, and volunteers inform each other on what was covered. Not only do these pull-out classes provide time for targeted instruction, but they can boost the learners' confidence by providing tasks that they can accomplish.

When a dedicated class isn't available

Pull-out classes are not an option for all programs. In such cases, you will have to get a little more creative to meet the various individual needs of your students. One option is to have times during class when everyone works on the same activity and then have other times when

students are working with their individual challenges. For example, you may have a specific time in class when writing is the focus; some students might be copying letters or writing their names, while others are writing short personal stories. Another idea is that when you do whole-group activities, you can follow them up with small group activities where learners of similar abilities are grouped together. Having two or three activities going on in the classroom may take some extra preparation time, but if you create the materials once, you can reuse them over and over. (Florez, 2007). Florez also recommends laminating a number of your class materials so reuse is easy to manage. On the other hand, there is some advantage to having students work in mixed-ability groups. The stronger students can help the less proficient students improve their skills through peer-to-peer learning. Mixing up your grouping strategies from time to time also prevents the less proficient students from feeling stigmatized as the “slow learners” (Wrigley and Guth, 1992). Plus, depending on the activity, the students who are struggling more with reading and writing issues might find other ways to excel, such as with oral storytelling, taking pictures, or drawing.

Yet another idea for managing multilevel classes with students who have mixed speaking and writing abilities is the concept of Listening, Reading/Writing, and Homeroom/Classroom classes, described by Noa Sadan (2007). Her solution is to divide the classroom time into three segments. One for developing listening skills, one for literacy skills, and one integrating all the skills but with a concentration on oral communication. In this fashion, the learning needs of the students were being met. Under this model, students attend the Listening and Reading/Writing classes that best match their proficiency level while they come together in the “Homeroom” class.

Some teachers find success in managing multilevel classes with the use of work stations, where small groups of students alternate between three or four activities during a certain period of class time.

Finally, literacy centers give students a chance to access for themselves the learning materials they feel they need most. Literacy centers are typically reading corners where students can look through books, magazines, newspapers, coupons, stories, posters, pictures and other items (Wrigley and Guth 1992). By creating specialized worksheets and instructions, learning centers can practice phonemic awareness activities. If possible, you may want to have a computer available for students to access electronic material.

Possible models for multilevel classes

One dynamic idea for your LESLLA class is the use of work stations. Under this model, three or four small groups of students work on different activities at the same time. Depending on the class make-up and the activity, you may have students switch to complete all activities. Or, you may have students remain working on one particular group activity that helps to meet their learning needs according to their abilities.

For example, you could have a small group of students practicing sentence strips, while another group practices pronunciation of terms from their picture dictionary. One or two students could be using alphabet flashcards, and yet another student could copy sentences from the board. As the students work, you would constantly monitor the different groups to answer their questions and check progress and comprehension. More than likely, you would find that the class stays busy and dynamic, while the students address their specific learning challenges during the work station period. Although planning for work stations and similar classroom models undoubtedly takes more time and effort on your part, you’ll be rewarded by a stronger lesson, increased student confidence, and comfort in the fact that you can reuse your multilevel lesson plans the next time you teach that particular level or topic.

Assessment, Research, and Technology

Assessment

Whether you have just one learner, a class with learners at the same level, or a class with learners at various levels, there will come a time when you'll have to evaluate how your students are performing. This assessment may be to measure whether students are ready to move to a new level. It may be to comply with national requirements for measuring L2 progress. Or, the assessment may solely serve the purpose of helping you find out what students have learned and still need to learn.

If you are using a standardized test then the work of what you should measure and how you should measure it is done for you. Although these tests have their critics in regards to their use with literacy students, they are commonly used by many programs. There are a few different approaches beyond standardized tests that you can use to assess your learners' progress. You may want to use final piece of assessment which is more complex and elaborate than restricted performance-based assessments. Performance-based assessments are often used to assess mastery of individual language and life skills. Extended performance-based assessments capture a broader range of student performance. Students are often involved in planning the task and in assessing their own performance. If you choose to design your own, make sure that the assessment is level-appropriate, assesses performance in a new way that learners have not practiced before but measures what has been taught and learned, and enables you to assess performance on your learners' goals.

Using an Assessment Grid

Another approach is the use of an assessment grid. As explained by Alysia Croydon in her 2005 book (p. 99), a grid enables you to chart progress for each individual student. A grid for each student would include the dates for all class meetings and the objectives covered in class. You can make notes to indicate successful completion of certain class activities and areas where students may need additional work. "This is a simple way to share progress with your students, too," Croydon writes. "You can show how much they know on one day and can point out their progress when you have reviewed material on a subsequent day."

If your focus is on how to decide that sufficient progress has been made to move to a new level, there are a few good resources that you can use. Marianne Spiegel and Helen Sunderland (2006) provide a short but helpful checklist to measure reading and writing progress for LESLLA learners. It starts on page 86 in their book. The reading progress checklist includes measures such as reading with a left to right orientation, word and number discrimination, upper-and lower-case discrimination, and knowledge of basic letter-sound association. On the writing side, their checklist includes copying/composing a one- or two-line text and copying or writing personal words. Croydon (2005) includes a number of assessment-related lists in her book, one of them with specific sound/symbol letter combinations that LESLLA students should be able to recognize.

For progress measures specific to class levels, you can use something similar to what is used in Virginia, namely the Virginia Adult ESOL Content Standards (2008) which also has checklists that you can use and adapt. Take a look at Beginning Literacy level, remembering that the indicators and benchmarks describe what learners should be able to do to exit a certain level. Finally, keep in mind that LESLLA students must make a tremendous amount of effort to gain reading and writing skills that they did not obtain (or did not obtain fully) in their native language. For this reason, there's a good chance that your LESLLA students will need to repeat their level a few times before they can move to a new level.

A research study

LESLLA teachers have struggled for many years with determining the best approaches to work with literacy learners. These learners are finally receiving more attention with a greater variety of textbooks, materials and teacher training materials. The formation of the LESLLA organization, mentioned earlier, is a reflection of the greater attention that LESLLA learners now receive. A study by Condelli, Cronen, and Bos (2010) focused on LESLLA students. Their *Impact of a Reading Intervention for Low-Literate Adult ESL Learners* was a national research project to test the effectiveness of literacy instruction to improve reading and speaking skills. It was sponsored by the Institute of Education Sciences within the U.S. Department of Education and was conducted by the American Institutes of Research and its partners. The study included the participation of 10 adult education programs and 1,800 low-literate adult immigrant learners. Teachers and students were randomly assigned the use of *Sam and Pat* (Hartel et al. 2006) referred to above, including five or more hours of literacy instruction per week for about 15 weeks; or to the control condition, which consisted of the instruction usually provided by the program during the same amount of time. The study addressed whether adult LESLLA learners could make greater improvements in reading and writing when they received literacy-specific instruction and how well instructors implemented study-based instruction (i.e. the use of *Sam and Pat*). The study produced the following key results:

- More direct reading instruction was carried out in the Sam and Pat classes, but in the control classes more English language instruction was done.
- Overall students made gains in reading and English language skills, but there were no differences in reading and English language outcomes between the students in the control groups and those in the Sam and Pat group.

LESLLA publications

Annually the LESLLA organization holds a conference/symposium usually in late summer or early fall. Every other year the symposium is held in an English-speaking country. The other years it is held in any non-English speaking country such as Spain, Netherlands, Finland or Italy; see <http://leslla.org>. The hosting institution publishes the proceedings making them available for sale at the following symposium. Some of these proceedings can be viewed on the LESLLA site and can be downloaded. There is a wealth of research concerning LESLLA issues within each volume that can serve as an invaluable resource both for adding to the knowledge bank and to support teachers with their practice.

Developments in Europe

Here is a short list of organizations and resources in Europe that might help you with your teaching.

Linguistic Integration of Adult Migrants (LIAM) Council of Europe, Strasbourg, France.

FIDE (French, Italian and German), based in Bern, Switzerland

Project IDEAL in the Netherlands. IDEAL is a program for social integration, based on the **participatory pedagogical method Themis**, which is characterized by its use of creative sense-activating didactic tools, a semi-structured curriculum, and a mother-tongue-based dual language approach.

Project ELMEGO: Greek for Immigrant parents

Technology

Instructors, administrators, and students alike have seen the value of using technology with LESLLA learners. While the benefits of technology may seem obvious, some adult LESLLA classrooms or even community centers or homes may still not have consistent access to technology. The amount of technology used with your learners can depend on numerous factors, such as a teacher's comfort level with using technology in instruction, and physical access to computers, projectors, etc. However, technology is all around and if we want to equip our students with the skills (language or otherwise) they need to get jobs, keep their jobs and participate in the community (in their children's school for example), our instruction should reflect current and best practices. Moreover, while they may not have other digital devices of their own, nearly all students nowadays have smartphones.

You might want to ask your students how they use their smartphones – maybe non-literate students are proficient at using them, even negotiating the literacy required. As a result they may need less support in mastering basic computer skills.

In Italy, the Fondazione Mondo Digitale (FMD) (<http://www.mondodigitale.org/it>) launched a special project, Double Code, in 2006 to help unaccompanied minors use technology especially through social media. They have succeeded in developing a "Third Welcome Formula" implementing new technologies, social learning with local activities for complete integration.

Wrigley and Guth (1992) believe that computers can be helpful with LESLLA learners. Learners who have a difficult time with the mechanics of literacy can be greatly helped by computers. Stories they have dictated or painstakingly written can be word processed and printed out, resulting in a "professional look" that can compete with papers written by more proficient students. Templates for notes or letters that are stored on the computer and large print can make using computers easier for both teachers and students. It is a good idea to pair students when they use the computers, especially if your students have varied technology skills. Teachers can pair students with higher technology skills with those with lower technology skills. Students can work together helping each other. It promotes more conversation. Since a student's level of technology skills can be very different from his or her language skills, it might give some students who normally struggle with the language a chance to shine. It is also helpful to have extra support (a volunteer, classroom aide or technology assistant) when students are using computers, especially in larger classes.

Though there is still value to having students practice their keyboarding skills, working on a PowerPoint project as mentioned earlier and working on level-appropriate websites, nowadays using technology in the classroom means so much more than bringing students to a computer lab and having them work on computers (practice on websites, practice typing). If possible, both teachers and students should be using technology to facilitate instruction and learning.

Technology is an instructional tool, just like a pen, a book or sentence strips. For each instructional task, teachers should choose the most appropriate tool for their particular context to communicate the material that is being taught. As Wrigley and Guth mention learning should always be within the appropriate context. Whatever takes place on the computer, iPad or other device should be in the context of what the students are learning in class.

Tablets and mobile phones

Using fingers to navigate seems much more intuitive than using a mouse. Learners can just follow along or select with a finger instead of navigating a mouse and then clicking. Nowadays

there are a variety of apps that can fulfil the needs of any multilevel class. Kristen Klas at Hmong American Partnerships in Minnesota, U.S.A, suggests these apps and activities (personal communication, 2016):

Apps:

- use Google Translate like a talking dictionary, students type the word and then it says it for them. Bonus points if their language is in there and it can translate the word for them.
- Montessori apps to teach phonics and vocabulary.
- Sight word apps. Google search for “sight words”.
- There are apps for practicing money and time.

Other activities:

- Students can view a YouTube video on tablets.
- PDFs of books and dictionaries in English and Karen, Somali, Hmong, etc. can be downloaded that otherwise the students couldn’t afford. These can be placed in iPad libraries and used like e-readers.

Learners can also experiment with Google or more precisely, with Google Images. Given a word, the learners can look up images of it to learn its meaning. Thus, these images serve as picture dictionaries. These Google images also could be used as mentor texts for their drawings (Pettit 2016). Learners frequently used Google Images to look up images that would then serve as mentor texts for their drawings, as well.

Using visual display technology in the classroom

Do you remember the days of overhead projectors? They allowed students to follow along with the teacher, see the answers to exercises, etc. These days, digital document cameras and similar technologies have taken the place of overhead projectors. Some textbooks now have software that allows the textbook to be projected on a screen or interactive whiteboard to facilitate instruction. For those books that do not have this resource, teachers can scan a page in the book and project it so students can follow along. This visual representation is crucial for LESLLA learners who might easily get lost looking at the book and unable to locate the exact image. Many textbooks nowadays come with either a CD or provide a link to resources online that can supplement lessons. These can be accessed anywhere there is online availability.

Many classrooms now have access to interactive whiteboards, which may have their own software in which teachers can create presentations and learning activities. Some interactive whiteboards allow teachers and students to use their fingers, instead of a pen or stylus, which can be helpful for some LESLLA learners who might have trouble holding a pencil. Earlier, we mentioned the use of hand held whiteboards that can be wiped clean with each use. These are ideal for working with learners one-on-one. Anything you or the students do on the general large whiteboard, your students can do on these handheld whiteboards. Some of them have lines on one side, an added bonus for those that are trying to master writing on lines. *Whiteboards Stimulate Student Learning* http://www.educationworld.com/a_lesson/lesson/lesson251.shtml provides some tips for using them.

Songs or videos can be used to introduce a lesson, or to provide practice activities. There are hundreds of songs on YouTube for downloading for your students to practice singing.

Pros and cons of using children’s materials with LESLLA Learners

Another issue debated in the realm of teaching LESLLA learners is the value of using children's materials with our adult students. Sites geared toward phonics and the alphabet have lessons relevant to LESLLA students' needs; certain children's books are written at a level that LESLLA students can understand. At the same time, these sites may use pictures that adults find too cute or condescending. Or the stories are too country-specific that contain cultural contexts that are lost on non-native students. Although some children's books or websites may seem childish for adults, they are usually easy for them to navigate, making them feel successful as they complete the activities. Another possible advantage of trying children's materials with your LESLLA learners is that you might give students ideas such as for books, movies, or lessons that they can use with their children. This particularly has potential if you are in a family literacy context. If you have students doing any personal writing, encourage them to share those stories with their children — teachers report this is a great way to extend the literacy lesson. The best approach when considering using children's material is to review the material you use ahead of time or even ask students what they think. Make sure that the instructions for the use of any children's material are easy to follow, and double check that any cultural norms presented in the lesson will not confuse students.

Conclusion

In this chapter, we have covered topics from who your learners are, to needs assessment, to instructional planning, to developing print awareness and sound/symbol correspondence, to working with multilevel learners, and finally to using instructional technology (websites, iPads, video). Many insights, examples and resources have been presented and described to enhance your practice. Working with low literacy second language learners is challenging, but extremely rewarding as you may have experienced. Once you have overcome initial obstacles, e.g. learning about your students and their abilities/needs or organizing materials and lesson plans for your first lessons, each meeting with your learner(s) will bring small successes both instructionally and personally for both the learner(s) and you.

Chapter 2: Language and literacy in their social context

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Introduction

This chapter covers a range of issues on language and literacy. Because the authors work in Finland, at the University of Jyväskylä, this means that these issues can be covered from the perspective of a culture and language with which readers might be unfamiliar. This unfamiliarity means you can consider make a comparison to what you are familiar with.

Different types of literacy

Our world views are unavoidably ego-centric: we think of our views, beliefs and practices as neutral or even superior to those of others. When it comes to literacy, we think of our alphabet, spelling system (orthography), reading habits and literacy practices as the right ones. Yet to understand our learners' literacy backgrounds, we need to develop a greater awareness of our own backgrounds. We begin with three questions (1) What do we need literacy for in our daily lives? (2) Why is literacy important for us in principle and in practice? (3) Where do our conceptualisations about literacy come from?

Although we have our own learning histories, life histories, daily life and future plans, our conception of literacy is not created by us alone. It is culturally mediated. We share and rely on what we have learnt from others, for example parents and those who have taught us and our peers and community. For our learners, literacy is also culturally mediated. The dominant views and beliefs in their communities determine the role of and status of literacy. However, this is likely to differ from their current wider environment. This means that they are unlikely to have goals and expectations for literacy training which are similar to their teacher's or tutor's or even their classmates'. For example, some learners might think that reading is not for them, and others might not understand the usefulness of literacy in their lives since they have coped fine without it.

The cultural embeddedness of literacy along with the individual differences that apply to all human beings means that it is difficult to predict for a given learner what added value they think literacy skills will bring. In post-industrialized, democratic societies, literacy is seen not only as a basic skill but also as a prerequisite for becoming a full, active member of a society whose members depend on their reading and writing to protect their rights and exercise their civic responsibilities. Teachers and tutors may therefore view the main benefit of literacy as empowerment, but this is something that learners are unlikely to anticipate at the start (see e.g. Miller and King 2009).

The situation in Finland

The Programme for International Student Assessment is an initiative of the OECD, the Organization for Economic Cooperation and Development. PISA is a triennial survey which compares educational systems by testing the numeracy and literacy skills and knowledge of 15-year-old learners in 70 countries around the world. Finland has been at the top of PISA rankings since 2001 and has gained the reputation of being an "educational paradise" or model country for education. In another OECD initiative, the Programme for the International Assessment of Adult Competencies (PIAAC), Finnish adults were also highly ranked in literacy, just after Japan. Two-thirds of the adult population in Finland are either good or excellent readers, far above the average of 50% for the rest of the OECD countries surveyed. However,

this hides the fact that there are also low-literate adults in Finland: 11% of all 16 to 65-year-olds have very poor skills in literacy.

Since late 1980s, migration flows have brought an increasing number of low-educated, low-literate adults to Finland. In response, literacy programmes have been developed to meet their needs. Finland has been actively seeking to learn from good educational practices developed in countries with longer histories of immigration. But linguistic and other differences have naturally meant that the pedagogical practices adopted in Finland had to be tailored to meet the needs of the learners of Finnish and Finland. In 2012, a national curriculum for literacy education for adult immigrants was launched by the Finnish National Board of Education. Throughout this chapter, we will refer to documents from the curriculum. The aim is not to become an expert on Finland, but to take the situation in Finland as a fresh point of departure for thinking about your own situation.

Types of literacy

The Finnish National Curriculum in Literacy for Adult Immigrants (Finnish National Board of Education 2012: 27) lists the following types of literacy when setting the goals for basic literacy education: mechanical literacy, basic reading skills, textual skills and image literacy. In addition to reading and writing, this covers oral language skills and numeracy. The learner should

- be able to combine sounds/letters into syllables and words; break a familiar word into syllables and sounds/letters; use syllable division to read a new word (mechanical literacy);
- be able to read a short text in addition to individual words and sentences (basic reading skills);
- be able to identify specific information in a simple text, provided that they can reread it as required (textual skills);
- understand from a picture what it represents and refers to in reality (visual literacy).

Written Finnish

Finnish is the native language of nearly 90% of the population of Finland, of 5.5 five million. Around 5% of the population speak Swedish as their native language. Finnish is now the second language of about 330,000 migrants, i.e. 6 % of the population. Finnish orthography is one of the most transparent of all languages written in the Roman alphabet. It is highly regular in that each letter of the alphabet stands for only one phoneme and each phoneme is always represented by the same letter, with only one exception. Finnish vowels are short or long and distinguish words. This is represented by repetition of the vowel grapheme (letter) where orthography is shown by using these brackets < > and the phonology by using these / /. For example, the word /tuli/ 'fire' is written as <tuli> and the word /tu:li/ 'wind' is written as <tuuli>. If you're familiar with the International Phonetic Alphabet, it might seem as if the orthography of Finnish is phonetic. But be careful. Languages which are written in the Roman alphabet typically represent phonemes; their spelling is phonemic, not phonetic. Phonemes have high degree of psychological reality which makes it counter-intuitive to write exactly how we speak, when adjacent sounds constantly influence each other. It would also be inefficient to spell this way. Consider how we take this for granted: in English, the plural suffix in <clocks> and <rings> is pronounced [s] in the former but [z] in the latter but the meaning of the suffix is the same and it's therefore written as <s>. Psychological reality doesn't prevent children and non-literate adults from misspellings which are phonetic when they are first learning to write.

Stress in Finnish is also simple: the first syllable in a word always takes the main stress. Simple orthography and stress result in a straightforward system. Yet things are not entirely simple. There is a wide gap in Finnish between the written standard language and spoken dialects. The standard language is seldom used when speaking; except for radio and television news, formal interviews, speeches etc., the standard is considered overly formal and not used. Finnish children have the luxury of acquiring their dialect before starting school and then learning to read in the standard language. Immigrants are confronted from the start by both varieties, the dialect they hear outside the classroom and the standard, written variety. To varying extents, this phenomenon exists in all languages and this is an aspect of language use in society which usually has to be taken into account in literacy education.

Go to <http://www.kotisuomessa.fi> to see an extensive second language learning material portal developed for the needs of immigrants in Europe. The project was funded by the European Social Fund and coordinated by the Finnish National Board of Education from 2008 to 2013. And visit this site, which was written in English (you can use an online translator to read it in your language):

http://www.oph.fi/download/140756_national_core_curriculum_for_literacy_training_for_adult_immigrants_2012.pdf

Writing systems

All the target languages involved in the EU-Speak 3 project are written in the Roman script. It turns out that this alphabet is used in the post-industrialized countries which have for the last half century welcomed the highest numbers of low-educated immigrant adults. But the native languages of our learners vary. It is important that the literacy teachers and tutors are aware of the writing systems present in the learners' lives, even if learners are not literate. Some of our learners' languages are written in the Roman alphabet, and this is typically the result of Christian missionaries creating a written form of the language and then translating the Bible into that language. Some of them use another system. There are three basic types of writing systems:

1. Logographic: each symbol represents one word (e.g. Chinese pictograms)
2. Syllabic: each symbol represents one syllable (e.g. Japanese *kana*)
3. Alphabetic: each symbol (typically) represents one phoneme (e.g. the Greek, Latin, Cyrillic and Thai alphabets: both vowels and consonants; Arabic: only consonants)

Combinations also exist. These are called complex writing systems. The direction of writing also varies, as follows: horizontally (e.g. Roman alphabet, Arabic, Thai); left to right (e.g. Roman alphabet); right to left (e.g. Arabic); vertically (e.g. Chinese, but due to digital requirements and Western influence now often horizontally). The writing direction of the native language may influence beginning second language literacy development even if the learner does not read and write his/her native language well or at all.

A website you can consult for information on the languages your learners speak is <http://wals.info/>. This link will take you to a description of writing systems where you can look up those used by the learners with whom you work:

<http://www.omniglot.com/writing/types.htm>.

Literacies in Western societies

The role of written word and literacy

We might think that the value and use of literacy skills is basically similar everywhere and for everyone, but this is not the case. All uses of written text are shaped in and by their social and cultural contexts, and conceptions of literacy are rooted in social and cultural conventions, needs and values (Gee 2000). In Western societies literacy skills are necessary and valued, but

this is not the case in many communities and societies around the world. It is the social environment that sets the criteria for what counts as sufficient literacy skills, defines what these skills are needed for and how important they are (Grabe and Stoller 2011: 52). Investment in literacy education varies considerably for a majority language, but within countries, literacy education in minority languages is often minimal or non-existent.

Values and conventions concerning literacy and the written word have varied in what are now post-industrialized societies before our current era of globalisation. In Europe, the roots of modern day literacy go back 500 years to Protestant Christian reform and to Martin Luther. 2017 was celebrated as the half-millennium anniversary of a reform that started in Northern Europe and led to the idea of universal literacy, not just literacy for a certain elite. At the time, the Bible was only in Latin and the proposal that everyone had the right to hear – and read – the word of the Bible directly, and in their own native language was considered radical. This led to intensive translation projects and literacy education which resulted in rapidly rising literacy rates from the mid-1600s onwards (Gutek 1995). This tradition is still alive in the form of language standardization projects and literacy campaigns led by Christian missionary workers as mentioned above.

Not surprisingly those countries which translated the Bible into their languages (e.g. the Netherlands, Sweden, England and Germany) have had higher literacy rates than other countries for centuries. It was only after reforms in the second Vatican Council 1962-1965 that the Catholic church permitted use of languages other than Latin during mass. The website <https://ourworldindata.org/literacy/> includes figures showing the history of the expansion of literacy as well as current literacy rates around the world. Look at the figures for your own country/language. Some of you may have grandparents or great-grandparents who were not literate. What (else) do you know about the development of literacy rates and earlier literacy education in your country?

We tend to perceive the written word as more reliable than the spoken word and this is a shared view in the traditionally Protestant regions and countries in Europe but less so in Catholic parts of Europe. Indeed, in many parts of the world, the spoken word is perceived as more reliable than the written word, and good oral skills are therefore respected more than literacy skills. In non-democratic political regimes, citizens may have a general mistrust of written texts: printed regulations are not valued if the authorities are not regarded as trustworthy. For those in power, access to the written word may be seen as a threat. We can see this not only in autocratic governments' attempts to control access to and use of the internet but also democratic governments' unease regarding unmonitored popular power.

A simple example of different orientations towards written texts are the different ways in which information is conveyed to people in their role as citizens or learners or patients or consumers. In many countries now, expectations of individual responsibility mean that face-to-face encounters are increasingly replaced by online services which use written language. The more virtual services become, the more difficult it is to manage without literacy.

Recent developments: multiliteracies

How written text and visual images are used has evolved considerably over the last century, giving rise to the idea of 'multiliteracies'. This idea brings together two aspects of literacy: on the one hand, the new ways of communicating in technologically rich environments (e.g. the internet, e-mail, text messages, social media, different applications for real-time communication etc.) and on the other hand, increasingly culturally diverse and multilingual communities where there is frequent parallel use of different languages in written form. The concept of 'new literacies' is also used to highlight the need to update the narrow, traditional

definition of literacy where it refers to how text is produced and how we interact with them. Linear text is, for example, no longer the norm, and the internet and mobile technologies are the motors for this development.

In the Finnish Core Curriculum for Basic Education (Finnish National Board of Education 2014), for example, the following descriptions are given in relation to the developing multiliteracies at grades 1-2 where the pupils are 7-8 years old:

- Multiliterate pupils can interpret, produce and evaluate different age-specific texts;
 - Texts mean any information expressed by using verbal, visual, auditory, numeric and kinaesthetic symbol systems or their combinations;
- All senses and holistic and phenomenon-centred pedagogical approaches are in use;
- Pupils are encouraged to use and produce different texts, enjoy them and express themselves through them;
- Fluency in basic literacy and everyday numeracy skills develops;
- The development of visual literacy is supported: pupils are guided to use visual means of self-expression and observe the visual means of influencing their environment.

Similar descriptions are useful when introducing a multiliteracy perspective in adult literacy education: the textual and visual world must be approached from different angles and provide space for emotions, self-expression and critical thinking from early on. This has not always been clear in adult literacy.

Thanks to mobile technology, people now write more than ever, and it has become everyone's right to express themselves in writing. Written text also has less permanence now. We often just convey a message, get an immediate response and are not concerned if the record of this interaction disappears. Communication via e-mails and text messages has increased more rapidly than anyone could predict, and social media is continually introducing new and more multimodal means of interaction where text is combined with other visual elements such as photos, videos and live streaming. This real time communication in technologically rich environments is not only a practice of the younger generation, but families and social networks across generations increasingly communicate virtually. Written or multimodal communication has come to be perceived as more flexible than face-to-face interaction or phone calls. Transnational relations depend on mobile technologies, and this is equally true for immigrants. Including literacies for and through new technologies is thus both a realistic and a necessary part of literacy instruction.

Reading on the internet, particularly with respect to websites, is in many ways different from reading linear text. Texts are shorter in general, and there is less continuity in them than in printed media. Different website designs and different logic applied to menus and links make it unpredictable where a user ends up when reading. Proficient users typically have several windows and programmes open at the same time. How we write has changed just as much as how we read (Brandt 2009). Technical developments mean that handwriting is becoming increasingly uncommon. In Finland, the proficient use of the keyboard or a touch screen is seen as a more important part of literacy skills than continuous (joined up/cursive) handwriting, and therefore this sort of handwriting will no longer be taught in schools (printing still remains on the curriculum).

The use of information technology and a presence in social media are nowadays keys to making oneself visible and heard. There are numerous forums for this (e.g. blogs, Twitter), and it is now possible to share straightforwardly what one writes with a potentially infinite number of readers. There are different and often new practices and norms for writing in

different environments and for different groups of readers, and managing these can be complicated.

From the empowerment or emancipation point of view, it is important to prepare LESLLA learners to recognise the existence and availability of such new types of writing. They are a crucial part of societal participation. Discussions on equality and human rights, for example, now mainly take place in virtual environments. Without the skills to access and participate in them one remains in the margins without a voice and without power. This relates to a concept of literacy which goes beyond the survival functions of literacy to 'critical literacy'. Sometimes this concept refers to the emancipatory or transformative potential of literacy described above: literacy enables us to protect our rights. It is also used to refer to the skills to evaluate which ideas in the textual world are reliable and which are not. Attaining this level of skill is a particular challenge for young children learning to read because they have less life experience and are cognitively less sophisticated. However, for low-educated adolescents and adults who can think critically about their own lives, their limited literacy need not be a barrier to helping them develop critical and functional literacy in parallel.

Examples of activities: multiliteracies and numeracy

Problems with literacy are widely seen in prison populations: e.g. in the UK a 2015 report showed that 46% of those entering the prison system had literacy skills no higher than those expected of an 11-year old; in the general adult population, only 15% display such inadequate literacy skills. In the *Learning Basic Skills while Serving Time* project implemented first in one Norwegian prison and then replicated in many others, assignments related to low-skilled prisoners' daily work and routines (e.g. in the prison kitchen) were designed for promoting numeracy and literacy development. During a four-month course, each inmate received a computer with numeracy and literacy learning programmes and specific programmes for text processing and numerical functions for their private use. The course resulted in a remarkable increase in their literacy and numeracy skills, developed their skills in applying for jobs and boosted their confidence and self-esteem.

In another Nordic country, in the town of Linköping, Sweden, the *Learning Together - Family Learning* project has 30 courses for low-literate immigrant parents and their three- to ten-year old children to collaboratively promote literacy and numeracy. An important aim of the project is to lead and support the parents to recognise their role in society in supporting their children's learning and schooling. Compatriots who are already well established in Swedish society function as role models and tutors most of whom are part-time home language teachers. They must have pedagogical experience and a good knowledge of Swedish society and language. Most of them are already working. The project provides them with materials and regular training sessions given by qualified staff. Through the project, parents have become more confident within and outside the family as they have improved their basic skills. Read more about these projects here: <http://www.unesco.org/uii/litbase/?menu=15&country=SE&programme=225&language=en>.

The role of interaction in second language and literacy development

Immigrants learn a second language in environments where those languages are used by the surrounding community (e.g. Turkish in Turkey, Finnish in Finland, Spanish in Spanish speaking countries), mainly in interaction with other people. For such learners, the role of language instruction could be seen simply as additional support to speed up the natural learning process mainly taking place outside the classroom. The learning environment is commonly regarded as one of the main differences between second and foreign language learning. We use the term second language learning for such situations, and the term foreign language

learning to refer to learning which does not take place in the language community (e.g. Spanish learnt in Finland) but rather in formal learning environments (language courses) and quite often without any regular opportunities to use the language in daily life. The layperson's view is that learning a new language equates to memorizing new words. It is also a common view that one first has to learn lots of words and master the grammar before starting to use the language in interaction. This is typical for adults who received formal foreign language instruction at school: accuracy is prioritised over fluency, oral skills or creative self-expression. Younger learners observe how second language development takes place among their immigrant background peers: through interaction and participation in everyday activities. New speakers of any language start picking up chunks along with single words. They start using chunks like words and only later break them down into words which they can combine with other words to create new sentences and to use them in new contexts. This is how what is known as the usage-based theory of second language development describes the process (Cadierno and Eskildsen 2015; Eskildsen 2009).

What is also needed during this process is timely support from those who already know the language. The concept of scaffolding refers to this. In the Vygotskian socio-cultural theory of second language development, any new learning activity involves the individual's so-called Zone of Proximal Development (ZPD). This metaphoric concept refers to the area located between those activities that the individual is able to tackle independently and those for which support from others is needed. The individual's need for scaffolding for a particular activity is temporary: as soon as the individual can cope with the activity independently, there is no longer a need for support, at least at that step. In the classroom as well as outside, the classroom teachers and target language speakers can provide scaffolding. But more proficient learners can do so, too. Collaborative linguistic support is available in any communication situation in the form of clarifications, clarification requests, repetitions and co-constructed utterances where for example gaps in vocabulary knowledge are filled in by an interlocutor. In the example below, both pronunciation and morphology (inflection of the verb *lukea* 'to read') is being negotiated by a learner (*NNS) and a native speaker (*NS) of Finnish. The topic is whether the learner reads the Finnish subtitles of English speaking TV programmes or not (Suni 2008).

*NS:	sinä luet niitä kuitenkin?	you read them anyway?
*NNS:	joo # now # minä # nyt minä en voi ää # luule # luul- luuse luu- +...	yeah # now # I # now I can't erm # 'luule' # 'luul- luuse luu- ' +...
*NS:	luet .	you read.
*NNS:	+, lukea # joo.	+, to read # yeah.
*NNS:	lukea on lu- minä luen luen # vähän.	to read is re- I read I read # a little.
*NS:	joo.	yeah.

Repetitions and modifications performed in interaction are such natural phenomena that we hardly notice them at all. However, they may be the most crucial features of the informal learning environments where our learners spend much more time than in the classrooms (Suni 2008).

Every teacher knows that the learners do not learn everything that is taught. Learning takes time, and there are many stages on the way towards mastery. But it is important to realise that learners often learn other things that are taught. Everyone has their own learning history,

current level of knowledge and their own needs and goals. Therefore, in the exact same situation and environment, different learners pick up different things. This is where the concept of affordance (van Lier 2000) is useful for understanding what happens. People naturally seek opportunities to act – for example to learn something - and what they notice and pay attention to depends on their own orientation and their current needs. Only what they find worthwhile becomes an affordance, a learning opportunity, for them.

Let's take another example from Finland. After a grammar-centred lesson in Finnish, one of the learners came to thank the teacher. "Thank you so much - this was so useful!" But instead of thanking for the teacher for the intended contents of the lesson, she said: "Now I finally learned what *no niin* means in Finnish and what it is used for. That's the phrase you use to open a new topic when explaining something!". As teachers, we need to be happy with such feedback and our main task is to follow the learning path of each individual student and support learners in what they are currently learning rather than expect them to learn what they are not yet ready for. It is easiest to learn what we have naturally noticed at some level and then as a result want to figure out.

Immigrant second language learners are often unaware that much of their language learning is occurring or can occur outside the classroom. One of the key roles of a LESLLA teacher is to provide tools for learning to learn in the wider world. Helping learners to recognise affordances is crucial here. Many learners need help in figuring out how to get involved in interactions in the second language and how to observe the linguistic and other symbols in their daily environment to be able to pick them up and use them as learning materials for themselves. Promoting interaction outside the classroom - "in the wild" - is a crucial part of beginners' second language classes. Teachers can show their learners how to access real-life situations where learning opportunities exist: where to go, what to observe and how to initiate and maintain interaction. Unfortunately, there are sometimes few opportunities for target-language interaction for LESLLA learners. Many stay-at-home mothers have hardly any contacts in the second language and their literacy class may be the primary environment in which they use their second language. These learners need particularly targeted support in starting to use the second language actively in their daily lives. Immigrants in non-English-speaking countries who know English (e.g. from Anglophone Africa) may also find it difficult to get opportunities to use the target language because their interlocutors, if they are proficient in English as a second language, tend to quickly switch to English when they recognize a beginner in their native language. The same situation will hold for learners from Francophone Africa to France or where there are good numbers of proficient French speakers, e.g. in the UK.

Grassroots campaigns such as *Puhu minulle suomea* "Speak Finnish to me" have arisen to raise general awareness of the second language speakers' desire to find interlocutors and not switch to English: <http://www.studentintegration.fi/solutions-bank/integration/finnish-language-as-a-support-for-integration/case-puhu-minulle-suomea-campaign>.

There are also international projects creating good practices to promote learning outside the classroom. "Language learning in the wild" is one of these initiatives; see <http://languagelearninginthewild.com/> For example, some cafes have committed to taking time to serve their customers in their second language, and different mobile technology apps which help in creating or locating learning opportunities in daily life are being developed.

Interaction in literacy development

Literacy skills are not learnt spontaneously like oral skills; they require explicit instruction, practice and learning through experience. Reading and writing skills in one's native language

can more or less be transferred for literacy in a second language especially when the orthographies of the languages are close to each other (e.g. Grabe and Stoller 2011). However, according to Alderson (2005), in the development of L2 reading skills, oral proficiency (or the underlying linguistic competence) in that language is even more important than reading proficiency in the learner's L1. This stems from the basis of the written form in the oral language (see e.g. Linell 2005). It is not possible to learn to write in a new language without some knowledge about its structure and vocabulary. It is important to recognize the purposes for which one's beginning learners need reading and writing skills inside and especially outside the classroom and the level of skills which will be sufficient for everyday survival. Remember that even if your learners already have literacy skills in their native language, their purposes for reading and writing may not be the kind valued by post-industrialised middle-class communities.

Research findings and applications

Case study of five women learning Finnish

Tammelin-Laine (2014) studied in her PhD the learning process of L2 Finnish by five non-literate women. She observed the participants as they were enrolled in a literacy training programme of approximately ten months and she used the following methods in data collection: audio recordings, field notes, oral and written tests prepared for the study, and written language tests organised by the adult education centres where she collected her data. The main findings in her study were that during the data collection period, none of the participants achieved functional reading skills but in addition to this, their oral skills developed very slowly. However, there seemed to be some sort of relationship between the development of reading skills and oral skills: the most fluent readers had the widest oral skills, particularly in terms of receptive vocabulary for nouns and in terms of productive vocabulary for verbs. Additionally, the most fluent readers produced more complex interrogative utterances. Oral skills developed the fastest, followed by reading skills and then writing skills. Why was it that oral skills developed most quickly, albeit only very slowly?

The importance of social interaction in language learning

Some researchers have suggested that for adults, learning a new language happens when the learner has a genuine need for using it (Elmeroth 2003). According to Krashen (1985), need is not enough. Learning a new language requires plentiful input the learner understands, i.e. comprehensible input provided in real-life situations with which the learner is familiar. The learner has to encounter language in interactional situations to get input. The classroom is often the most important and unfortunately sometimes the only context in which adult immigrants encounter speakers of the target language and have the chance to interact with them. However, Elmeroth (2003), a Swedish researcher, emphasizes the importance of language contact with native speakers beyond their teachers. This echoes the emphasis which Canadian researcher Norton Peirce (1993) puts on the role of contact between immigrants and native speakers in the learning process. Such contact also has psychological effects: when learners have contact with native speakers of the target language, their motivation to learn the language increases, their willingness to integrate into their new country increases. As their social exclusion begins to decrease, opportunities for interaction with native speakers expand exponentially.

The International Adult Literacy Survey and Second International Adult Literacy Survey

The IALS and SIALS were surveys in the 1990s upon which PIAAC has been building. In IALS, literacy was not examined from the perspective of basic, mechanical reading skills or reading comprehension, but as the ability to use "printed and written information to function in

society, to achieve one's goals, and to develop one's knowledge and potential". Three domains of literacy were assessed during the two survey rounds (1994–1998 and 1997–2000): prose literacy, document literacy, and quantitative literacy (numeracy). The survey used a scale with five performance levels. The SIALS scale acknowledges the cognitive requirements of reading activities along with the literacy demands of today's knowledge society and refers to the need for lifelong learning.

Level 1: Mastery of basic, mechanical reading skills. The skills are sufficient for identifying pieces of information, understanding easy texts literally and dealing with simple arithmetic operations;

Level 2: Understanding of the main content of the text and searching for, combining and comparing textual information;

Level 3: Ability to cope with the literacy requirements of the society; interpretation of textual content in the context and making inferences on conditions, reasons and consequences; performing various arithmetic operations;

Levels 4-5: Interpreting, selecting and critically evaluating different types of textual information and performing arithmetic operations in problem solving.

In the Nordic countries, the survey showed that all adults were above the international average, and the percentage of adults at the lowest level was very small. In Finland, the survey showed that 67% of adults had reached level 3 or higher and 20% had reached the highest level. Even those whose skills were low considered their literacy skills as adequate. Length of formal education and parental educational background correlated with adults' level of literacy levels in all countries in which the survey was conducted. This shows what other large-scale and case studies have shown: literacy skills are a cross-generational matter whereby promotion of adult literacy plays an important role in the achievement of the next generation. Those who hold the purse strings for funding of adult basic skills should not dismiss those low-educated immigrant adults who are stay-at-home mothers who may never enter the world of work. Their literacy turns out to matter to their children's future.

Immigrants in PISA and other surveys

Above we looked at the large-scale OECD PISA survey measuring 15-year-olds' skills in the respective domains of reading, mathematics and science. Immigrant secondary school learners who share a common country of origin, and therefore many cultural similarities, have been observed to perform very differently across school systems. There is strong evidence that the education systems in different societies provide them different opportunities for integration and success. The difference in performance between immigrant learners and non-immigrant learners of similar socio-economic status is smaller in school systems with large immigrant populations and where immigrant learners are as diverse in socio-economic status as other learners (e.g. Australia, Canada, USA). In countries with a relatively small proportion of immigrant learners and with a larger variation in the socio-economic status among immigrants than for other learners, there are much larger differences in PISA performance (PISA in Focus 2013).

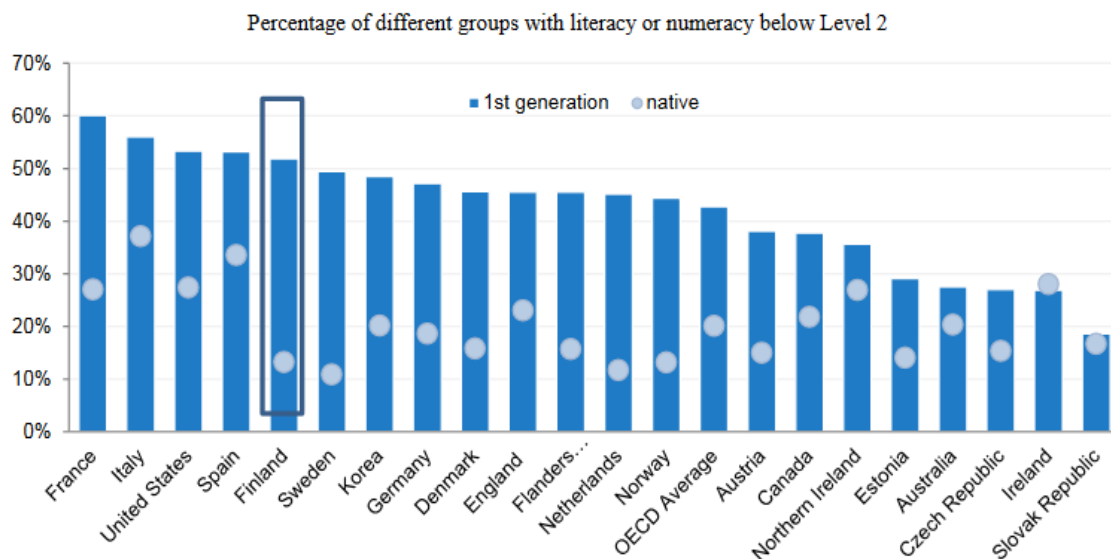
In Finland, the survey showed that first and second-generation immigrant secondary learners lagged about two years behind their non-immigrant peers with a greater proportion of first generation learners not even reaching the minimum level of mathematical proficiency. Those

who had arrived in their early school years or immigrated from countries geographically closer to Finland performed better than others. Proficiency in the language of instruction was found to be a key factor. The study also suggests the importance of immigrant learners' support both for their mother tongue and the language of instruction at school, as both turn out to be fundamental for their learning (Harju-Luukkainen et al. 2014). There will be publications on this in your own country; use the internet to track them down. In the Finnish education system, one year of preparatory instruction with a focus on Finnish (or Swedish) as a second language instruction is available for immigrant learners. This is followed by regular second language instruction and mother tongue instruction during the later school years (two hours/week). It is noteworthy that learners with immigrant backgrounds had more positive attitudes to school, a stronger sense of belonging to school and a more positive perception of the teacher-student relations than their non-immigrant peers.

These positive findings do not ensure that performance gaps are bridged. What most of those low-performing immigrant learners (65% in first and 57% in the second generation) lack at home are books. In PISA and some other international surveys, the number of books (in any language) available at home is used as an indicator of cultural capital, e.g. valuing of literary culture in homes. In the group of lowest performance, it is thus common to have few if any books at home. Those immigrant learners who performed well typically had lots of books (>200) at home as did the high performing non-immigrant learners (Harju-Luukkainen et al. 2014). There is, however, evidence that the community can compensate for absence of books in the home if learners have developed the habit of reading for pleasure (Neuman and Celano 2001; Sonnenschein and Schmidt 2000).

The concept of literacy adopted in the extensive PIAAC was introduced at the start of this chapter. The PIAAC, PISA and IALS are similar but the tasks in PIAAC include basic everyday skills which are not particularly complex and some PISA readings are more demanding than in PIAAC. One similarity to PISA is that, in addition to literacy and numeracy skills, both PISA and PIAAC include problem solving. Problem-solving is acknowledged as taking place in technology-rich environments; in the surveys, it covers the use of digital technology, communication tools and networks in (1) searching for and evaluating information, and (2) communicating and performing various work-related and private activities. In Finland, PIAAC showed that adults' performance was roughly similar to the earlier SIALS survey (implemented 14 years earlier). General background factors such as age and parental education level were found to be relevant in PIAAC with respect to educational choices and interest in developing literacy.

In PIAAC there were more immigrant participants than in SIALS. It appeared that five years in a new country serves as a kind of boundary: those immigrants who had lived five years or more in Finland outperformed the others. Generally immigrant adults in Finland performed similarly to those in other countries, but when compared to non-immigrant adults, the gap in basic or foundation skills turned out to be greater in Finland than in most other countries. 50% of first generation immigrants had a maximum of level 2 skills in literacy and numeracy (Musset 2015: 22).

Figure 1.8 In Finland, half of the first-generation migrants lack foundation skills

Note: For some countries results are not reported due to insufficient number of observations.

Source: OECD calculations based on the Survey of Adult Skills (PIAAC) (2012) (database).

In addition, only half of all adults with low skill levels were employed, and one third were inactive and not in education. Limited literacy and numeracy skills thus bring the risk of unemployment and economic exclusion for adults with and without immigration backgrounds. For information about the country in which you teach, visit: <http://www.oecd.org/skills/piaac/newcountryspecificmaterial.htm>.

The role of literacy in learner agency

Parenting

Adults are expected to be able to take care of themselves and their children in every imaginable way. In post-industrialised societies, this includes ensuring that they have the ability to read and write. The OECD defines literacy skills as being able to understand and use written information in daily activities, at home, work and in the community – to accomplish one's goals, and develop one's knowledge and potential.

As we have already discussed, immigrants require oral proficiency, literacy and numeracy in the target language to support their children's schooling. In a study of immigrant mothers and their children in Finland, Honko (2013) found a strong positive correlation between mothers' oral skills in Finnish and children's skills during the early school years. Honko also noted the need for parents' literacy skills to keep in touch with day care and school to write short messages including in online interaction.

Employment

In post-industrialised societies, diverse reading and writing skills among adults are taken for granted, and without them it is difficult to manage everyday life and live as a full, active member of the community. These skills are, however, not all equally necessary or highly valued in societies of the world. The values placed on literacy skills will always define what is expected of adults (Grabe and Stoller 2011). In many countries, the unemployment rate of immigrants is two to three times higher than for non-immigrants. In the service sector there are some typical low-skilled entry-level jobs which provide work opportunities for newcomers with limited language proficiency. Cleaning work is the most common of these so-called "3D

jobs” = dirty, dangerous and demanding. They are quite crucial from the family income point of view, but they are usually dead-end jobs, even for well-educated immigrants.

Agricultural work still has the reputation of involving simple, physical work. Even here there are now high expectations for literacy. One example of this is a recent attempt to support immigrants with suitable backgrounds and experience in becoming entrepreneurs in agriculture in Italy (as observed by Del Percio at the University of Oslo, Norway).

Strømmer (2015) collected ethnographic data in the cleaning sector in Finland. Recall the research discussed earlier on the importance of interaction with native speakers in developing oral proficiency in the target language. Strømmer’s findings show that immigrants who work in this sector are isolated and their opportunities for interaction in the target language in the workplace are infrequent. This is not difficult to imagine; cleaners often work alone in empty premises and if not, they are invisible to those occupying these spaces. Employers can play a very important role in fostering interaction and enabling language acquisition to take place by pairing immigrant-non-immigrant cleaners, offering them shifts where there is customer contact, raising customer awareness of the value of positive interactions with cleaners and/or involving them in the work community.

It is a common misunderstanding that cleaning work hardly requires any language and literacy skills. But cleaning involves use of tools and equipment as well as a range of cleaning agents. For all of these, there are printed user manuals or directions and these include not only written text but symbols, numerical information, abbreviations and strategic placement of crucial information. In modern cleaning, guidance and reporting now take place through mobile phone applications. If we unpick the 3D, it is clear that cleaning is dangerous for someone without literacy, and the demands are therefore greater than we assume.

Catering, most commonly in ethnic restaurants, is another typical provider of entry-level jobs. Pennycook and Otsuji (2015) have shown that in urban environments such work communities may create quite unique multilingual practices: the languages spoken in the kitchen are not necessarily the same as those spoken with the customers. Literacy in several languages may also be needed and valued in restaurants. Restaurant work may therefore offer considerably more opportunities for linguistic interaction. However, this might not always be in the target language. There are lots of anecdotes about immigrants to a given country acquiring the languages of other immigrants to quite impressive levels. Literacy is also needed to pass various tests. In the European Union, all employees in cafes, restaurants, institutional kitchens, food stores and food factories must have a Hygiene Passport if they handle unpackaged easily perishable foods, for example milk, meat and fish.

In many countries including the Nordic countries, so-called integration training is provided for all unemployed immigrants, typically for one year. The focus is on the knowledge of the language and surrounding society, but practical training for the workplace is perceived as important, too. Sandwall’s (2013) case study shows, however, that in Sweden, work placements provide very few opportunities to communicate in Swedish. Due to simple, individual work the interaction time was limited to only a few minutes per day. In the learners’ eyes, the “school world” and the “work placement world” also remained as two separate, completely different worlds.

Chapter 3: Bilingualism and Multilingualism

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What is a bilingual?

You've come across many individuals in your life who speak more than one language. This may also have applied to your learners before they started learning a new language with your support. It applies to your learners' children if they are attending school in your country. We call someone who speaks more than one language a bilingual, and the broadest definition of a bilingual is someone who regularly uses two languages in everyday life. There are other definitions, however, that refer to how well someone speaks these languages, and if you'd like to read more about definitions take a look at Edwards (2013) or Grosjean (2008). In this chapter, the discussion revolves around bilinguals, but for those who are learning or already speak more than two languages – a multilingual – the same considerations apply, but slightly differently.

Bilingualism is a widespread phenomenon and linguistic and cultural diversity is a fact of modern life. Millions of children begin to learn another language in early childhood and recent statistics show that almost two-thirds of the global population is either bilingual or multilingual (Bhatia and Ritchie 2013). A glance at the roughly 7000 languages spoken in over 200 countries demonstrates how common it is. Use of two or more languages in the same society isn't limited to certain regions; many African, Asian and European countries are bilingual or multilingual.

How babies start acquiring one language and cope with more than one

Let's take a brief look at what researchers know about the field referred to as child language acquisition. This will give you knowledge for thinking about some of what we'll be discussing during the rest of this chapter. There are now lots of videos on YouTube on babies' language acquisition. If you've never done so, browse a bit and watch some. Baby Human is a nice series.

Linguists consider it remarkable that all typically-developing young children have a marvellous capacity to acquire their first language (which we'll abbreviate as L1). Why only typically-developing children? Some children are atypical in their language acquisition. That is, they have specific language learning or cognitive difficulties which reduce in some way their capacity to acquire language. In the last decade researchers around the world have worked to figure out how we know when a bilingual child's development is typical and when it's atypical. This is a central concern for many immigrant parents and for their children's teachers and we therefore return to this topic further below.

Children acquire their L1 efficiently. They do so within a relatively short period of time, without instruction and without any conscious effort. This isn't comparable to what happens in learning a second language (which we'll abbreviate as L2). For many older L2 learners, instruction and conscious effort are heavily involved. Children acquire language naturally through exposure to a language and interaction with speakers of that language, usually their caregivers but of course also siblings, other older children and other adults. The knowledge

system that the child acquires by the end of this process results in understanding and production of an infinite number of sentences. Children do not simply imitate what they hear. They acquire what linguists call linguistic competence. This is a mental system which enables the speaker of a language to understand or produce a sentence which s/he has never heard or produced before.

Children reach the point where their linguistic competence in their L1 is comparable in many ways to the older children and adults around them no matter what kind of input they receive. There are many individual differences among children in their environment, their social class and the language input they get. Despite these differences, all children end up with the same core linguistic competence in that language. Children learning the same L1 end up knowing how to form questions and passives in that language. They know how adjectives modify nouns and whether they can drop subject pronouns in that language. The human brain is ideally equipped to acquire language under varying environmental conditions.

The acquisition of language occurs when children's cognitive, motor, perceptual and social skills are still immature. There are milestones in development which do not seem connected to language. For example, tri-dimensional organization of visual space emerges 16-18 weeks after birth (Held et al. 1980) and bipedal gait, walking on two legs, develops towards the end of the first year of life. This is around the time infants begin to produce their first words. Children are born prepared to acquire language and researchers have therefore spent a good amount of time trying to find out what babies know at birth. Techniques involve the very young baby sucking on a nipple that does not yield milk to show the baby's responses to sets of different sounds the researcher exposes them to.

Researchers have discovered that babies are able to hear sounds outside the womb from 23 weeks onwards and when newborns are tested they recognize their mother's voice; they prefer to listen to this voice over others' voices but they don't recognize the mother's voice if it's played backwards (DeCasper and Fifer, 1980; Mehler et al., 1988; Peña et al. 2003; Gervain and Mehler, 2010).

The importance of prosody

What this research suggests is that the newborn has already picked up on the prosody of the language they've been listening to, that is, on how sounds are grouped to create a rhythm and a tune in speech. Babies cannot yet identify the individual sounds of the language they've been hearing since these will have been muffled in the womb. After only two months, babies can distinguish utterances in 'their' language from those in a language they haven't ever heard, which indicates that children are starting to form a mental representation of the prosody of their language (e.g. Mehler et al. 1988; Nazzi et al. 1998). Prosody turns out to be an important cue in distinguishing one language from another and it's therefore relevant to how babies deal with hearing two languages at the same time and keeping them separate. Under such circumstances, we do not observe that babies growing up bilingual make a horrible mess of the input.

Acquiring a language means coming to know its system of sounds and how they pattern, its words and word formation system, and its grammar and how to use it when communicating with others. For babies growing up in a bilingual context, identifying sound and grammar

patterns in two languages and mapping them onto meanings in two different languages seems to be a double challenge. We'll talk about how babies deal with this challenge after we flesh out the definition of bilingualism we started with.

What does it mean to be a bilingual?

Types of Bilingualism

Whenever we talk about bilingualism, we might well be referring to more than two languages and we could use the term multilingual. Under these strict definitions of bilingualism, someone who learns additional languages after the age of five is a second language learner/second language user not a bilingual. While one might think of bilingualism as a continuum as does Valdés (2001), adopting the strict definitions we show here can be useful because it separates those who are likely to have fluency and a high level of proficiency (or be native-like) in two or more languages and who use these languages on a regular basis from those who have a smattering of various languages that they can use to order food when they go on holiday.

Types of bilingual individuals

Simultaneous bilinguals are those exposed to two languages from infancy (De Houwer, 1990). Successive/sequential bilinguals are those whose exposure to another language begins after the first language has been acquired, i.e. at the age of three to five years, but before schooling starts. Receptive bilinguals can understand the language but have limited proficiency in using it. Productive bilinguals can function in both languages.

There are various types of bilingualism. Additive bilingualism involves situations where both the learners' languages are supported in their community and school settings. Subtractive bilingualism is where the learners' mother tongue is lost at the expense of the acquisition of the society/majority language. Family bilingualism/heritage language use is where family members are bilingual but one of the languages is not spoken in the society. Finally, balanced bilingualism - a rare case - is where the learner has similar levels of proficiency in both languages.

Linguistic diversity and language change

Bi-/multilingualism is not new. Wherever there is contact among languages, bi-/multilingualism occurs. However, the extent of multilingualism in some of today's urban areas in the world is probably unprecedented. Linguists refer to this as super-diversity. A language can become extinct if there are no longer any speakers of that language, if it's not a written language, or if it's not supported in schooling. Every language death is a tragedy. But consider the dead languages you know of. Latin has not been spoken for centuries and even though it's taught in school, it's considered to be a dead language. Latin as spoken in the Roman Empire evolved into Italian, Portuguese, Romanian, Romansch and Spanish.

Linguists are starting to wonder how the very common phenomenon among bilingual and multilingual speakers - code switching - contributes to language change. We know that modern English is the product of a good amount of influence from French from the Normans after they settled in British Isles in the 12th century. We don't have any recordings of conversations from this time, but there are written records. One example is a letter written to King Henry IV at the start of the 15th century where the writer switched constantly between French and English.

Language change isn't as fascinating to outsiders as it is to linguists. People feel threatened when they see their language changing (and there are whole institutions dedicated to preserving languages in their assumed current form; there may be such an institution in your country). When outsiders hear bi-/multilinguals using two or more languages in one conversation, they have a similarly negative reaction. They perceive this as misuse of a language when someone doesn't have good command of it. This perception misses the point: speakers' use of two or more languages in one conversation demonstrates creativity and versatility.

Code switching

In the same conversation, bi-/multilinguals mix the languages they know both within a sentence or from a sentence to another. This is variably referred to as code switching or code mixing and there are further subtle definitions. For purposes of this chapter, we will just use the term code switching. The most common form of switching concerns inserting a word from one language while speaking in the other language. This is shown in the following Turkish-English example:

midterm'ün tarihini değiştirebilir miyiz?
 midterm-of date change-could ques we
 'Can we change the date of the midterm?'

The speaker in this example uses the English word 'midterm' in a Turkish sentence and attaches a Turkish suffix to the word. Single word switches like this are pervasive among bilinguals. Why do you think this student used the word midterm here? Since she's speaking in Turkish, it's not because she doesn't know the word in Turkish. There could be a variety of reasons. But at this point, it's useful to consider how you would describe your learners' use of their native language in the classroom. This, too, comes under the category of code switching and it is likely to be pervasive in your classroom when they don't know a word or a phrase and their compatriots are within earshot during one of your lessons. This situation probably doesn't arise when you're talking to your student; if your student knows you don't know his/her language, there won't be much use of words from the native language.

Code switching is not random. It is constrained by the syntax of that language and by how language is used, by pragmatics. Bilinguals code switch for various reasons. There are usually communicative reasons for doing so, due to the nature of the context or interlocutors in the conversation. Sometimes, they code switch because of limited exposure to one or more of the languages they are learning. This is typical for young bilingual children during the early stages of the acquisition process. They might have access to a particular word in one language but not in the other due to lack of input.

Speakers also code switch to mark their ethnic identities, social roles or status or to establish interpersonal intimacy or distance. An example of this that might apply to your learners is code switching in the workplace. This is a relatively new line of research which Chui et al. (2014) address using immigrants in Hong Kong as an example. In their study, they found that code switching operates like social glue where the newly arrived reveal more about their motivation to fit in, while for longer-term residents it demonstrates, for example, identity.

We all use language to mark our identity, social role, status and intimacy/distance. If we are monolingual, we still have dialect and register at our disposal. On this basis, Gardner-Chloros argues that bi-multi-linguals aren't special in their code switching. We all do it.

Researchers have viewed children's code switching as a sign of incompetence. This also applies to older second language learners such as your learners. Researchers have also viewed code switching among children as a sign of confusion. Parents might be concerned with when they hear their children code switch if they think that their children are unable to separate their languages. Studies of young bilinguals have shown that children are not confused at all. For example, 2 ½ year-old bilinguals indicated which language the mother spoke and which language the father spoke in a study by Genesee, Nicoladis and Paradis (1995) of English-French bilingual children in Canada. They looked at the children's behaviour in three different contexts: (i) the mother alone, (ii) the father alone; (iii) both parents present. The bilingual children used more French to the French-speaking parent and more English to the English-speaking parent. For a similar account of code switching by children and by adults, this time in an immigrant context, you can take a look at Rwandan UK immigrant academic Joseph Garafanga's (2010) work on Kinyarwanda-French bilinguals.

So not only do bilingual children separate their languages at a very young age, but also, they use them appropriately according to the situation. The crucial message here is that bi-/multi-linguals of all ages adapt their language behaviour according to the context. Researchers have long argued that adult code switching is constrained by the syntax of the language involved, i.e. it is highly systematic.

Although bilingual children separate their language systems at a young age, their languages are nonetheless in constant interaction. Code-switching is a sign of this interaction. When it comes to syntax, in bi-/multilingual code switches, the speaker usually produces grammatically correct sentences. The next section presents key components of bilingual language development in children.

Bilingual language development

Many LESLLA learners are parents and their children will become bilingual at least once they start school. Knowing more about this aspect of your students' lives can enrich your teaching. The section presents more information about bilingual learning situations. Then we address how children acquire more than one language, how this relates to their cognitive development and how the brain represents multiple languages.

Simultaneous vs. successive/sequential bilinguals

Children acquire more than one language (even if these are signed language) with no conscious effort in their first several years of life. Although there are practical limits, there seem to be no biological limits to how many languages a child can acquire simultaneously. Children who learn two languages from birth or shortly thereafter are called simultaneous bilinguals. Those who learn an additional language after they have acquired their first language are called successive or sequential bilinguals (De Houwer 1990; Unsworth 2013).

How do simultaneous bilinguals acquire their two languages?

Do bilingual children separate the two languages into two separate systems?

Early research on bilingualism has focused on the view that at early stages of language acquisition, children do not differentiate their two languages. That is, early acquisition is like a monolingual's with a single grammar but words from two languages (Volterra Taeschner, 1978). Research since then does not support this view. Babies are not confused and do not meld two languages together. As mentioned previously, within hours of birth, babies can distinguish their mother's voice from others' voices. Babies are impressive language learners and even very young bilingual children show evidence of two separate systems (Paradis & Genesee 1996). Babies' acute linguistic sensitivity enables them to separately categorize input from different languages. This sensitivity equips them to deal efficiently with varying amounts of exposure to different languages when they get input in their two languages from different people and in different contexts (Grosjean 2004). If parents share a language, it will usually be what's most often spoken around the child. One parent will then use the additional language when alone with the child. This does not hamper babies' ability to distinguish languages (e.g. Bosch & Sebastián-Gallés 2003), though in juggling two languages development of perceptual abilities may take a bit longer (Polka, Rvachew and Mattock 2007).

Simultaneous bilinguals' language development

Simultaneous bilinguals show different patterns of development in some areas of language. One such area is early vocabulary development and this gives credence to the unitary language systems hypothesis. Both monolinguals and bilinguals produce their first words around the age of one (Patterson & Pearson, 2004) and their rate of word learning is similar (Nicoladis, 2001; Pearson et al. 1997). There is some evidence for a delay of several months for bilinguals and their vocabularies in one or both of their languages may be smaller than monolinguals' the same age and they might only know words in one of their two languages. Some don't see this as a deficiency (Pearson et al. 1997) given the bilingual's double learning task (two or more words are needed for every object or idea) and their learning situation (exposure to different people in different situations).

When it comes to the acquisition of word order and inflectional morphology (i.e. past tense marker *-ed* or auxiliary verbs *-am, is, are*) studies have looked at simultaneous bilingual children to see whether the path of development in each of their languages is like a monolingual's path. Researchers generally agree that bilingual children learn language-specific properties of each of their two languages early on and the path of development is generally like monolingual children's. Paradis and Genesee (1996) reported that two- to three-year-old children learning English and French followed the same path in each language as monolingual children acquiring either English or French. Studies also reveal that bilingual children show the same rate of development as monolinguals in the language they are most exposed to, their dominant language, but may be slower in the other language (De Houwer, 2005).

Even though simultaneous bilingual children show that for each language they have a separate linguistic system which they acquire like a monolingual does, there is cross-linguistic transfer or influence of one language on the other. This tends to be restricted to certain aspects of grammar (e.g. Serrattice and Sorace, 2003; Serrattice, Sorace and Paoli 2004). Word order is one such aspect, and this is easily seen where the two languages have different

word orders. Young children pick up on word order in simple sentences very early and Döpke (2000) observed that two-year-old simultaneous bilingual German-English children produced object-verb sentences like monolingual German children as in *Milch trinken* 'milk drink' (= 'I want some milk'). Unlike German monolinguals, the children also produced a good number of verb-object sentences following the order of monolingual English children.

Simultaneous bilingual children also show the influence of learning a language that requires subject pronouns to always be overt, i.e. pronounced, such as English along with a language that allows empty pronominal subjects. Paradis and Navarro (2003) found that Spanish-English simultaneous bilingual children used more overt subjects in their Spanish than monolingual children did due to the influence of the English they were also learning. Haznedar (2010) observed the same in their study of Turkish-English simultaneous bilingual children when they were speaking Turkish.

How do successive/sequential bilingual children acquire their two languages?

Those who start acquiring an additional language after they have acquired the core aspects of language are older and therefore more cognitively and physically advanced than simultaneous bilinguals. A higher level of linguistic competence in the L1 means the learner's *initial state* (Schwartz and Eubank 1996) contains more possibilities for that language to influence the additional language being acquired. 60 years ago, such influence was held to be a crucial difference distinguishing adult from child where L1 influence impeded mastery of the new language. For the last half-century linguists have documented how a learner's first language subconsciously influences various aspects of an additional language during acquisition by adults and children and we now know that the amount and type of L1 influence is comparable regardless of age.

In a study of a four-year-old Turkish-speaking child learning English, Haznedar (1997) found that during his first several months of exposure, the child adopted subject-object-verb Turkish word order in English and produced sentences such as *Yes ball playing*. Mobaraki et al. (2008) also showed this for eight- and nine-year-old subject-object-verb Farsi speakers learning English: *We tennis play*. Children often omit subject pronouns and for these children, their L1s also allow empty pronominal subjects. We refer to the stage where learners produce short sentences without words like pronouns and function words such as 'am, is, are' as a telegraphic stage because sentences resemble old-fashioned telegrams or texts: *Home 11 o'clock. Talk at breakfast*.

Early childhood bilingualism

Successive bilinguals might start their acquisition with a 'silent period' during which they don't produce anything. There's an interesting difference between younger and older children you might never have thought about: babies produce a lot of noise during their first year of life. Not only do they cry a lot, but they also babble extensively. (And they listen a lot, too.) As far as we know, even after infancy, and even when the baby has for some reason been deprived of language or has been unable to produce sounds, after the age of one, the young child does not babble at the start of acquisition. This has never been documented for older children

when exposed to their second language. So silence – while the child absorbs input in their new language by listening – occurs without babbling.

During the acquisition process, just like children learning their first language, second language learners take a while to master the characteristics of their new language. Researchers refer what the learner can't yet do as an 'error' or as 'non-target-like' (or for children, non-adult-like). Errors are not random but rather are highly systematic and demonstrate the language learner's subconscious processing of the input as they construct the mental system we call language.

The lexicon is important for both oral proficiency and literacy, and vocabulary learning is a gradual process which unlike the early acquisition of other aspects of language lasts for years through primary, middle school years and beyond (Kohnert, 2004). Studies of the vocabulary knowledge of simultaneous and successive bilingual school children revealed that successive bilinguals had smaller vocabularies than simultaneous bilinguals and that both groups had smaller vocabularies than monolinguals (Umbel et al. 1992). Studies have also shown that successive bilinguals have more restricted vocabularies than monolinguals; that is, they use fewer different types of words.

Cognitive advantages of bilingualism

Some 50 years ago, people thought that monolingual children cognitively outperformed bilinguals, bilingualism was harmful, related to low IQ, learning problems and language delay. This thinking was the product of how early studies were conducted where researchers did not match bilingual and monolingual children for age, social class, language proficiency or exposure. When these were kept constant for study participants, results began to show that bilinguals were not just equal to monolinguals but sometimes better. It turns out that being bilingual enhances cognitive skills. Being able to use two (or more) languages trains the brain better than learning just one. Bilinguals' languages are always active. Using more than one language involves the executive control system which is considered to be one of the most important aspects of our cognitive system. One of its main responsibilities is attention. Consider how bilinguals have to select the right language for a particular situation. They are not only better at controlling attention when using language but they are also better at nonverbal tasks that involve attention shifts. Bialystok (2005) designed and ran an experiment with monolingual and bilingual children and adults. They were told that they would see a red or green square at the sides of a computer screen and told to press the left key when the square was green and the right key when it was red. When a green square appeared on the left, it was easier to press the left key. When a green square appeared on the right, it was harder because participants had to divide their attention between colour and key. Bilinguals' responses were faster and more accurate than monolinguals' responses when this shift was required. Are benefits for bilingualism only found for those with high proficiency? One study of young school-age children learning Hebrew and another of children learning French whose proficiency varied showed that the bilingual executive control advantage was not connected to proficiency but to length of L2 exposure (Bialystok and Barac, 2012).

The bilingual advantage in executive control is also independent from social class as shown in a study comparing working class and middle class monolingual and bilingual children at the

same school; the bilinguals showed superiority in executive control tasks regardless of their social class (Calvo and Bialystok, 2014). Executive control advantage is also present in adulthood where for various forms of dementia, including Alzheimer's, symptoms can be delayed four to five years (as shown in hospital records of monolingual vs. bilinguals; Gollan et al. 2011).

The cognitive advantages of bilingualism go beyond executive control. Ricciardelli (1992) found a positive relationship between bilingualism and creative thinking in 20 out of 24 studies reviewed. Bilinguals demonstrate better skills in mathematical problem solving (Leikin, Schwartz and Share 2010). A summary by Adesope et al. (2010) of 63 studies of 6000 participants illustrated bilinguals' higher performance not only in what we've discussed - control of attention, creative thinking and problem solving - but also in other executive control functions such as working memory and in metalinguistic awareness and abstract and symbolic reasoning.

The challenges of bilingualism

Some argue that there are no differences in rate of development for bilingual children (Paradis and Genesee 1996) but there do seem to be differences between monolinguals and bilinguals when it comes to vocabulary. A review of studies examining bilingual children's lexicon sizes showed that this is a general tendency (Bialystok et al. 2010), and one which persists throughout the lifespan (Bialystok and Barac 2012; Bialystok and Craik 2010's review of 20 studies of 1600 adult mono- and bilinguals aged 17 to 89). Studies also show that bilinguals take longer than monolinguals to retrieve words from their lexicons due to the parallel activation of two (or more) languages (Pelham and Abrams 2014). Extra effort is needed to retrieve a word from the language a speaker is using. For example, bilinguals experience more tip-of-the tongue moments when searching for words than monolingual speakers do (Gollan and Silverberg, 2010). But this seems only to apply to word retrieval (Pearson et al. 1997). Gollan and Acenas's (2004) Spanish-English bilinguals were slower than monolinguals in saying words for pictures they were shown but not any slower when listening to words and identifying pictures of these words.

The neurological basis of language

Where is the language represented in the brain and which parts of the brain are responsible for various language tasks? The brain might be small (it amounts to 2% of an adult's weight) but it's incredibly complex. It contains roughly 86 billion neurons along with glial cells and blood vessels (Azevedo et al. 2009) organized into three main parts: the cerebrum/cerebral cortex (19% of the neurons), the cerebellum (80% of the neurons) and the brain stem (1% of the neurons). The cerebrum is the largest part and is divided into a right and left hemisphere which communicate with each other via a longitudinal fissure and a bundle of fibres called the corpus callosum (Nowinski 2011). Each cerebral hemisphere has frontal, temporal, occipital and parietal lobes.

At the end of the 19th century, doctors Broca and Wernicke discovered major language areas in the left hemisphere by connecting aphasia symptoms due to a trauma such as a stroke to sites in the patient's brain post-mortem. People with Broca's aphasia cannot speak fluently but can generally comprehend speech. People with Wernicke's aphasia speak fluently and grammatically but their speech is nonsensical and they cannot comprehend speech. A century later, technology has advanced what we know about the brain and language. One technique used is functional Magnetic Resonance Imaging which provides images of the brain in action (Scott and Wise 2003). When an area in the brain is activated by an individual's response to a language task the researcher sets them, more oxygen is required for the task, and the blood flow shows where in the brain the oxygen is used. Studies of bilinguals reveal whether blood flow is similar for the various languages they know, similar to monolinguals and similar to older or younger bilinguals. It turns out that bilinguals use the same brain areas for identical tasks for both languages tested (e.g. picture naming, verbal fluency) regardless of their differences in orthography, phonology and syntax. One study had bilinguals say sentences and for their lower-proficiency language, there was greater activation in the prefrontal cortex indicating more working memory involvement, i.e. the brain working harder. This effect was moderated by longer exposure regardless of the speaker's proficiency. The same effects were found in studies of vocabulary. However, in some aspects of language, age matters more: those who began acquiring the L2 as adults were found to process syntax differently from those who began as children (Wartenburger et al. 2003).

This last reading presented cutting edge research on recent bilingualism research. This sort of research is expensive and often only carried out on those with cerebral problems rather than on healthy individuals. It is important to note that views and perspectives are often divided on how one language and multiple languages are represented in a speaker's brain. It's an exciting field to keep abreast of.

Language Impairment

We now know that language problems affect our entire species; wherever researchers have looked, they have found that a small percentage of young children display speech problems (boys 8%, girls 6%; Tomblin et al. 1997) and this might include some of your learners' children. It could be that some of your learners had such problems as children and might still be affected as adults. However, because we can draw on a substantial body of research in clinical linguistics relating to children and almost nothing on LESLLA adults, our focus here will be on your learners as parents.

The focus above was on the characteristics of 'typically' developing children and on adults. We emphasized that there are no biological limits on the number of languages individuals, particularly children, can acquire with enough input and chances to interact with speakers of that language. We also noted that even though there are basic similarities between monolingual and bilingual language development for children, there are some differences. So, in simultaneous bilingual acquisition, while the route of acquisition is similar, the rate of acquisition in each language may not necessarily be identical. This can be due to the properties of each language. For example, a child learning English and Spanish might develop definite and indefinite articles at the same rate because the two systems are similar. A child learning English and Turkish might be delayed a little in acquiring the English article system because Turkish doesn't have articles.

We know that bilingual children often receive unequal amounts of input in each language. This results in more rapid acquisition in one of them. In the child's more rapidly developing language, she will produce longer sentences, more complex sentence patterns and more word types than in the other language. As noted by Genesee and his colleagues, the dominance of one language influences the language the child uses, including when speaking the non-dominant language. Children as young as two keep their two languages separate, but they do code switch when their knowledge is insufficient in the language they are speaking (Genesee, Boivin and Nicoladis, 1996). This point is important when professionals assess the language competence of bilinguals to see whether a delay parents or teachers observe is a sign of atypical development, i.e. some sort of language disorder that requires speech therapy. There are various categories of atypical language development and one which has received much attention is specific language impairment (SLI). SLI is where the child's language development is delayed in comparison to their cognitive and socio-emotional development. SLI children have normal non-verbal IQs, no deviant social behaviour and there are also no socio-economic reasons for their delay.

The difficulties language-impaired people experience vary yet clinical linguists can now identify atypical patterns of development in a range of languages. While children's language problems can affect their comprehension of language, it is more common for speech production to be affected (Conti-Ramsden and Hesketh 2003). For example, a child may produce their first words later, may have smaller vocabularies, and may have less intelligible pronunciation than children of the same age. The parents may realise these problems run in the family. They or their siblings might have had such problems. There may be other reasons for slow development; some children simply start producing language later. Bilingualism is another reason.

The most serious type of atypical language development concerns grammar. The most common grammar problems are with morphosyntax and use of functional elements (Leonard, 1998). Because languages vary, children with problems will display different problems in a particular language (Abdalla & Crago 2008; Leonard 2000; Paradis and Crago 2001). Here are some examples:

For English, by the age of five, children have acquired tense and aspect marking as in *she watched* or *they are watching*. And one sign of specific language impairment is unstable and variable use of the suffixes -ed and -ing and the auxiliary verbs *is* and *are* (Rice and Wexler 1996). In Spanish, there are difficulties with gender and number agreement in articles (Restrepo and Guitierrez-Clellen 2004); in German, there are difficulties with subject-verb agreement and word order for verbs (Clahsen, Bartke and Gollner 1997). In Turkish, there are difficulties in both producing and comprehending counterfactuals due to morphological complexity as in the sentence *If she had worked harder, she would have been given the position* (Yarbay-Duman, Blom and Topbaş 2015).

The correct diagnosis of speech problems is important for a child's wellbeing and success in life. It is a disservice if a child is labelled as atypical when the child is simply trying to master two languages. But if the child's bilingual development masks atypical development, this can mean the child does not get the treatment needed for their mastery of language-based skills. There is a limited but growing body of work on atypical language development by bilinguals. However, there is still a lack of detailed information to guide parents and teachers in making decisions about how to respond to problems and this has strengthened the view discussed above that bilingualism places too great a cognitive and linguistic burden on children.

Parents with children diagnosed as atypical have been advised not to expose them to two languages. There is no scientific evidence which shows that typically developing bilingual children experience more severe delays, disorders or impairments than their age-matched monolingual peers. Atypically developing bilinguals show impairments in their two languages which are similar to atypical monolingual children. What this means is that the bilingual situation does not affect their impairment. Paradis, Genesee and Crago (2011) urge parents, teachers and clinicians who suspect that a bilingual child is overly delayed to make sure that they take into account (1) typical characteristics of bilingual development such as code switching and influence of one language on the other; (2) the entirely normal dominance of one language over the other due to different amounts of exposure to the two languages.

Supporting the home language in the community

Another term we can apply in bilingual contexts is that of *heritage speaker*. It refers to first generation immigrants as well as to second and later generations who are exposed to the immigrant language but may or may not speak it, i.e. they are receptive bilinguals. Many people around the world acquire their heritage language to some degree by hearing their grandparents or members of the community speak it. Language acquisition researchers have compared bilinguals' weaker language to that of monolinguals to see which linguistic characteristics they are less likely to acquire. They also look at the type of input bilinguals receive in their weaker language. For example, the heritage language may be limited to interactions with parents and extended family members. Immigrant parents may also start to use their language differently from monolinguals back home. What researchers find is that children in this situation learn fewer registers, have a smaller vocabulary, show less variety in their grammar and they might not even acquire the more difficult aspects of a given language (e.g. Polinsky 2007). Second and third generation heritage language speakers may also be exposed in the community to a different variety of the heritage language than their parents or grandparents speak. And if their heritage language exposure is only at home, the child will usually not become literate in the heritage language (sometimes this is not possible if the language isn't written).

Researchers who study the social context of language acquisition observe a shift over three generations from the heritage language, the minority language, to majority language, the language of the host country/region. The first generation is monolingual in the minority language and starts to acquire the majority language; the second generation is bilingual and the third generation is monolingual in the majority language. By the fourth and later generations, the language is no longer used at all within the family. If there isn't continued immigration into the community, the community becomes monolingual. Speakers of the Sylheti variety of Bengali in the UK seem to be an exception, due to continued immigration from Bangladesh (Hamid 2011).

There is another way to maintain a community's bilingualism: through education in the heritage language, i.e. bilingual education where the two languages are used in the subjects a student takes (Cummins 2005). You are likely already aware of the many social, psychological, economic, administrative, and instructional factors that accompany the idea of bilingual education. An expanded list of such factors (Garcia 2009 p. 137-157) includes *situational factors* (learners' social and linguistic backgrounds, population diversity, language policy of the country, the school, status of languages in the society, costs of providing bilingual education); *operational factors* (curriculum and subjects, materials in that language, learners' initial literacy, assessment, teachers, parents, community); and *outcome factors* (expectations of ultimate proficiency, subject achievement, and sociocultural maturity).

Models of bilingual education range from equal proficiency to full proficiency only in the majority language. Under the dual-language immersion model balanced bilingualism and biliteracy are the aim. Such a programme may start in either early or late primary school and the child may develop biliteracy either simultaneously or sequentially. Strict language compartmentalization by subject and equal numbers of learners from each language are important for the success of this type of bilingual education (Baker 2011). Majority language or transitional bilingual education aims to support children in the heritage language until they gain sufficient majority language proficiency to cope with teaching only in that language (Baker and Wright 2017). This model is also found in non-immigrant contexts such as sub-Saharan Africa where, after three or four years in primary school of instruction in their home language, children transition to a colonial language such as English or French.

We are starting to realize that this model not only deprives the world of the many important talents of bilingual speakers of a wide range of languages but also has a negative effect on heritage communities and, in some circumstances, contributes to the extinction of languages. Changing in thinking about bilingualism is connected to what is termed the dynamic framework where bilingualism is taken as a resource, transcultural identities are recognized as positive, and hybrid linguistic cultural experience are welcomed (Garcia 2009).

The heritage language maintenance movement

There is now a growing movement for heritage language maintenance. This comes from in part from the realization that the focus in many countries on learning additional languages has been on those connected with being a cultured individual, e.g. in the US and the UK, French, German, Spanish along with classical Latin and Greek. The linguistic capabilities of immigrants have largely been ignored and in many countries maintenance of the heritage language has been actively discouraged if not made illegal. The aim of such steps has been to foster social cohesion under the majority language. This is a laudable goal, but we now know bilingualism does not endanger social cohesion. That said, there is a range of complex issues relating to language policy that are continuously discussed in countries worldwide.

Maintaining heritage languages involves not only immigrant languages but also non-immigrant languages where in some cases languages are revitalized. These include Inuit in Arctic Canada (Allen, Crago and Pesco 2006) and Irish in Ireland (Ó'Giollagáin et al. 2007) and signed languages around the world. There is varied success with reintroduction of a language. At one end of the spectrum is Scotland's introduction of the Celtic language Gaelic in schools, but the absence by then of monolingual Gaelic speakers reduced communicative incentive for children to acquire it. At the other end is Hebrew in Israel for which, despite the non-existence of modern Hebrew, when it was introduced in Israel it quickly became a strong majority language.

The success of the heritage language movement has involved countering two persistent myths we have addressed in this chapter: (1) learning an additional language is no more a challenge for the child than learning their first language is; (2) learning an additional language does not affect the successful outcome of the first language. In fact, we have seen there are a number of advantages to bilingualism.

Parents do not always rely on schools to make sure their children acquire their heritage language. There are many examples worldwide of after-school programmes that provide classes in the heritage language. This requires involvement of the heritage language community. A new development to support communities was recently started by Italian-born Antonella Sorace, a professor at the University of Edinburgh in Scotland. Her Bilingualism

Matters network is growing and includes those in various European countries: <http://www.bilingualism-matters.ppls.ed.ac.uk/branches/branch-network/>.

The network does not yet encompass the heritage languages of LESLLA learners and Trudie Aberdeen has been exploring the feasibility of active community support for LESLLA learners' heritage languages in Alberta, Canada. Aberdeen noted in her presentation at the LESLLA symposium in St Augustine, Florida in November 2016 that unlike educated, middle-class, non-immigrant parents, LESLLA parents are grappling with their own education and their survival. In addition, they (1) cannot travel to the home country; (2) may not have established a language community where they live; (3) have few if any books and other teaching materials in the heritage language; and (4) do not have the funds, ability to raise funds or the time to do so for their children's after-school bilingual education. She has been active in promoting heritage language bilingual programmes in her community and points out the need to address these constraints: (1) a space for classes; (2) transportation; (3) curriculum.

Bi-literacy

Bi-literacy refers to someone who has "literate competencies in two languages, to whatever degree, developed either simultaneously or successively" (Dworin 2003 p. 171). The focus will again be on your learners as parents and we will look at 'emergent literacy', i.e. the earliest stages of the development of reading and writing, rather than higher levels of literacy. Parents, educators and policy makers have long been concerned about whether bilingual children should first learn to read and write in one language or whether they can cope with literacy instruction in both languages at the same time. Researchers focus on the effect of concurrent teaching of reading and writing in a simultaneous bilingual's two languages vs. successive instruction in one language and then the other (see e.g. Bialystok, Luk and Kwan 2005).

Simultaneous bi-literacy

Above we discussed what happens when a child learns two languages simultaneously and the influence of one language on the other. The same issue arises when we consider what happens when a child learns to read in two languages simultaneously. Do they influence each other? If so, how? Is this detrimental, beneficial or neither to the child's literacy development? Does this depend on the writing system? As can be seen, very many questions can be raised regarding the development of two literacy systems. This section presents some of the key elements in the biliteracy literature in the field.

Wang et al. (2006) looked at the bi-literacy development of bilingual Korean-English children. The Korean writing system is alphabetic but letters are grouped into square syllabic units which resemble characters. The researchers tested 45 bilingual children who were concurrently learning to read and write in both languages when they were six and again when they were seven. Children's listening and spelling processing and decoding were measured in both languages. Results illustrated how cross-language transfer between alphabetic scripts even with different spelling systems helps children.

Bialystok, Luk and Kwan (2005) also studied children speaking languages whose writing systems differed from each other, in this study English (Roman alphabet), Hebrew (non-Roman alphabet) and Cantonese (characters). The researchers divided six-year-olds into four groups: mono-literate English monolinguals, Cantonese-English bilinguals, Hebrew-English bilinguals and Spanish-English bilinguals. The 30 Hebrew-English bilinguals were attending a Hebrew immersion school with subjects taught in both Hebrew and English. They received daily phonics instruction in both languages and for Hebrew, they used text with diacritics used for short vowels but absent for proficient readers (problems with reading these diacritics is

the frequent cause of children's reading errors). The 29 Cantonese bilinguals were learning to read in English and also had two hours of Chinese instruction every week. The 33 Spanish bilinguals were learning to read in English and had weekly after-school Spanish instruction. Towards the end of their first semester in school, all children were tested in English and their other language on working memory, receptive vocabulary, single sound (phoneme) segmentation and reading (word decoding). The results for word decoding showed a weak correlation between their two languages for the Cantonese-English bilinguals, a medium correlation for the Hebrew-English group and a high correlation for the Spanish-English group. The authors concluded that simultaneous bi-literacy is most helpful when the two languages share an alphabetic system regardless of how much time they spend on that language and regardless of their social class. The Spanish-English bilinguals spent much less time on literacy than the Hebrew-English children and represented a lower social class than the Hebrew-English children.

Buckwalter and Lo (2002) conducted a 15-week case study of a single Chinese-English bilingual child, five-year-old Ming, who had moved with his parents from Taiwan to the U.S five months prior to the study. The researchers used books designed for emergent readers and had Ming read both English and Chinese versions of all books, they had him write or pretend to write what they could and then asked him to read what he'd written in both English and Chinese, and they played board games, matching games and card games with him. Data included the researchers' transcriptions of recordings of weekly meetings, field notes and 30 writing samples. They then coded the data into two categories: foundational level awareness (knowledge of literacy in general) and surface level awareness (knowledge of specific nature of each language). For Chinese and English, Ming showed foundational level awareness of intentionality of print, correspondence between spoken and written words, and conventions of writing. At surface level, Ming demonstrated that he understood the morphosyllabic features of Chinese and how characters differ from English letters and cannot be decoded through phonics. The researchers concluded that Ming was not confused by two systems and did not mix them (much like simultaneous bilinguals).

Wang, Perfetti and Liu (2005) studied English-Chinese bilingual/bi-literate seven- and eight-year olds to look for cross-writing system influence on reading. They completed tasks measuring their processing of spoken and written language for each of their languages. Results revealed that the children's skills in noticing and manipulating rhymes in words (as in the -oy in boy) were significantly correlated in both languages and that their Chinese character reading was correlated with decoding words in English. This points to clear and beneficial cross-linguistic transfer even when the two languages have different writing systems.

Successive bi-literacy

Just as with successive bilingualism, where an individual acquires an additional language after they have acquired their L1, there are countless examples of individuals who can read and write in their native language who then develop reading in the additional language they are learning. It seems that simply knowing how to read is helpful when developing literacy in another language (Cummins 1979, the Interdependence Hypothesis). But bilingual mono-literates also transfer the specific reading skills they have to support development of literacy skills in their additional language (Koda and Zehler 2008; Leikin, Schwartz and Share 2010). This transfer easily occurs when both languages use the same writing system, for example the Roman alphabet (Durgunoğlu and Hancin 1992; Reyes 2006) but it also occurs when they do not.

Leiken, Schwartz and Share (2010) compared Russian-Hebrew six-year olds learning to read and write in Hebrew in Israel. Russian and Hebrew have very regular but different scripts: the Russian alphabet represents both consonants and vowels but Hebrew represents consonants and only long vowels. The researchers assessed the early literacy acquisition of 39 Russian-Hebrew bilinguals who had received a year of weekly reading instruction in Russian and were then learning to read in Hebrew, 41 bilinguals learning to read in Hebrew with no Russian literacy, and 41 monolinguals learning to read in Hebrew. The hypothesis was that bilinguals who had literacy in Russian would be better than the mono-literate bilinguals and the monolinguals in developing literacy in Hebrew due to the earlier phonics instruction in more regular Russian. At the start of schooling in Hebrew at six years old and then at the end of that school year they were given tasks measuring their listening processing, conscious awareness of sounds/phonemes and word decoding in both languages. Results showed that the Russian-Hebrew bi-literate children significantly outperformed the mono-literate bilinguals and monolinguals. Like the other studies discussed in this section, these results were not affected by non-verbal intelligence or social class (here mothers' level of education). Hussien (2014) conducted a similar study to look at the effect of English literacy on Arabic literacy. The study compared 45 Arabic-English bilinguals attending a bilingual school whose main medium of instruction was English to 38 monolingual, mono-literate Arabic speakers. These nine-year-olds took tasks to measure oral reading accuracy and spelling accuracy. Results showed that the 45 bi-literate bilinguals significantly outscored the monolinguals in reading aloud and in spelling in both English and in Arabic, the language in which they were receiving less literacy instruction.

As discussed previously in this chapter, bilingual children's better performance in certain domains of cognition is also observed in their literacy skills, in particular with respect to accuracy in oral reading and spelling skills.

Chapter 4: Learning to read from a psycholinguistic perspective

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The reader's task

In the dictionary, reading is defined as 'understanding a written text'. Underlying this definition are independent but interrelated skills. These skills can be classified into lower level skills (more automatic, less reflective) and higher level skills (less automatic, more reflective).

Lower level skills

Lower level skills are word recognition, also referred to as 'decoding'. Word recognition means that the word's written (graphical) form and meaning are recognized by the reader. This is linked to the reader's awareness that speech consists of individual words, that words consist of syllables, that syllables consist of sub-parts we call onset (the start of the syllable) and rime (the end of the syllable), and that these subparts consist of phonemes. In all languages of the world, the phoneme is the smallest unit of meaning. Take, for example, /t/. We know it is a phoneme because it distinguishes words which are otherwise exactly the same: 'tip' and 'dip'. The pronunciation of /t/ varies depending on its position in a word: we release a burst of air after the /t/ in 'tip' but not after the /t/ in 'trip' or the /t/ in 'beta'. Even though our ears detect different pronunciations, our minds process phonemes at a more abstract level. The awareness of this is referred to as 'phonological awareness' and is strongly connected to the reader's ability to grasp the 'alphabetic principle', the idea that a single letter or sometimes a sequence of letters corresponds to one phoneme.

Higher level skills

Higher level skills are those involving the analysis and processing of words and longer text, for example phrases, clauses, sentences and paragraphs, in terms of their syntax and discourse factors as well as our knowledge of the world. For good readers, lower-level skills and higher-level skills are automated. For example, when proficient readers reading a sentence such as 'Little Mary is eating a whole cake' come to the word: <cake>, reading it automatically evokes the concept of something baked and delicious. (We will use these brackets < > to indicate the spelling of a word.) Word order (syntax) along with our experience and our knowledge of the world mean that we do not read the sentence as 'Mary was eaten by a cake.'

For experienced readers, comprehending written text is an effortless and subconscious process. It occurs rapidly, at four or five words per second. What we call reading *fluency* is the result of continuous practice over a long period. Later on in the chapter, we will discuss ways in which this practice occurs, in particular through pleasure reading, and how you can encourage your learners to read for pleasure.

Higher-level sub-skills are sophisticated skills that result in comprehension of a text. These skills are more available to the reader's conscious control, and this means that the reader is able to monitor them and to develop and apply strategies.

- Differences between spoken and written text
- Figuring out the structure of the text
- Aim of the text
- Predicting content
- Distinguishing basic ideas from secondary ones
- Identifying relationships between ideas
- Interpreting the text

- Discourse coherence: cultural, topic and world knowledge
- Discourse cohesion (linguistic elements that explicitly connect a text, such as pronouns and adverbs of time)

The information we hold in our heads for several seconds in our working memory is not overloaded by the need to painstakingly decode each word before moving to the next word. Not having to decode each word allows the reader's attention to focus on higher-level skills. That is, if lower-level processing is too slow, this creates a bottleneck that impedes accurate higher-level processing. Research tells us that the automation of lower-level processes is a time-consuming process, and that this depends on how regular the spelling system is in that language. It also depends on the learner's vocabulary. It is difficult to read an unknown word. We won't be talking much in this chapter about the bottleneck insufficient vocabulary creates. The EU-Speak chapter on vocabulary learning covers this.

Bottom-up and top-down models of reading

These terms refer to opposing starting points. In bottom-up, the reader builds meaning step by step, from small units (words or smaller) to form phrases, clauses, sentences and paragraphs. In top-down, the reader starts with expectations about the whole text and then checks these expectations with increasingly smaller pieces of information. You will agree that this is a false dichotomy; readers engage in both bottom-up and top-down processing and integrate the two.

LESLLA readers

Less experienced readers often depend entirely on low-level or bottom up processing and in their reading the 'synthetic approach' is predominant (meaning is being created or synthesized from lower-level units). Beginning readers must develop phonological awareness and automate the connections between phonemes and graphemes. So, it makes sense to focus on automation of these skills.

The progressive automation of basic word recognition skills and the parallel development of higher-level skills are influenced by four factors:

1. Linguistic competence in the target language

When children start learning to read - usually around the age of five - they are doing so in a language in which they have acquired adult-like oral proficiency, also referred to as *linguistic competence* (word order/syntax, morphology, phonology, vocabulary). Their vocabulary will already be large and will continue to expand the rest of their lives. For LESLLA learners, linguistic competence in the language in which they are learning to read is important. The idea of a *threshold level* is that we need sufficient linguistic competence to be able to read; this is how lower- and high-level processes can work smoothly together.

It is common for LESLLA learners, particularly those who do not work with speakers of the target language, to use the target language only during their classes. Their socialising may take place entirely in their native language and this will naturally limit their development of linguistic competence and in turn their literacy development in the target language.

2. Similar lexicons

Logically, learners with a higher level of oral proficiency will reach the threshold level they require to support higher-level skills. To this we can also add the possibility that the reader could rely on common vocabulary across the two languages. Recognising shared words will be very helpful for a new reader because it reduces working memory load and allows the reader to focus on other processes.

3. Level of literacy in the learner's first language

LESLLA learners represent a variety of starting points. When they have native language literacy, the spelling system of the language or languages in which they are literate will facilitate their literacy in the target language, but it might also create difficulties.

4. Target spelling transparency vs. opacity and different writing systems

As we will discuss below, writing systems differ in how they represent the spoken language. Chinese characters represent concepts, Japanese *kana* graphemes represent syllables and English letters represent phonemes. Spelling systems (also known as orthographies) vary considerably across languages in terms of their regularity (or transparency) or irregularity (or opacity). This refers to the 1:1 relationship between graphemes and phonemes. Finnish is at the very transparent end of the spectrum while English is at the opaque end of the spectrum (see Chapter 2).

An example of LESLLA literacy teaching in Spain

Maite Hernández and Félix Villalba (pc) point out the difficulties oral language teaching presents for the learner: only auditory memory is enabled; working memory is easily overloaded; the learner lacks learning strategies which we take for granted for educated, literate adults. They provide tips based on their experience in working with LESLLA learners in Madrid:

- Small group of learners
- Lessons 1 ½ hours or less
- Different kinds of activities to maintain active attention
- Different dynamic groups (in pairs, in small groups)
- Modelling language short be short, concise, drawing on routine expressions
- Plentiful assorted visual and audio material
- During each lesson, content should be limited to the most useful
- Repeat the content sequencing

Writing systems

Some researchers classify writing systems into evolutionist and typological (Peres Rodrigues 1999). Evolutionist classifications (e.g. Gelb 1976), are characterised by the idea that writing aims to be efficient. This classification sees alphabetic writing systems as most efficient and therefore the ideal type of system. Typological classifications reject the idea of an ideal system and focus on classifying systems and the linguistic units they represent (DeFrancis 1996; Sampson 1985; Stubbs 1987; Tusón 1997).

Before we turn to a description of these systems, let's consider the fact that writing is a late invention for humans; it only has a 6000-year history. It is therefore not surprising that the rate of literacy is still low in many places around the world. The origin of literacy is polycentric, i.e. it emerged independently in different places. The most important places are Mesoamerica, China and the Middle East. Literacy seems to have emerged in response to the need for keeping track of commercial exchanges, taxes, warehouse stock in increasingly large and urban civilizations. In the proto-writing systems which are no longer actively used, written symbols represent meaning and are limited systems in that they are used for a few semantic fields (names, accounting, a calendar). Some well-known examples are Egyptian hieroglyphics and Aztec writing. Writing systems then began to show evidence of the *rebus principle* where two pictographs combine to create a new meaning. These systems also began to draw on oral language and symbols started to represent the spoken word.

Logographic systems emerged early, and an example is Chinese *Hsing Sheng* writing. These are like the system above, but more evolved. Each character has two parts: a root that

provides information about the meaning and a phonetic component that informs pronunciation.

Syllabic systems known as syllabaries have emerged independently in different places in the world. In this sort of system, each grapheme represents a syllable. Modern examples are the two syllabaries used in Japanese, hiragana and katakana. In hiragana (shown in the following chart) each grapheme represents the consonant in the upper row and the vowel in the column on the left. This works well for Japanese for two reasons. First, there are no consonant clusters in Japanese. Second, the only consonant a word can end in is a nasal. That is, it is the only grapheme which represents a consonant but no vowel.

	k	s	t	n	h	m	y	r	w		
a	あ	か	さ	た	な	は	ま	や	ら	わ	ん
i	い	き	し	ち	に	ひ	み		り	め	n nasal
u	う	く	す	つ	ぬ	ふ	む	ゆ	る		
e	え	け	せ	て	ね	へ	め		れ	ゑ	
o	お	こ	そ	と	の	ほ	も	よ	ろ	を	

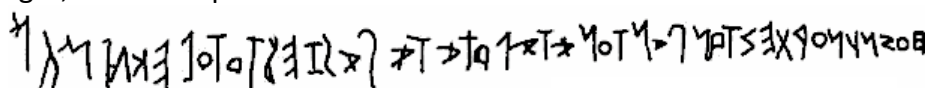
When writing systems began to shift to represent sound rather than concepts, the need to represent both consonants and vowels arose for some languages due to their consonant clusters.

The alphabet we use today is a slightly modified version of the Roman alphabet which originated in the Greek alphabet which originally came from Phoenician. As far as we know, the alphabet has only been invented once. The reason for its worldwide spread has as much to do with imperialism and missionary work as it does with its efficiency.

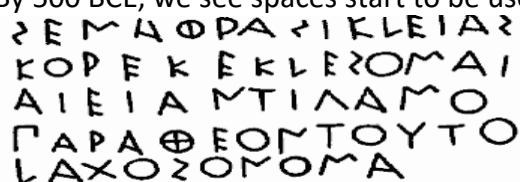
There are writing systems that represent a transition between a syllabary and an alphabet. This term for this is *abugida* (from the Ge'ez language) or alphasyllabary. These systems include scripts in South Asia and Southeast Asia, Ethiopic, Canadian Aboriginal scripts and Arabic. An abugida varies in whether and how it represents vowels. In Arabic, only long vowels are represented by graphemes and short vowels are represented by diacritics. These diacritics are optional in less formal written communication. For example, in Arabic *kataba* 'he wrote' is read from right to left, and consists of a three-letter root, going from right to left: k, t and b. Short vowels can be added by using diacritics. Another abugida is the *davanagari* script used in India.

Writing conventions

Writing involves conventions which are culturally transmitted and must therefore be learned. These include direction left to right, right to left, both (Boustrophedon 'in the direction of an ox') and top to bottom and spacing. This Greek inscription from the 8th century BCE is read left to right, but lacks spaces between words:



By 500 BCE, we see spaces start to be used as in this Attica stone inscription:



The learning task

A logographic system requires considerable effort to memorize thousands of individual logograms. A syllabary works very well for languages like Japanese with a simple syllable structure without consonant clusters. As soon as a language has plentiful consonant clusters, such as English or Greek, learning an alphabet with 30 or fewer graphemes becomes much easier than learning a syllabary of hundreds and hundreds. Efficiency does not mean that the learning task is simple. We will see below that our awareness of larger phonological units such as words, syllables, onsets and rimes develops naturally without schooling. But awareness of phonemes does not develop naturally. It requires schooling. This explains why the alphabet did not emerge independently in places around the world when compared with syllabic and logographic scripts which did. Learning to read in an alphabetic system presents a challenge for LESLLA learners.

Try ranking the level of learning load for the six types of learner. Here we are including an issue discussed above, oral proficiency, which as we know also makes a difference in learners' developmental trajectories.

High L2 oral proficiency	No native language literacy
High L2 oral proficiency	Native language literacy but not Roman alphabet
High L2 oral proficiency	Native language literacy Roman alphabet
Low L2 oral proficiency	No native language literacy
Low L2 oral proficiency	Native language literacy but not Roman alphabet
Low L2 oral proficiency	Native language literacy Roman alphabet

Phonological awareness and how it underpins reading

Phonological awareness is defined as the explicit, conscious knowledge of the sound structure of oral language. This awareness enables us to analyse and manipulate language for a range of activities. For example, poets (whether they are literate or not) use this phonological awareness to enable them to find just the right word to convey experience through sound. Phonological awareness is essential for successful literacy development. For beginning readers, it is their existing phonological awareness that links oral and written language. This is particularly important when learning to read in an alphabetic script. As readers, we find it easy to think of speech as consisting of words and syllables. In fact, as seen in some of the relevant research, non-readers are also aware of words and syllables. But unless we are linguists, we are unlikely to have a high level of conscious awareness of the smallest unit, the phoneme.

In every human language, the phoneme is the smallest unit in human languages that distinguishes meaning. Consonants and vowels adjacent to each other interact and this can mask phonemes. Linguists use a simple test to determine whether a consonant or vowel is a phoneme: they create a 'minimal pair' by changing only one sound in a word to see whether it produces a different meaning. For example, /p/ and /b/ distinguish the two words 'pan' and 'ban'. When we produce the initial /p/ in 'pan', we aspirate it, we expel breath and produce [p^h]. However, /p/ and /p^h/ are not phonemes because there is no word in English that depends on the aspiration of /p/. A listener hears variation in aspiration as extraneous noise. Phonemes are abstract units and this makes them less accessible to conscious reflection.

Spelling systems of various languages – their orthographies – represent phonemes. Alphabets are efficient: they are phonemic, not phonetic. To start reading in any one of the orthographies in the Roman alphabet, the reader has to grasp the alphabetic principle, that a grapheme represents a phoneme. (In some cases, several graphemes represent a phoneme,

e.g. the <ph> in 'photo' in English represents /f/.) Phonemic awareness is the basis of the word recognition and there are different views on whether phonemic awareness develops before and then underpins reading or develops as the result of reading. One thing is clear: phonemic awareness and reading in an alphabetic script go hand-in-hand.

The development of phonological awareness has traditionally been seen as a continuum:

1. Inter-syllabic awareness: awareness that words have a syllabic structure.
2. Intra-syllabic awareness: awareness that a syllable has an initial part or onset and a final part, a rime.
3. Phonemic awareness: awareness that syllable onsets and rimes consist of individual consonants and vowels.

There is considerable research that supports the idea that in learning to read in languages with a more transparent orthography such as Spanish and Finnish, phonemic awareness develops more rapidly than in opaque orthographies such as English. Among adult second language learners, if the learner is literate in her or his first language and it is written in the Roman alphabet, they will have developed phonemic awareness. But if the learner is not literate, he or she starts from the same position as the young child, but often without the benefit of the same level of linguistic competence, as we have discussed above.

You probably already engage your learners in activities that exploit and raise their phonological awareness in various ways. Here is another example.

Divide what you hear into words. Start with short sentences and support them with an image. Avoid using words they do not know, especially function words. Use names instead of pronouns. For example, 'Peter eats cornflakes' and 'Mary writes letters'.

LESLLA learners' placement and assessment

When it comes to educated learners, we do not usually place learners with different levels of oral skills in one group. Even though basic language skills for LESLLA learners may be underfunded, it is still important to consider how to create different groups for different levels of literacy. Here we adopt a classification used in Finland that comes from the EU-Speak module, Language and Literacy in their Social Context:

- Level of mechanical literacy
- Level of basic reading skills
- Level of textual skills

To place learners at appropriate levels, we check whether they can:

- combine sounds/letters into syllables and words; break a familiar word into syllables and sounds/letters;
- make use of syllable division to read a new word (mechanical literacy);
- read a short text going beyond individual words and sentences (basic reading skills);
- identify specific information in a simple text, with rereading as required (textual skills).

For textual skills, we also include high-level skills relating to comprehension. At this level, oral skills play an important role, but at the first two levels they are less important. To assign levels, one could create nine groups of learners.

- (i) Interview the learner to find out how much formal instruction they have received and their level of literacy in their home language(s)
- (ii) Do an objective test in which the learner has to demonstrate the skills above
- (iii) For an objective test, you can create a word list, sentences and a paragraph.

	Oral skills
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Literacy Level	mechanical literacy	mechanical literacy	mechanical literacy
	basic level of oral skills	intermediate level of oral skills	advanced level of oral skills
	basic level of reading skills	basic level of reading skills	basic level of reading skills
	basic level of oral skills	intermediate level of oral skills	advanced level of oral skills
	textual skills	textual skills	textual skills
	basic level of oral skill	intermediate level of oral skills	advanced level of oral skills

Research on early reading

There is a wealth of research that tells us that regardless of the language and its orthography, phonological awareness is essential for successful reading in the Roman alphabet. We start with children, and below are some techniques used to measure their awareness of various phonological units. Note that these techniques can (and have been) used with LESLLA learners.

Syllable segmentation

- The child counts the number of the syllables in a word.
 - How many syllables are there in the word *computer*?

Syllable completion

- Provide the missing syllable in a word.
 - Here is a picture of a rabbit. I'll say the first part of the word. Can you finish the word ra_____?

Syllable identity

- The child is required to find the syllable that two words share
 - Can you tell me which part of mermaid and mercy is the same?

Syllable deletion

- The child deletes a syllable from a word.
 - Say spider. Now say spider without saying der

Onset-rime awareness

Spoken rhyme recognition

The child's ability to recognize the rhymes is tested.

Do these words rhyme: can-pan?

Spoken detection and oddity task

The child is asked to detect the rhyming word pair among the words given, or the word which does not rhyme with the other words.

Can you tell me which word does not rhyme: sheet, feet, book?

Spoken rhyme generation

The child produces a word which rhymes with the given word.

- Can you tell me a word rhyming with sheet?

Phonemic awareness

Phoneme detection

- The child is asked to tell the word starting or ending with a different sound.
 - Which word starts with a different sound: cat, bed, can, cup?

Phoneme matching

- The child is given a word and then asked to find the word starting or ending with the same sound among several other words.
 - Which word starts with the same sound as cat: can, fat, ball?

Phoneme isolation

- This task requires detecting the individual phonemes in words.
 - Which sound does the word door start with?

Phoneme completion

- This task requires the child to complete the missing phoneme in the word.
 - Here is a picture of a dog. Can you finish the word do__?

Phoneme blending

- The child is told several sounds and asked to blend these sounds in order to make a word. Both real words and pseudowords can be used for this task.
 - What word do these sounds make: /b/, /e/, /d/?

Elision (Phoneme deletion)

- The child is given a word and asked to find what is left when one of the sounds in the word is deleted.
 - Say fleet. Now, say fleet without saying /t/.

Phoneme segmentation

- The child segments the word into its sounds.
 - Say blue. Now, say blue one sound at a time.

Phoneme reversal

- The child is given a word and asked to tell the word backwards.
 - Say nap. Now say nap backwards-pan.

Phoneme manipulation

- The child is required to substitute a sound in a word with another sound.
 - Say cat. Now say cat again, but this time say /p/ instead of /t/.

Development of phonological awareness

Research on children has shown that phonological awareness is the best predictor for successful reading and spelling in a Roman alphabet orthography. Children with weak phonological awareness have difficulty in both (Brady and Shankweiler 1991; Goswami and Bryant 1990; Stanovich 1992). A study by Anthony et al. (2002) looked at children's phonological awareness at various levels and found that this awareness develops as follows. Children develop at different rates, but syllable awareness is usually evident around ages three or four and onset-rime awareness by ages four to five. In a study of word awareness, Karmiloff-Smith et al. (1996) found that while three-year-olds had very poor performance on their task, four-year-olds scored 74-77%, and five-year-olds 95-97%. Phonemic awareness is evident only after children are actively learning to read, and this is not related to age (Goswami and Bryant, 1990). In an older study, Liberman et al. (1974) gave three age-based groups of children a syllable tapping task and a phoneme tapping task. The four-year olds scored 46% on syllable tapping, but 0% on phoneme tapping. The five-year-olds scored 48% on syllable tapping and 17% for phoneme tapping. The six-year-olds, who had been learning

to read for almost a year, scored 90% for syllable tapping and 70% for phoneme tapping. These results reveal the tight relationship between learning to read and phonemic awareness and they also show that other aspects of phonological awareness improve through learning to read. Other studies have used different tasks and have found the same patterns for various aspects of phonological awareness. For example, Treiman and Zukowski (1991) used a same-different judgement task for onset-rime awareness and their results showed that four-year olds scored 56%, five-year-olds 74% and six-year olds 100%.

Reading in English

Researchers have different starting points when it comes to models of reading and these relate to the top-down and bottom-up perspectives presented earlier and are responses to the complexity of English orthography. These are Anglo-centric models and while researchers have begun to look at reading in a wider range of languages, a high percentage of the earlier research is on English. The least regular spelling in English is found among the most common words so it makes sense for early reading to focus on these. This involves treating them as sight words, as if they were unanalysable units of meaning, much like Chinese characters. Children learn to read words by sight without having developed phonemic awareness. Our minds constantly search for patterns, but these are words with grapheme-phoneme correspondences which are not systematic: take the initial <th> in <the> and the initial <th> in <think>, or the <oo> in <look> vs. <boot> vs. <food>. When the reader has developed phonemic awareness and awareness of the morphological building blocks of English, they will be able to detect sub-regularities of English orthography, for example alternations in the vowel <a> as the article <a> or in <able> as a separate word compared to <able> as a suffix in <readable>, or the sequence <ti> in the word <tie> vs. <ti> in the suffix <tion> in <vacation>. In the latter, <ti> is called a digraph, a sequence of two graphemes read as a single phoneme. There are even quadrigraphs, for example the <ough> in <though>.

Under the phonological route model of reading, (e.g. Katz and Frost 1992), the reader analyses sequences of letters into the letters or letter combinations corresponding to a single phoneme. Next, the reader accesses the phonology of the word by applying letter-sound translation and uses grapheme-phoneme conversion to assemble phonemes into a complete phonological representation. That is, the reader decodes the word (Gillon 2017).

For English and languages with similarly opaque orthographies such as Danish, a dual route model is proposed (e.g. Coltheart 1978; Ehri 1992). The reader follows a phonological route for sounding out regular words and a visual route by associating the orthographic representation of a word stored as a whole in memory with its meaning. Irregular words are learned by rote; these are the so-called 'sight words'. Once the individual can read rapidly, the process is largely visual which means that regular words end up being processed similarly to irregular words. Having to use a dual route means that reading is a longer process in English and it is no surprise that one study showed that by age seven 95% of children learning to read in German's much more transparent orthography were accurate on a phonemic awareness task while at age eight, only 65% of English readers were accurate on the task.

Under the analogy model, the phonology of both regularly and irregularly spelled words are accessed through patterns stored in the memory (Glushko 1979; Marcel 1980). For example, the reader recognizes the word <bake> by making an analogy with the word <cake>. This model seems to apply to readers who are more advanced since it requires them to have developed morphological awareness (Marsh et al. 1981).

Connectionist models aim to explain the gradual formation of simple and complex representations through repeated interaction of orthography, phonology and meaning during

learning. Computer modelling is used to account for difficulties in confronting new words, particularly when they do not fit patterns already learned (Seidenberg and McClelland 1989). Frith (1985) offers three stages: *the logographic stage* with recognition of logos, brands and signs by visual shape and memorized sight words; the *alphabetic stage* when the emerging reader starts to detect systematic associations between sound and spelling and gradually becomes able to attack unfamiliar words; *the orthographic stage* when alphabetic processing becomes automatic and morphological awareness embellishes proficient reading. Ehri (1992) offers four phases which overlap. These are *pre-alphabetic*, *partial alphabetic*, *full alphabetic* and *consolidated alphabetic*. At the pre-alphabetic stage, the child is unable to detect the difference between <PEPSI> and <XEPSI> due to their similar visual shapes (Masonheimer, Drum and Ehri 1984). At the partial alphabetic phase, when children start to make grapheme-phoneme correspondences, they may *glance* at an unfamiliar word and *guess* but their guess will be based on a familiar word and incorrect. The difference between the last two stages is that in the consolidated alphabetic phase, the grapheme-phoneme associations which the reader has mastered are automatically applied to multisyllabic words and unfamiliar words. At the intermediate stage/phase in both proposals, the child shows sensitivity to and enjoyment of alliteration, rhyme and repetition, awareness of conventions of the orthography in their environment and understanding of sorting into categories by sound, shape and function.

Adults

The child's development of phonemic awareness goes hand-in-hand with their learning to read in an alphabetic orthography. Two points of relevance to LESLLA learners follow from this. First, phonemic awareness does not develop naturally, unlike awareness of larger phonological units. Second, individuals can develop phonemic awareness at any point during their lives. Researchers have addressed the first point by looking at educated adult Chinese readers to see if they develop phonemic awareness simply by having learned to read, but in a script which represents meaning or in a system which does not represent vowels such as Arabic or Hebrew. Chinese readers who had also been exposed to the Pinyin alphabet in primary school were better at detecting phonemes than those without such exposure (Read et al. 1986). English readers were better than Hebrew readers at detecting phonemes (Ben-Dror, Bentin and Frost 1995).

Researchers have addressed both points by looking at those who first learn to read later in life in their native language. Morais and colleagues (Morais et al. 1979; 1988) studied speakers of Portuguese learning to read for the first time as adults and found that they patterned much like children: there was evidence they had developed the various aspects of phonological awareness before being taught to read except for phonemic awareness which developed as they learn to read. There are also more recent intriguing studies carried out by Elaine Tarone and Martha Bigelow in Minnesota and Falk Huettig and Ramesh Mishra in India comparing the aural processing of non-literates and literates; see www.leslla.org

LESLLA learners' reading

There is a modest body of research which addresses the same topics as those addressed by children's reading experts. These studies range from action research in the classroom to case studies of a few learners to large-scale studies of hundreds of learners and they involve qualitative and quantitative and mixed methods research. Two of the earliest studies of LESLLA learners' reading development focused on adults who were first taught to read in their native languages (in Haitian Kreyòl, Burtoff 1985; in Hmong, Robson 1982). These two studies showed that reading skills in an alphabetic orthography are easily transferred.

Studies since the early 2000 by Jeanne Kurvers and colleagues in the Netherlands and Martha Young-Scholten and colleagues in the UK have applied the same methodology used with children and discovered that the patterns of pre-reading and emerging reading development are similar enough to conclude that the starting point of first-time adult readers, even when learning to read in a second language, is much the same as children's. Yet large-scale studies (Condelli et al. 2003; Kurvers, Stockmann and van de Craats 2010) show that adults who immigrate without any schooling or literacy need up to eight times longer than educated adults to go beyond the lowest levels of attainment. Happily, a further study by Condelli et al. (2010) found a strong connection between learners' success and teachers with specific, relevant knowledge and skills.

Methods in teaching reading

Throughout history in the teaching of reading in an alphabetic script there have been two main methods: the synthetic method and the analytical method. In the synthetic method, the reader starts with smaller units and combines them in larger units: letters are combined to form syllables and syllables are combined to form words. In the analytical method, the reader starts with higher units and divides them into smaller elements: words are divided into syllables and syllables into letters. Among the various possibilities in early reading pedagogy is a method and an approach which diverge from those which focus on the mechanics of reading. The first is the generative word method which is used in the Portuguese - and Spanish-speaking world. The second is the language experience approach. Below we will present the results from a project, the Digital Literacy Instructor, which uses balanced phonics for software for beginning reading for adult immigrants.

The generative word method

Generative word refers to the idea that new readers generate the words on which they then work. In his pedagogy of the oppressed, Paulo Freire promoted this analytical method with adult native speakers of Portuguese and Spanish. These steps are demonstrated in videos from the Mexican Institute of Adult Education. Click on the links below to watch each step. Don't worry if you don't know Spanish; you should still be able to figure out what is going on. Note how these exercises are introduced as topics important to adults (health and the environment) and for critical literacy, and authentic texts and realia are used (forms, receipts, leaflets, advertisements) for practical relevance. The final link shows the task which brings everything together in the form of a composition (a poster) where learners reflect on the text's functions, its objective, the best place to put it and so on. The whole process connects learning with life outside the classroom. Between the second step and the fifth step, there is scope for the teacher to carry out additional activities for phonological awareness particularly relating to phoneme-grapheme correspondences.

1. Dialog about word and its meaning
<https://www.youtube.com/watch?v=14JQSq2SgPM>
2. Break down of the word into syllables and syllable strings presentation
<https://www.youtube.com/watch?v=Fod5uqUX5G0>
<https://www.youtube.com/watch?v=Fod5uqUX5G0>
3. New words' creation
<https://www.youtube.com/watch?v=1YhECWmJLo>
<https://www.youtube.com/watch?v=1YhECWmJLo>
4. Functional elements' integration in the written language
<https://www.youtube.com/watch?v=rDTs7V5aXT0>
<https://www.youtube.com/watch?v=rDTs7V5aXT0>
5. Meaningful texts' integration and creation

<https://www.youtube.com/watch?v=QMYE6JGVMLA><https://www.youtube.com/watch?v=QMYE6JGVMLA>

6. Task allocation and revision

<https://www.youtube.com/watch?v=KznV09wJvLo><https://www.youtube.com/watch?v=KznV09wJvLo>

7. Progress' reflection and assessment

<https://www.youtube.com/watch?v=0kif04vZFUI><https://www.youtube.com/watch?v=0kif04vZFUI>

The language experience approach (LEA)

LEA takes advantage of learners' life experiences as the context for beginning reading instruction (also see Ch. 1). This involves a shared activity such as a shopping trip or visit to a place relevant to the learners in that class (e.g. a bus station) or looking at a sequence of images or watching a film. A learning unit follows the three steps which revolve around the shared activity: (1) Create the text: the learners give oral accounts, using pictures and other non-text supporting materials; the teacher prompts with questions; (2) An account of the shared activity is written by the teacher who makes few changes in the learners' oral account; (3) The learners are engaged in activities such as independent and shared reading; copying paragraphs or the whole text; sequencing parts of the text; focusing on phonological awareness, e.g. words, syllables, phonemes.

When compared to the generative word method, the Language Experience Approach is less structured but it is more flexible and can be used at various levels and to develop a range of skills from syllabification and decoding to summarising, schematising and drafting texts. The advantage of this approach is that it starts and ends with the learners' skills, experiences and interests.

The Digital Literacy Instructor

DigLin is word decoding software in British English, Dutch, Finnish and German for adults who are complete beginners for whom no literacy is assumed. The software can also easily be used by literates. It was developed and tested from 2013 to 2015 by a consortium led by Helmer Strik and Ineke van de Craats at Radboud University in Nijmegen, the Netherlands, and funded by the Grundtvig Lifelong Learning Programme (527536-LLP-1-2012-1-NL-GRUNDTVIG-GMP). The software promotes individualised and independent learning, on a PC, tablet or smartphone. DigLin is flexible enough for solitary work, pair work and whole group work so it can be used in the classroom or outside the classroom for homework or at a community centre. There are 300 nouns, verbs and adjectives in 15 sets of exercises of these types:

Exercise type	Aim
1. Listen to words	1. Written word + meaning via photographs
2. Listen and drag the letters	2. Grapheme-phoneme correspondences
3. Listen and drag words	3. Grapheme-phoneme correspondences
4. Listen to letters + drag words	4. Grapheme-phoneme correspondences
5. Listen and type words	5. Automatization of decoding
6. Reading aloud	6. Automatic Speech Recognition: evaluation of oral production

Each item the DigLin user attempts elicits immediate feedback and this results in a flexible system that enables each learner to use their own strategies. User behaviour can be tracked via the log files which are automatically created by a user's keystrokes and mouse movements. The underlying mechanics of the exercises are similar to what we have been discussing throughout the chapter. The project consortium is currently expanding the software to include more exercise types, and has plans to expand single words to phrases, sentences and longer text and to extend the software to more languages, for example Spanish.

We invite you to try Diglin; visit the website and follow the instructions to try out the software yourself or with your learners; the website provides a single log-in that everyone can use: <http://diglin.eu/http://diglin.eu/>.

Reading comprehension and reading for pleasure

Why do we read? In highly literate post-industrialized societies, we read to check ingredients on food labels and dosage on medicine bottles. We read signs and timetables and maps to navigate our way through life. We read the paper and magazines for news and gossip. We interact in print on social media. Reading for pleasure is different. It transports us. We read tales written by talented authors of imaginary characters in settings and in situations that we never encounter in our daily lives. This separates pleasure reading from functional or utilitarian reading. Pleasure reading opens the door to worlds we would never directly experience and in many cases would not want to. Consider the popularity of crime, thrillers, science fiction and fantasy. For most who've enjoyed the Harry Potter series, the English boarding school setting is a culture apart from their experience, but the human themes are universal. Story-telling is universal (Labov and Waletzky 1997). Not all of us read for pleasure, but everyone should have the chance to read for pleasure, and LESLLA learners should, too.

Intensive and extensive reading

Academics make a distinction between two approaches to reading texts: intensive reading and extensive reading (Cassany, Sanz and Luna Sanjuán 1998; San Mateo Valdehita 2005). Intensive reading involves short written text and aims for complete and detailed comprehension of the text along with development of specific reading skills. Extensive reading involves longer texts and aims for a global understanding of the text.

In comprehending text beyond single words, the reader must parse syntax and morphology. She/he must assign functions to the words in a clause based on their position and based on any prefixes and suffixes (Koda 2005). The reader must also apply real world knowledge, interpretation and inferencing. (See e.g. Adams 1998; Anderson and Pearson 1984; Beck 1998; Carrell et al. 1988; Cohen 2007; Laberge and Samuels 1974; Pitt 2005; Rand 2002; Reutzel et al. 2008; Samuels 1994; Tagushi et al. 2004; Wallace 1992; Weir and Khalifa 2008.) As we discussed earlier, this must occur rapidly in order for comprehension to succeed. (See Fraser 2007; Grabe 2004, 2009; Koda 1996, 2005; Kuhn and Stahl 2003; Meyer 1999; Perfetti 1999; Pressley 2006; Rasinski 2003; Segalowitz 2010; Stanovich 2000.)

Extensive reading

The term extensive reading is the term used to refer to pleasure reading to distinguish it from the sort of reading we do during school or university. Extensive reading is as important as intensive reading in building reading comprehension, and some argue it is more important. For decades now, numerous studies and surveys of native and of second language readers report its impressive benefits (e.g. Bamford and Day 2004; Elley and Mangubhai 1983; PISA 2002). Extensive reading seems to be a better predictor of reading success than socio-economic status and books in the home (Sonnenschein and Schmidt 2000; Neuman and

Celano 2001). Stephen Krashen, a vocal expert in promoting what he calls *free voluntary reading*, has long claimed that in a second language, the amount of such reading strongly correlates with performance on a range of reading and writing tests and with the subconscious development of morphosyntax and vocabulary (Krashen 1988; 1993; 2004).

Extensive reading in general but fiction in particular transports us and it is therefore no surprise that it correlates with increased wellbeing (Dijikic et al. 2009; Mar and Oatley 2008). Research also suggests that when the narrative is interesting, this increases the learner's intake of the linguistic aspects of a text (Lee 2009). For adults, extensive reading establishes a foundation for critical literacy and active citizenship (Auerbach and Wallerstein 2005; Cardiff et al. 2007; Cooke and Simpson 2008; Duncan 2014; Freire 1970; Graff 1993; Schellekens 2007; Spiegel and Sunderland 2006) by directly drawing on readers' experiences and expectations. Because extensive reading is individualized, it promotes autonomy and ultimately boosts independence and self-confidence.

Can extensive reading can be used successfully with LESLLA learners? This depends on two basic criteria: (1) books at the right level (Crossley, Allen and McNamara 2012; Hill 2008) and books which engage the reader. As Williams says, without interesting books, 'very little is possible' (1986 p. 42). We previously noted how considerable practice is required for automatic reading. If extensive reading material is at the right level and it engages the reader, it can provide the missing link in providing the considerable practice that is required for automatic reading. A handful of studies of immigrant adults in the USA and the UK shows the same benefits as for higher-level readers (Laymon 2013; Rodrigo et al. 2007; Williamson 2013; Yaden, Madrigal and Tam 2003). These studies found gains in

- L2 reading skills
- L2 linguistic competence
- critical thinking
- literacy practices
- community engagement
- motivation to read more

The practice of extensive reading with LESLLA learners is not widespread. Only one study we know of (Laymon 2013) looked at the lowest beginning readers. Extensive reading is 'at odds with the dominant approach to reading' in adult immigrant basic skills classes where the emphasis is on functional literacy (Williamson 2013 p. 25). This is too bad because, as we have said, in reading narratives, learners can draw on life experience and real world knowledge. This addresses the problem of the decontextualisation language and of cognitively unchallenging and demotivating materials.

There are, however, few engaging and accessible books for adults just starting to read in a second language, in English or other languages. A minimum ratio of six books per learner at a particular level is required to set up an extensive reading programme. For a class of 15 learners, this translates into 90 different books. These need to be books which interest the reader. How do you know what might interest your learners if they don't yet read for pleasure? In the Rodrigo et al. study, readers' preference were documented and fiction was the most preferred followed by biography and then by categories of non-fiction. You could take a survey of the learners with whom you work to collect their preferences for genre, topic and theme. First, find out what about the television shows and films they like. Then find out what they think they would enjoy reading by designing a simple handout with images to represent common genres (this refers to different categories of books such as romance;

crime; fantasy; science fiction; historical fiction; biography) and ask them to circle smiley and frowning faces. The next step is to create a library.

There is a long tradition in beginning reading, both for children learning to read and in foreign language teaching, of providing readers with texts simplified at various levels and in various ways. The next step is to collect books to create a small library. Then choose books with the learners and raise their awareness of these books. It's important that there be a choice of books but time needs to be set aside in class for silent reading and learners should be able to borrow books to read at home. The teacher's aim is to create a reading culture that starts in the classroom and extends beyond. Consider these seven criteria to create a library. These are just suggestions; in the end, your learners' preferences and their ability to tackle a given book will be the seven most important criteria.

1. Short, not more than 300 words
2. Interesting narratives
3. Fiction and non-fiction
4. Different genres
5. Different types of materials including newspapers and magazines
6. Linguistically accessible
7. Images to support the text

Are there topics to avoid in creating a library? The key to the success of extensive reading is freedom to decide what to read. Here your survey of what your learners watch and view should be helpful. Keep in mind that we are all drawn to the dangerous. In 'Bad books in easy English', Murphy (1987) defends the reader's freedom to choose such books, and Dubin and Olshtain (1977) note our attraction to taboo topics. Your learners are adults but their lives are complicated. Use your best judgement. Keep in mind the idea of a threshold level, that the reader should have achieved a sufficient level of linguistic competence to be able to comprehend a text without difficulty. In the case of vocabulary, researchers point out that readers should know at least the 95% of the words that appear in the text.

With respect to the final criterion, Rodrigo et al. (2007) discovered that images influence the reader's experience from the point at which they choose which book to read to their enhanced interpretation and enjoyment of the text through the images which accompany it. Images can contextualize the narrative to allow a simpler text which does not include the details of a setting or characters. This allows the reader to focus on the story itself.

For the last six years, the project partners at the University of Granada and University of Newcastle have been involving their university students in writing short fiction books for local immigrant adults. You can see and use the books in Spanish at <http://wdb.ugr.es/~sosinski/>. You may be unaware of the existence of wordless picture books, also known as silent books. These are books written by artists which are not specifically intended for those without literacy and which can be both age neutral and culture neutral. One of the best known are Shaun Tan's *The Arrival* and Marla Frazee's *The Farmer and the Clown*.

Chapter 5: The acquisition of vocabulary

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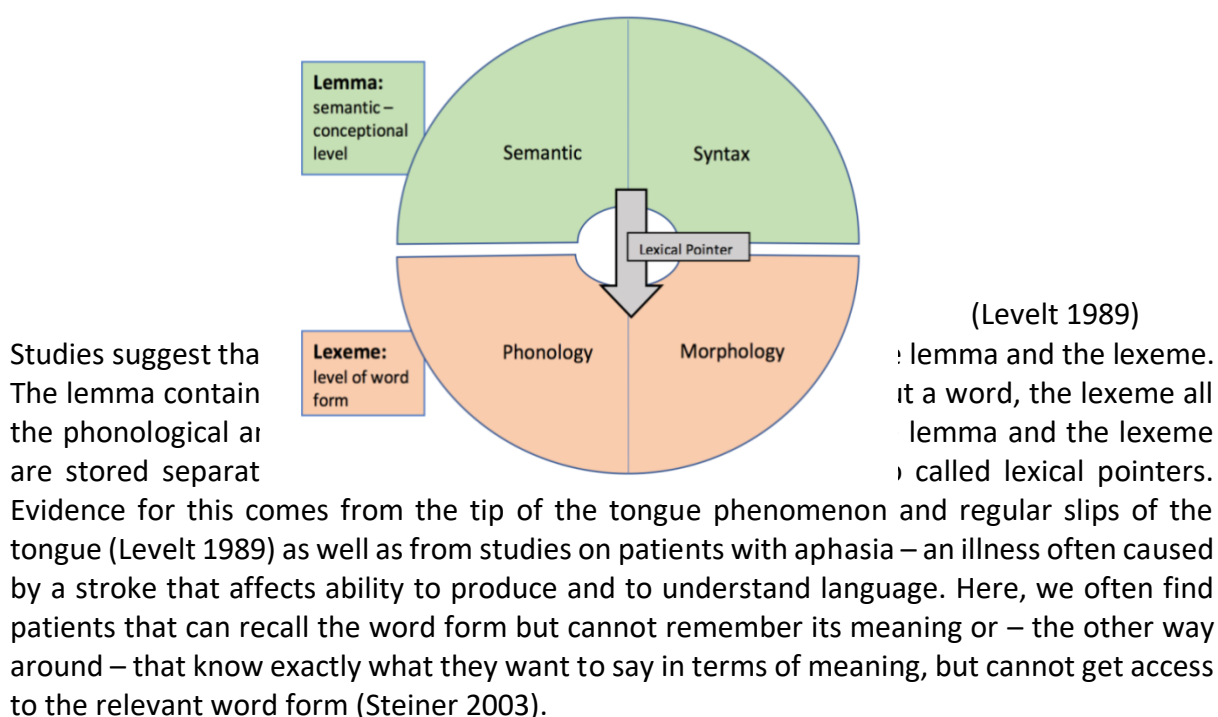
What's in a word?

This chapter provides linguistic and practical/pedagogical insights for dealing with words. After looking at some basic issues, such as the content of a word, the links that hold among words and the human word store, we look at our ability to learn words and how we systematically make sense of the world around us by naming objects. We then look at ways of teaching words and strategies how to retain words permanently, given your learners have a poor mastery of reading and writing skills.

Breadth and depth

When people think about word knowledge, they usually think about the number of words that a person knows. What we often neglect is all the complex knowledge associated with really “knowing” a word. Try coming up with a mind map for the word ‘dog’ to illustrate this. The breadth of word knowledge refers to the number of words stored in our mental lexicon. When can we say that someone knows a word in breadth? Would you consider knowing the word in breadth if you recognized it as sounding familiar but cannot remember the rough meaning? The other dimension is the depth of word knowledge, which refers to the extent of our understanding of a word (Anderson and Freebody 1981, cited in Ma 2009). The depth of understanding crucially depends on the different aspects of the word you listed when coming up with a mind map of the word *dog*. The more “bubbles” a mind map has, i.e. the more knowledge you have about the word dog, the deeper your understanding of the word. Deep knowledge of a word not only includes knowledge about its meaning, but also our phonological, morphological, syntactic and pragmatic knowledge of a word.

How word knowledge is structured/stored in the mind: The mental lexicon



Having deep knowledge of a word, i.e. having a complex network built around a word, eases the retrieval process of a word (Glück 1999, 2007). The more a person knows about a word, the more complex the network around that word. A complex network means more paths that lead toward the word and that ease the retrieval process. Additionally, the retrieval of stored word knowledge crucially depends on *the number of times you have had to access the word* in the past (Glück 2007). So, the more often you've encouraged your learners to produce a word, the more successful they will be in retrieving it later on, when they need it in real communication. The *speed* with which a word is accessed seems to matter as well. Studies suggest that learners who have accessed a word very quickly several times are more successful in retrieving it later on (Glück 2003).

Word fields

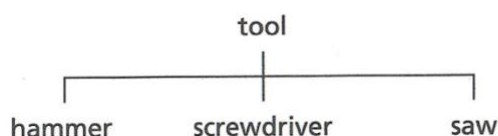
There are a number of different types of lexical relation, i.e. the way vocabulary items are linked to each other. A particular vocabulary item may simultaneously participate in a number of these relations, so that it may be more accurate to think of the lexicon as a network, rather than a listing of words as in a dictionary. An important organizational principle in the lexicon of a language is the lexical field or word field. This is a group of words which belong to a particular activity or area of specialist knowledge, such as the terms in cooking or sailing, or the vocabulary used by doctors, musicians or writers. One example is the use of specialist terms like *phoneme* in linguistics or *gigabyte* in computing. More common, though, is the use of different senses for a word, where the first meaning here is the common one and the second is a highly specialised meaning, for example:

blanket ¹	verb.	to cover as with a blanket.
blanket ²	verb.	<i>Sailing.</i> to block another vessel's wind by sailing close to it on the windward side.
ledger ¹	noun.	<i>Bookkeeping.</i> the main book in which a company's financial records are kept.
ledger ²	noun.	<i>Angling.</i> a trace that holds the bait above the bottom.

(Saeed 1997)

Hierarchy: Superordinate and subordinate words

Many words can be ordered in a taxonomy, i.e. a hierarchical order:



In the above example, "tool" is the superordinate term or *hyperonym* that contains all the words on the lower levels, "saw" and "jigsaw" are subordinate to "tool" or *hyponyms*, "chainsaw" and "jigsaw" are referred to as *co-hyponyms*. It is believed to be useful to teach words in word or lexical fields as the overall theme (in this case "tool") holds the vocabulary items together and provides a clue to their meanings.

Synonyms and antonyms

Other than forming hierarchies, words may be related to each other in two major ways. Synonyms are different words which have the same or very similar meanings:

Synonymy: couch/sofa boy/lad autumn/fall toilet/lavatory rancid/addled

Antonyms are words which are opposite in meaning. It is useful, however, to identify different types of relationship under a more general label of "opposition". Antonyms usually belong to the class of adjectives).

Gradable antonymy: big-small high-low hot-cold beautiful-ugly
 Complementary antonymy: dead-alive true-false female-male

Different languages, different vocabularies

Dictionaries may give you the impression that each word of your first language neatly corresponds to one word in any further language. This, however, is (of course) not the case. Each culture does not carve up the world in the same way in each individual language. In German, for example, we have the word *Himmel* which translates into English as both 'sky' and 'heaven'. The difference between 'sky' and 'heaven' is not explicitly made in German. This is a very simple example. Things become a lot more complex when we look at abstract entities such as 'liberty' or 'home'. It takes some experience in order to find out to what extent these words cover the same ground beyond their superficial equivalents of *Freiheit* and *Heimat* in German. The figure below also illustrates this.

concept language \	tree	wood (stuff)	firewood	small forest	large forest
Spanish	árbol	madera	leña	bosque	selva
French	arbre	bois			forêt
German	Baum	Holz		Wald	
Danish	træ			skov	

No speaker of a language usually knows all the possible meanings a particular word has. And a second language learner, e.g. may know that "blue" refers to a colour but does not know which colour exactly or all of the things that might be blue, the shades of blue, or the use of the colour blue to indicate meaning (e.g. blue as a colour in a country flag; or as part of a sport team's uniform). To take a more recent example, a learner may have heard about "fracking" in the news but only knows two things: a) that this has something to do with energy extraction, and b) that it is highly controversial. More exact meaning components may be acquired later.

Fast mapping

Let's now turn to aspects of vocabulary acquisition that researchers try to explain:

- How foreign language learners learn vocabulary
- How young children learn words quickly
- How young children learn most of them just by listening and observing (Clark 1993, Rohde and Tiefenthal 2002).

Considering how children learn words allows us to expand our thinking about how immigrant adults learn words by listening and observing since like children, they have little or no literacy and thus no ability to learn words from context during reading and they have few or none of the metalinguistic word learning strategies that educated learners use. A child or an adult learns words explicitly when they are directly instructed about a word meaning and when they are told to remember both the word form and its meaning. Implicit word learning refers to a process in which the learner acquires a word and its meaning incidentally, without being instructed and possibly without even noticing that a word and its meaning have been stored in their mental lexicon. The former process will be focused on in more detail further on in this chapter; the latter process is also referred to as *fast mapping* which will be explained further below.

Fast mapping is the ability we need in order to quickly link a word to a meaning or part of a meaning. A meaning is mapped onto a linguistic form, a word. It is important for the learner to remember new words and to retain their meanings for a period of time. In order for this to

happen, the learner needs to be exposed to new words again and again. This strengthens the learner's memory and it allows her/him to specify and extend word meanings.

However, fast mapping denotes the learner's ability to connect a word with a meaning after little exposure, in some cases after hearing a word just once. In the research literature, fast mapping has three components:

- The speed of the mapping process;
- The incomplete nature of the process; at first, the meaning is not complete;
- The implicit nature of naming. Learners (both children and adults) grasp aspects of the meaning of a new word often without any explicit act of naming; i.e. they are able to infer meaning on the basis of joint attention, eye gaze, or interpretation of the speaker's intention.

In both first and second language acquisition, nouns are more easily fast mapped than verbs or adjectives. This is probably due to the fact that nouns often refer to real-life objects, which are visually clearly delineated. Moreover, the action or situation labelled by a verb has to be abstracted from what is perceived and has a temporal component. Some actions only last for a very short time, whereas an object does not (usually) suddenly cease to exist. Last but not least, an adjective refers to just one characteristic of its referent (Clark 1993; Tiefenthal 2009). In order for the learner to know what a newly heard adjective refers to, the characteristic in question must be salient, and the learner may have to invest more effort than in object naming.

Studies offer various suggestions about how often a word has to be heard before it can become a permanent entry in the mental lexicon. According to research, a word must be heard 5-16 times to be retained by adolescent foreign language learners in a classroom (Thornbury 2002).

One prerequisite to learning words is the learner's previous knowledge. In the case of children, for example, the more words from a particular word field the child has already acquired, the more reliably the child can "hook" a new word onto these stored words (e.g. in the colour example above). Another prerequisite appears to be the environment in which words are learned, particularly in second language acquisition. The learner has to feel comfortable, and there must not be too much information given at once (Tiefenthal 2009).

As suggested above, it may be more challenging to introduce new words to second language learners implicitly than always drawing an explicit connection between a label and an object ("Look, this is a ...). This is because implicit naming requires joint attention, including shared eye gaze. The following model (Golinkoff and Hirsh-Pasek 2000) includes the most important prerequisites or cues for successful naming and fast mapping for LESLLA learners:



Fig. 1 – Cues for successful naming and fast mapping

Most of the research on fast mapping has been carried out with children. A number of experiments were conducted with 3- to 6-year old German children acquiring English as a second language in a bilingual kindergarten project. In one of these experiments a new toy animal, a moose with a blue cap, and a word created for the study (*Swop*) for the toy were introduced in an interactive session in English which involved all the above-mentioned cues with the children. (The word “swap” is in fact an English word but usually not used in such a context, so the children could not have heard the label before.) The children saw two familiar toy animals that they could already name, an elephant and a dog. 44% (12 out of 27) of these children were later able to identify the toy after hearing the label ten times in the interactive session. However, in the same experiment involving 15 monolingual German children who heard the made-up German label *Glopp* ten times for the toy moose, the children were better than the bilingual school children: all 15 were later able to remember the label and its referent (Rohde and Tiefenthal 2000).

Why were the monolingual children more successful in their ability to remember a novel label after hearing it ten times and then after a 24-hour delay? It was speculated that fast mapping in second language acquisition may be less effective than in first language acquisition. Novel second language words may not be as salient for the children in connected speech as first language sounding words in a first language-speaking context. The second language situation may require more effort to follow utterances in the new, lesser known language. In the monolingual context in which the new label *Glopp* was used, this label stuck out as being unfamiliar. In any second language context, not only the new label but all the language used may potentially be less familiar, so that a new label is not salient and striking enough for the learners (ibid).

Eight follow-up experiments were conducted over a period lasting two years in order to investigate the influence of various factors on the success of fast mapping, such as word class (most of the available first language studies were concerned with nouns), the medium of introduction (a game, a song, a video film), the temporal delay between introduction and test, the amount of new words introduced, the frequency of labelling a new object, sex, age and the size of children's vocabularies in the lexical field relevant to the new word. All the experiments were also conducted with the monolingual German children. The most important results were:

- Word class is an influential factor. In general, nouns were better learned than verbs, and verbs, in turn, were more successfully learned than adjectives. This seems to support the view of the primacy of nouns (Gentner and Boroditsky 2001).
- The ability of fast mapping is not affected by different word introduction contexts. Even if the children in an experiment are not given the opportunity to negotiate meaning, i.e. ask questions about the meaning of new words (as in one video experiment), they are able to infer the target-like meaning and learn it.
- The attention level and concentration involved in a particular task are important. When a play context was too exciting, the children did not remember any new vocabulary.
- Children received better scores when novel labels were introduced to them individually rather than in a group situation.
- Not surprisingly, the frequency with which a new label is introduced plays a role in fast mapping.

- Comprehension is by far more successful than production. New words may be understood after a delay of 24 hours, but very few of the children were able to produce the labels.
- It is insignificant whether children were tested after a one-day or a one-week delay after the introduction of a novel label. Their performance was relatively stable.
- The monolingual German children performed better than the L2 English children in every task. Due to the fact that English is not the ambient language and German is by far dominant in the bilingual kindergarten, fast mapping is consistently more successful in a German context as new words in German tend to be more salient than in English where the attention required to understand instructions, for example, may be considerably higher.

How we learn the meaning(s) of words

In word learning there are two basic questions: Firstly, what ability enables us to learn and retain words, i.e. how can our ability of fast mapping be accounted for? Secondly, how do we learn the meaning(s) of words? As for the first question, let us simply suggest that we are equipped with the ability (shared by some other species in similar ways) to encode, store, retain and subsequently recall information, and thus also word forms. As far as the second question is concerned, we will discuss two approaches: Lexical Principles and the Theory-of-Mind view (Golinkoff and Hirsch-Pasek 2000).

Lexical Principles

Our memory enables us to store and retain word shapes; however, it does not say anything about how words relate to our reality. Words are linked to our world by the symbolic function that we humans develop between the ages of 2 and 4 years of age. This function gives us the insight that a word, a sign or an icon does not stand for itself but refers to something in the world, e.g. a specific object, a particular action or a quality. This is sometimes referred to as the naming insight (Golinkoff and Hirsh-Pasek 1999), and it is also shared (at least to some extent) by some other species, such as apes and dogs (Kaminski, Call and Fischer 2004). Once a child knows that a word has the power of reference, the next question is: What exactly does it refer to? A seemingly obvious answer would be: The word *ball* refers to a ball or balls in general and the word *bike* refers to a bike and bikes in general. This issue, however, is far from being trivial because you could ask: How do we know that the ball in its entirety is referred to by “ball” and not its shape, colour or texture? There are further candidates for what the word refers to, such as the trajectory of the ball, “ballness”, the ball and its owner, its size, etc. According to one approach, children follow three principles in order to handle word meanings:

The whole object assumption: For very young children between about one and three years of age labels/words refer to objects in their entirety and not to their parts or substances (Markman 1989, Rohde 2005);

The taxonomic assumption: Labels/words refer to objects of like kind. When the child learns the word “dog” for the family dog, he/she will assume that other objects identified as dogs can also be named “dog”. This does not go without saying because, theoretically, it would be conceivable that children, upon perceiving even the slightest difference between two dogs, could be led to think that a new second exemplar should be labelled differently as there is a perceptible difference between the two. Note that sometimes children underextend meanings and only refer to the family dog as “dog” and deny that other dogs can be dogs too. This, however, is rather rare, and so is the opposite (overextension) that “dog” may refer to all four-legged animals (Markman 1989, Rohde 2005);

The mutual exclusivity assumption: Children between one and three years of age prefer one label per object and deny that a dog can also be a dachshund or an animal, for example (Markman 1989, Rohde 2005, Hansen and Markman 2009).

The three assumptions are claimed to limit the learner's assumptions as to which object a given word refers to. The task of word learning is thus facilitated and the acquisition process is accelerated. By following the principles, the children avoid the need to check a potentially infinite number of referents for a particular word. The three assumptions mentioned constrain the children in their first guesses as what entity a new label refers to, yet at the same time, they enable the child to build up a large lexicon in a short period of time.

There has been some controversy as to the terminology, some voices claiming that principles (as in syntactic theories, for example) should work on an all-or-nothing basis. However, it is obvious that lexical principles have to be violated at some point, otherwise children would never be able to refer to parts or substances, form taxonomies (as *dog* and *animal* could refer

to the same referent, violating mutual exclusivity), or, even worse, learn a second or third language (Golinkoff and Hirsh-Pasek 2000).

The term 'principle' has to be understood as "good first guesses as to what a novel word means". The principles can and, of course, have to be revised when the evidence invites a child to do so, e.g. when there is the adult's explicit explanation that *a dog* is also a kind of *animal* or a kind of *pet*, the child will accept these terms as overlapping synonyms and eventually as sub- and superordinate terms of a hierarchical order (Rohde 2005).

The whole object and taxonomic assumptions

The taxonomic assumption (and, indirectly, the whole object assumption) has been tested in experiments in which children were asked to match a target object (e.g. a car) with another object from a set of three, containing e.g. another car, a traffic light and a book as a distractor (Markman and Hutchinson 1984).

standard object	taxonomic choice	thematic choice	distractor
car	van	traffic light	cheese
pair of shoes	pair of pumps	naked feet	piano
German shepherd	beagle	doghouse	pen
armchair	highchair	boy sitting	flower

The tests suggest that a new label (e.g. a nonce label such as *flane*) in the instruction "This is a flane. Can you find another flane?" tended to prompt the children to select the taxonomically related item (the second car). However, when no new label was offered as in "See this? Can you find another one like this?", especially children below the age of four picked the thematically related traffic light. The distractor in the experimental setup made sure that the children had the choice of selecting neither the taxonomic nor the thematic choice. Thus, we can conclude that words may function as invitations to form categories. When objects are not labelled, young children seem to be more focused on thematic relations. This behaviour has been confirmed for three- to six-year old first language speakers of German in a bilingual kindergarten setup when tested in English, their second language (Rohde 2005).

The mutual exclusivity assumption: Disambiguation

Entertaining the mutual exclusivity assumption does not mean that children do not accept or cannot learn a second label for an object – they can if they are explicitly told to do so (or if they speak two or more languages) – but there is a clear preference to identify one label with one object, at least for monolingual children. There are various experimental designs to test the *mutual exclusivity assumption* in children, the simplest being disambiguation tasks. Children are able to disambiguate a potentially ambiguous situation when they decide that an unfamiliar word refers to an unknown or novel object. When children are shown four objects, three of them familiar, one unfamiliar, and are asked to pick the *flane* (novel word), they will select the hitherto unknown object. They do not assume that the novel label is an alternative word for one of the familiar objects (Mervis and Bertrand 1994, Davidson et al. 1997). Interestingly, similar experiments have been carried out with a border collie, arguably the most intelligent breed of dogs, demonstrating that the tested dog was in fact also able to disambiguate.

What has been reported so far exclusively refers to the receptive side of word learning. Whether the lexical principles are also at work in word production has not yet been investigated. The production data of a number of German children acquiring English in the US without instruction, i.e. under naturalistic conditions, suggest, however, that the principles

are in fact honoured in second language learning too: in their first 700 to 1,000 words they did not display any hierarchical vocabulary structure but rather object words on the basic level of conceptualization. They had not learnt words for parts of objects but appeared to name objects in their entirety (body parts being a possible exception) and, last but not least, in line with the mutual exclusivity assumption, they did not have any words that could be identified as synonyms of other words they had already learnt – obviously presupposing that our interpretation of the learner's word meanings were in fact accurate (Rohde and Tiefenthal 2002, Rohde 2005).

The impact of the principles or assumptions in second language acquisition is interesting as these children had learned to violate the assumptions in their first language (otherwise they would not have any words for object parts, taxonomies or synonyms). In second language acquisition, the "power" of the assumptions is virtually re-established as the learners seemed to have recognized them as powerful learning strategies.

The social-pragmatic approach combined with the Theory-of-Mind view

The postulation of lexical principles has been criticized and some authors explicitly deny their existence. Instead, it is claimed that word learning can only be seen within a social-pragmatic approach. According to this view, language is one means by which adults encourage children to attend to certain phenomena of a shared social situation (Tomasello 2001). The above postulated problem of an infinite number of possible referents is not a problem for the word learning child as the infinite number of hypotheses as to what a word may refer to is simply not part of the child's experience. The social-pragmatic embedding of word learning, however, cannot do the trick alone. It is therefore assumed that the child's "Theory of Mind" (i.e. their ability to take another person's perspective) solves the word learning problem. In a situation where the child is confronted with one familiar (a banana) and one novel object (a whisk) and is asked to "point to the *fendle*" (using a nonce word), the child does not have to assume that labels are mutually exclusive but, rather, has to be able to interpret the speaker's intention:

I know that a banana is called *banana*.

If the speaker meant to refer to the banana, she would have asked me to show her the banana.

But she didn't; she used a strange word, *fendle*.

So she must intend to refer to something other than banana.

A plausible candidate is the unknown object [the whisk].

Fendle must refer to the unknown object [whisk] (Bloom 2000).

It is certainly true that lexical principles cannot work in a vacuum: word learning is undeniably a socio-cultural process, and, obviously, the child's language acquisition in general is strongly influenced by the ability to interpret other people's (communicative) intentions. Otherwise, children would never be able to understand irony or the intention behind utterances such as "the door is open" or "it's cold in here" that are requests (to shut the door and to shut the window, respectively).

On the other hand, the question of why children prefer to name whole objects, for example, is simply shifted. If the young child assumes that an adult wants to establish joint attention by pointing to a car, exclaiming "Look, there is a car", the question arises why the adult only refers to whole objects when interacting with the child. The answer could be that the adult is convinced that the child at first does not seem to understand utterances like "Look, see the dent in the car?" Why would the child not understand "dent" at the age of two or three? Because she/he appears to perceive objects holistically and prefers to give names to these perceived holistic objects – in other words, we are back at the lexical principles approach. Woodward (2000) summarizes the lack of any overarching word learning theory accordingly:

There is no silver bullet for word learning. No single factor can account for the word-learning success of young children. It is much more likely that each act of learning reflects the interaction of multiple constraints. (Woodward 2000: 81f.)

Language Learning Strategies

There are two ways of learning new words: explicit and implicit learning. Implicit word learning refers to a process in which the learner acquires a word and its meaning indirectly, i.e. incidentally, without being instructed and possibly without even noticing that a word has been stored in the mental lexicon. Certain aspects of our word knowledge (such as collocations, phonology and orthography) are thought to be acquired mostly if not completely incidentally. But it can also be important to notice, focus on and have our attention drawn to a new word in order to acquire its meaning. In general, both processes are necessary and helpful. Since we learn numerous words and do so throughout our lifetimes, it would require too many cognitive and time resources if we only learned word explicitly. So, implicit and explicit learning are thought to work in a complementary fashion (Haudeck 2008). Earlier, three principles have been discussed that guide, facilitate and accelerate the word learning process of children and enable them to build up a large lexicon in a short period of time. These principles constrain children's first guesses as to what a new word could refer to. As the principles seem to be such powerful learning strategies they are applied in second language learning as well. Language learning strategies can be defined as

operations employed by the learner to aid the acquisition, storage, retrieval, and use of information (...) [and] specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferrable to new situations (Oxford 1990: 8)

Researchers have aimed at a conceptualization of language learning strategies that includes not only cognitive and intellectual but also the social and affective sides of learning. The following explicit language learning strategies can be distinguished according to Oxford (1990):

Direct Strategies	Indirect Strategies
Cognitive Strategies <ul style="list-style-type: none"> • practicing • receiving and sending messages • analyzing and reasoning • creating structure for input and output 	Metacognitive Strategies <ul style="list-style-type: none"> • centering and learning • arranging and planning one's learning • evaluating one's learning
Memory Strategies <ul style="list-style-type: none"> • creating mental linkages • applying images and sounds • reviewing well • employing action 	Affective Strategies <ul style="list-style-type: none"> • lowering one's anxiety • encouraging oneself • taking one's emotional temperature
Compensation Strategies <ul style="list-style-type: none"> • guessing intelligently • overcoming limitations in speaking and writing 	Social Strategies <ul style="list-style-type: none"> • asking questions • cooperating with others • empathizing with others

Whereas *direct language learning strategies* require mental linguistic processing, *indirect strategies* are not specifically language related. They support the learning process on a more general level. *Cognitive strategies* support the comprehension and production of language, *memory strategies* help to store and retrieve newly gained information. An example is the "key word method" where the learner links the phonological form of a new word with the image of a word that sounds similar in their first language. This is an explicit memory strategy that needs a lot of attentional resources (Haudeck 2008 p. 65).

Compensation strategies compensate for missing knowledge and comprehension gaps - for example, when we use contextual clues or nonverbal gestures to infer the meaning of new word in an utterance or text. Metacognitive strategies help to monitor cognitive processes to focus, plan and evaluate learning whereas affective strategies are responsible for building and keeping up the learner's self-confidence. Finally, social strategies enable the learner to engage in conversations and interactions and foster sociolinguistic competence as well as cultural awareness (Oxford 1990).

Language learning strategies can help to facilitate learning and make it more effective: "research continues to prove that strategies help learners take control of their learning and become more proficient" (ibid). The use of learning strategies depends on different factors: the level of awareness, the level of language proficiency, the specific demands of a task, expectations of the teacher but also age, gender, nationality, general learning behaviour, personality traits, motivation, learning goals, etc. (ibid). Strategies are to a certain extent explicit and thus learnable.

Some researchers seem to suggest that learning strategies are always conscious actions. However, after a certain amount of practice and use, learning strategies (...) can become automatic. (...) The strategies some

learners use – either appropriate or inappropriate ones – are already employed instinctively, unthinkingly and uncritically. (ibid: 12)

Practice and training can help learners become more aware of their strategy use and evaluate it, which is again thought to enhance the learning process and help the learner monitor and control his/her learning, foster learner autonomy and make the use of learning strategies even more efficient (Knapp-Potthoff 1997). It thus seems to be worth helping learners achieve greater language learning awareness.

Word learning strategies

According to the so-called Depth of Processing Hypothesis, the storage of vocabulary items depends on cognitive engagement or rather the depth to which what is heard or read is analysed (Zahedi 2012). Shallow processing (e.g. the analysis of just visual or acoustic properties) contributes to short-term memory but doesn't result in learning the word. Semantic processing, analysing the meaning of an item and relating it to previous knowledge, however, is considered to be "deep" and to lead to storage in the learner's long-term memory. Examples for strategies that support deep processing are semantic mapping and grouping words. Both are considered to help learners store words permanently and at the same time increase the recall of words. Semantic mapping can be introduced to learners at any proficiency level to make learners aware of relationships in a text to deepen understanding of that text and to result in networks for words (Zahedi and Abdi 2012). In fact, different memory strategies are incorporated in semantic mapping like grouping, using imagery, associating and elaborating.

Learning strategies and multilingual learners

In order to learn new words implicitly and incidentally, a sufficient amount of input is required. Thus, in the case of second language learners, the relevance of explicit learning is increased as the input that second language learners and especially LESLLA learners get is much more limited compared to children learning their first language (Haudeck 2008). So the relevance of explicit learning, noticing and learning strategies for LESLLA learners is even more prominent. On the other hand, if learners are multilingual, they seem to have a certain advantage with regard to their language learning awareness. Even second language learners have an advantage because they have already acquired a first language. But those who are acquiring their third or fourth language have gained helpful experience about how languages are learned (Jessner 2009). If they have learned these languages as adults through instruction (rather than in a naturalistic environment), they will know something about their personal optimal learning style, how much discipline, practice and flexibility they need – and possibly which strategies they can apply and how they can be used efficiently (Mißler 1999).

Besides communicative strategies, the readiness to make guesses and/or mistakes, and hypothesis testing are strategies that seem to be especially enhanced in multilingual, experienced learners. The amount of available strategies increases and the individual strategies are refined with experience. Language learning awareness - knowledge about learning strategies - increases interdependently with growing learning experience. The more experienced a learner is, the more likely he/she can apply his/her knowledge and use strategies in the best possible way with a higher probability of success (Mißler 1999). Furthermore, if we want to learn new words permanently, we need to connect them to something that is already stored in our mental lexicon, that is, to other concepts that we have already established. Thus, the more extensive the previous word knowledge of a learner is, the more points of reference his/her mental lexicon is able to provide and the more easily

he/she will acquire new words. This not only applies to word knowledge in the target language but it also pertains to word knowledge we have in other languages (Haudeck 2008).

Along with the setting in which learning a language occurs, other factors such as a high level of competence in previously learned languages, a (perceived) similarity between these languages and the target language as well as the prestige of the languages influence strategy use, motivation and attitudes towards learning, the willingness to take risks and ultimately the success of a learner. Under certain conditions, however, it has been shown that bi-/multilingual learners are indeed more successful than monolingual, inexperienced language learners when learning new vocabulary. This success has been discussed again as a result of their heightened ability and efficient way to use learning strategies (Mißler 1999).

Inductive inferencing and intercomprehension

Previous language knowledge and skills are thought to be especially helpful when guessing the meaning of new words. This so called intelligent guessing or (inductive) inferencing has been subsumed under compensation strategies. When guessing new meanings, we can draw upon different kinds of knowledge. First, we can use our implicit knowledge about the target language, i.e. knowledge that we cannot explicitly utter or put into rules. Second, we have knowledge from previously learned languages, the target language itself (=intralingual) as well as other languages (=interlingual knowledge), general metalinguistic knowledge, and world knowledge that helps us, for example, to classify the contextual information of a text or utterance. Third, we can make use of other specific strategies (Mißler 1999)

The concept of intercomprehension further defines and stresses the specific resources that multilingual learners possess and that they can make use of in order to infer meaning in a new language. Intercomprehension originally refers to the fact that speakers of languages belonging to the same linguistic family (for example Slavic, Romance or Germanic languages) can understand each other (or written texts in another language) without knowing the language.

The central methodological hypothesis is that all learners using the intercomprehension method have some knowledge in various categories at their disposal, which they can exploit, and that teachers can help them develop the strategies to use this knowledge for understanding new texts.
(European Commission 2012: 9)

According to Doyé (2005), these categories that learners can use in order to make inferences on the basis of previously learned languages are:

- a) General world/encyclopaedic knowledge, cultural and socio-cultural knowledge
 - b) Knowledge about the situation that the text is embedded in
 - c) Behavioural knowledge (recognize and interpret culture specific behaviour, non-verbal signs)
 - d) Pragmatic knowledge (which purpose does a text serve?)
 - e) Graphic knowledge (writing systems)
 - f) Phonological knowledge (sound system)
 - g) Grammatical knowledge (grammatical structures, syntax and morphology)
 - h) Lexical knowledge (international vocabulary as well as related vocabulary from previously learned and related languages (=cognates))
- (European Commission 2012: 9f)

Thus, the idea is that language learners strategically draw on their knowledge from other

languages in order to infer the meaning of words/texts in a language they do not know yet. For related languages such as Swedish, Norwegian, Danish, Icelandic, English, Dutch and German on the table below, Möller (2014) lists the following cognates that could be helpful when approaching a text in one of these languages:

Schw.	Norw.	Dän.	Isl.	Engl.	Nl.	Dt.
ja	ja	ja	já	yes	ja	ja
nej	nei	nej	nei	no	nee(n)	nein
dag	dag	dag	dagur	day	dag	Tag
natt	natt	nat	nótt	night	nacht	Nacht
här	her	her	hér	here	hier	hier

Deep knowledge about syntax and morphology - that is, about the structure of sentences and words – can help in learning more about the meaning of words. We can find out the word class of an unknown word with the help of affixes (such as the suffix {-ly}, which usually marks an adverb in English) or the sentence elements (e.g. which element in a sentence performs the subject function, which is the verbal element?) as the sentence structure of related languages are also similar (Hufeisen and Marx 2014).

Teaching vocabulary

Considering the amount of words that second language learners know after a period of time, it is unlikely that all those words have been acquired through direct instruction. However, there might be specific words you need your learners to know to prepare them for upcoming lessons or specific words you consider important to know. Moreover, older, educated learners who decide to sign up for a language class will particularly expect you to explicitly present them with language. This may also be true of LESLLA learners. Therefore, teaching some words directly to your learners is an important part of every language learning programme. Consequently, the questions we need to deal with are: Which words should we teach? How can we introduce those words and how can we support our learners in deepening their knowledge? Below, we discuss a set of ideas on teaching vocabulary items.

Which words should we teach?

How many words a second language learner needs to know heavily depends on the situations in which she/he has to use the second language. A learner taking a specific job might need technical and domain specific vocabulary. One general suggestion considering this question is equipping the learner with a core vocabulary including the words that are frequently used in daily conversations of a native speaker. English native speakers, for example, make frequent use of about 2,000 words in daily conversations (Thornbury 2002).

Taking the idea of a core vocabulary into account, the first criterion that might support us in choosing suitable words to teach is frequency. In many languages, various lists of the most frequent words exist and can give you some idea of which words your learners will probably encounter in their daily lives. Still, such lists might be based on different data sources and end up with different words. We can, hence, not simply accept any list we find but need to critically look at the source and decide whether it is suitable for our learners or not. Furthermore, frequency does not equal usefulness. Your learners might need less frequent words to deal with activities in their daily lives, especially when the semantic meaning of such a word cannot easily be described or paraphrased. Consider the word *thread*, for example. To describe or paraphrase it your learners might need words such as *sew*, *needle*, *wire*, *fibre* or *strand* which are not high frequency words either and might, hence, be unknown to your

learners (Gairns and Redman 2004). We should also consider the fact that many of the most frequent words are function words, such as *and*, *his*, *her*, and not content words. Whether it is useful to teach function words in isolation is questionable (Thornbury 2002).

Another criterion we need to consider when choosing suitable words to teach is the learner's cultural background as it will influence what learners want to utter and which words they need. If that culture is not part of the target language's country, the relevant words will not be frequently used and, hence, not covered by word frequency lists. This idea leads to the next criterion, the learner's need for words. This might seem especially problematic if learners need words which do not fit their general language level, e.g. low-level learners who have to deal with highly specialised words such as those found on various application forms. It is argued, however, that this is not problematic if learners consider the vocabulary they are taught as relevant. If lexical input is considered as relevant, learners will be much more motivated and this motivation, again, will contribute to effective vocabulary acquisition. Last but not least, there are definitely some words which are expedient for any classroom conversation, such as words that often occur in teachers' talk or words often included in task instructions, and should be considered when deciding on suitable words to teach (Gairns and Redman 2004).

Introducing new words

When presenting words to your learners, there are a number of decisions that have to be made in advance (1) How many words do you want to present? (2) Should you introduce meaning first or form first? (3) Which means of presentation do you want to choose?

The number of words you choose to introduce will probably depend on different factors, such as the difficulty of a word or your learners' current language levels. You might also consider whether the words can be explained easily or even demonstrated and whether you want your learners to be able to produce the words or simply recognise them when reading or listening (Thornbury 2002).

Considering the sequence of meaning and form, there are two reasonable approaches. When teaching form first, you could say the word *jacket* (form) for a few times and then provide the learners with the meaning by showing them a picture of a jacket or even a real jacket. Presenting form first might enable learners to figure out the meaning for themselves if the form is presented in a context. When teaching meaning first you provide your learners with a picture of a jacket (meaning) before saying '*This is a jacket*'. By presenting the meaning first, learners might develop a need for the suitable form and, being confronted with it, might memorise it more easily (ibid).

The next question you are confronted with is the question of which means of presentation to use to introduce new words. A very traditional form which is still often found in (monolingual) classrooms is translation. Translating a word is the most direct way of providing learners with the meaning and it seems to be the easiest way to deal with upcoming vocabulary questions that might occur in the classroom. However, it is not without disadvantages. Sometimes there is no close match between the word in the target language and the learner's native language equivalent. Additionally, your learners might not be able to build their own second language lexicon and, as a consequence, always have to access the meaning of a word via their first language (ibid). And finally, translation means you have to know your learners' languages, and this is usually not the case.

Instead of simply translating words, you can try to illustrate the meaning. There are different options to illustrate the meaning of words. Firstly, you can bring real life objects (realia) to class. Secondly, you can bring pictures on flash cards. Often, flash cards are provided as

additional material in text books but you can also design your own flash cards. Thirdly, you can use facial expressions and gestures to illustrate meaning. Illustrating the meaning instead of translating is an especially useful approach in classrooms with mixed nationalities who do not share the same native language (ibid).

Some words, however, cannot be illustrated that easily. This is also the case in the use of photo dictionaries. There is a third option: providing definitions. The easiest way – but only for those who are literate – is to use a dictionary. Even this can be problematic since too little information may be given or the meaning of a word is paraphrased in a way that leads to an incorrect interpretation. Consider, for example, the word *erode*. The traditional definition of the word in a monolingual dictionary might include the phrase *eating out* (as in soil) based on which one learner created the sentence “*My family erodes a lot*” (Graves, August and Mancilla-Martinez. 2013: 28). To avoid such problems and misunderstandings, it makes more sense to provide your learners with learner-friendly definitions which only include simple words and support the learners in using the word in the right context (ibid).

Achieving vocabulary depth

When teaching new words to your learners, you should not only be concerned with the number of words that they learn but also consider the depth of their vocabulary. In other words, it is not only important that your learners know many words but also that they know a lot of different aspects about single lexical items. They should not only be able to pronounce and spell the word correctly and know the literal meaning, but – particularly at higher proficiency levels – you should also provide them with connotations, synonyms or different suitable contexts. In the following, we discuss a few methods that can help you to help your learners achieve vocabulary depth (all taken from Graves et al. 2013).

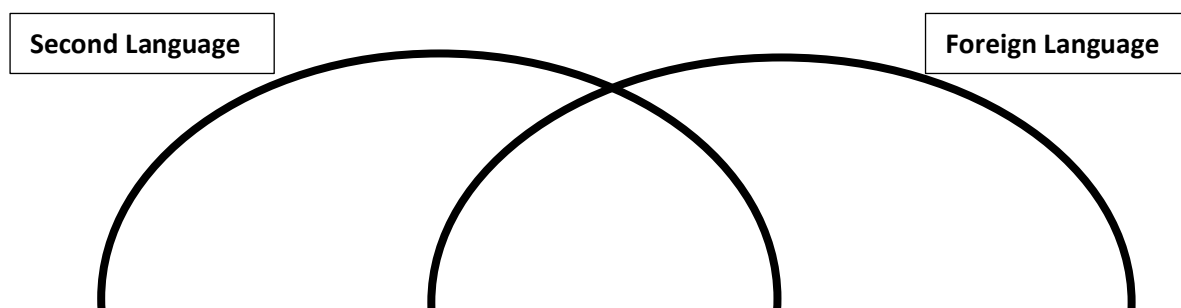
Semantic Mapping

Semantic mapping can be used to work with words and, at the same time, support comprehension of complex topics your learners are currently dealing with. Such topics could, for example, be *family* or *transportation in the town*. You can create a semantic map together with your learners using the board or have your learners work on it in pairs or groups using big pieces of paper. Put the word representing the central concept of the topic in the middle of the board or paper. After that, find some words which represent categories related to the central concept. Your learners should then find as many words as possible for each category. Afterwards you can discuss some of the words your learners found.

Venn Diagrams

Venn Diagrams are diagrams which are used to look at different sets and the possible logical relations between those sets. One set is usually visualised by a circle surrounding all the elements belonging to one set. In vocabulary learning those diagrams are useful for working with word pairs which share many features but do not mean exactly the same. Working with the diagrams might help your learners understand the different meaning of such pairs and enable them to use the right word in the right context. Help them find two words they find hard to differentiate and draw two overlapping circles. They should next write (or even draw) all the features the two words share in the overlapping part of the circles. Then they should find characteristics that are exclusive to word A, write them into one of the circles and then do the same thing for word B and the other circle.

Here’s an example which applies to terms used in applied linguistics:



Learned in a rather natural environment where the language is spoken

Usually acquired after your first language

Learned in an environment where the language is not spoken; often learned in a classroom setting

Four Squares

Four squares is used to deepen a learner's knowledge of new words and items and it does not need much preparation. Simply ask your learners to fold a blank piece of paper into four parts. In the upper left quadrant, your learners should now write the word you want them to define or let them write down their own word. To give a concrete example, consider the word *furry*. In a second step, your learners should write down things that are furry in the upper right quadrant and things that are not furry in the lower right quadrant. Make sure your learners use suitable examples and discuss problematic examples in class. Finally, your learners should come up with their own definition of the word and write it in the lower left quadrant.

furry	cats rabbits dogs
Things that have a fur and feel very soft are furry.	frogs fish stones

Teaching word parts

Instead of teaching whole words you might also consider teaching word parts which can help your learners to work out the meaning of new and unknown words for themselves. The question is, which word parts are useful for your learners to learn? It makes sense to teach derivational prefixes and suffixes. Derivational prefixes are elements attached at the beginning of words to change the meaning and sometime the word class. One example is *im-* as in *impolite*. Knowing prefixes can help learners to guess the meaning of new words. If they know the meaning of *polite*, for example, and they know that the prefix *im-* (usually) creates the opposite meaning of the original word, they can correctly guess that someone who is *impolite* is not polite (Graves, August and Mancilla-Martinez 2013). Examples of derivational suffixes are *-er* which changes the verb *drive* to the noun *driver* or *-y* which changes the noun *fog* to the adjective *foggy*.

Negotiation of Meaning

We now turn to another process by which vocabulary learning can take place without instruction. When two people talk to each other, particularly if they are not both proficient speakers of the language they are using, we often observe "interactional work done by interlocutors to achieve mutual understanding when a communication problem occurs", that is "negotiation of meaning" (Yi and Sun 2013 p. 120). Another definition is

The process whereby interactions are modified between or among conversational partners to help overcome communication breakdowns. (...) Thus, it is cooperative interaction that often results in mutual understanding. (Oliver 1998 p. 372)

Have a look at the following example dialogues (1) between a native speakers (=NS) and a second language learners or non-native speakers (= NNS) and (2 and 3) between two non-native speakers. They are involved in task where they have to describe scenes to each other.

Example 1:

NS: Where's the plant?
 NNS: Huh?
 NS: The plant. (*exaggerated intonation*)
 NNS: Plant. (*said quietly to self*) Can spell it?
 NS: P-L-A-N-T
 NNS: Oh. Plant is left side near the window.

Example 2:

NNS 2: How tall is the tree?
 NNS 1: How – tall?
 NNS 2: Yer
 NNS 1: Just this one?
 NNS 2: How tall?
 NNS 1: That one or the other one?
 NNS 2: No, this one how tall (*draws a line going upwards*). I mean it's like this.
 How tall?
 NNS 1: Oh. Yer, ah, seven.

Example 3:

NNS 1: Where do I put -?
 NNS 2: What?
 NNS 1: The pl[a]nt.
 NNS 2: The pl[a]nt? - What's that, pl[a]nt?
 NNS 1: Pl[a]nt.
 NNS 2: Ah, plant. – It's not a pl[a]nt, it's plant.

(Examples taken from Oliver 1998 p. 378f)

In interactions, interlocutors negotiate the meaning of formerly incomprehensible input, that is new structures or words. When negotiating, speakers modify their speech by using repetition, expansion, the support of gestures/drawings/spelling, they adapt their pace of speech or stress certain words in order to clarify the meaning and make the input comprehensible (for example the word 'tall'). Sometimes, learners and competent speakers also 'negotiate' the form of words (such as the pronunciation of 'plant') or the structure of sentences.

Negotiation of meaning include various strategies and sequences which have been identified as clarification requests, confirmation checks and recasts. Long (1985) regarded these as types of interactional modification which "portray a process in which a listener requests message clarification and confirmation, and the speaker follows up these requests through repeating, elaborating or simplifying the original message" (Yi and Sun 2013 p. 120). The following examples of negotiation of meaning illustrate some of the most representative modifications (examples taken from Oliver 1998 p. 375).

Clarification Requests: Comments or questions posed by the listener (such as “I don’t understand”) who asks for clarification as to what the speaker has said or meant. Example:

NNS: A little line in the leave.

NS: A what?

1. **Confirmation Checks:** The listener tries to make sure and establish that the preceding utterance has been heard and understood correctly (e.g. through repeating (parts of) the utterance with rising intonation).

Example:

NNS: Where does the um, glasses go?

NS: The glasses?

2. **Comprehension Checks:** The speaker checks whether a preceding utterance has been understood correctly by the listener (e.g. questions such as ‘do you understand?’, repetition with rising intonation).

Example:

NNS: You know what, you know?

3. **Partial, Expanded or Total Self-Repetition:** The speaker repeats his/her utterance exact or partial, that is some of the lexical items, or expands/elaborates on the other’s utterance. Examples:

- a) NNS1: Two foot?

NNS2: Two foot and two leg.

- b) NNS: The cups?
The cups?

NS: The cups and the saucers?

Long (1983) also analysed different interactions between native speakers and non-native speakers). He found that communication between two native speakers differed from those between a NS and a NNS, especially with regard to conversational management. The NS-NNS pairs used more strategies such as repetitions, confirmation/comprehension checks or clarification requests. This observation led Long (1985) to introduce his Interaction Hypothesis which claims that interaction, i.e. negotiation of meaning, promotes second language acquisition (Mitchell and Myles 2004).

Second language learners seem to benefit from the process of negotiation of meaning for several reasons. First, this is because it provides them with the opportunity to receive comprehensible input. Comprehensible input is “uniquely modified for learners’ individual circumstances” (Oliver 1998 p. 373; see also Krashen 1985). Interactions result in the competent speaker modifying his/her speech, targeting it to the learner’s level of competence; the nature of the input is thus adapted to the learner’s acquisitional needs. This qualitative change will increase comprehensibility. Second, when negotiating meaning, the learner is in a situation where he/she needs to make him/herself understood and thus produce comprehensible output – “through the process of negotiating for meaning learners are ‘pushed’ to produce comprehensible output” (Oliver 1998 p. 378). Finally, they will receive feedback on their attempts by their interlocutor which can be explicit (‘you didn’t say it correctly’) but it can also be more implicit (e.g. through a confirmation check or clarification request). All three factors – provision of comprehensible input, production of output and

feedback - are considered to be crucial elements in second language acquisition (Long 1983) and empirical studies support the effectiveness of negotiation of meaning especially for L2 vocabulary acquisition (Yi and Sun 2013).

A study by Oliver (1995) investigated strategy use by children when negotiating for meaning. Oliver found that there are no categorical differences between the ways adults and primary school children negotiate for meaning. However, a difference was found with regard to the proportional use of particular strategies; for example, compared to adults, children seem to rarely use comprehension checks.

A study by Yi and Sun (2013) focused on negotiation of meaning and vocabulary acquisition of secondary school Chinese learners of English in an instructed classroom setting. The study found a strong correlation between comprehensible input, negotiation of meaning and acquiring new words.

Specialized Language and Reading

So far, your focus will have been on vocabulary your learners need for everyday life. Some of your learners would like be or are already working or are dealing with situations in which specific vocabulary items are needed (e.g. visiting the doctor or going to the city hall). Some of your learners will eventually move on to gain various qualifications and in these situations the knowledge and use of what we can refer to as *academic language* will be increasingly required. It is useful to teach academic vocabulary items to your learners which are not specific to any subject area and can be used in various situations.

Academic Vocabulary

One can distinguish different types of vocabulary that are useful in an academic environment and, hence, have to be learned by learners. One type that is helpful for your learners includes vocabulary items that are related to functional and notional categories. They are also referred to as sub-technical vocabulary and are part of a range of disciplines. What is special about those items is that although there will be definitions in the dictionary, they have additional meanings in an academic context (McCarter and Jakes 2009). The question which arises is then: which vocabulary items are part of this group and thus, which items to introduce?

Xue and Nation (1984) came up with a list of the most common 836 words that occur in academic texts in English. Familiarity with these words increases the learner's chances of comprehending such texts and can guide teachers in deciding which vocabulary items to teach and in which sequence to teach them (McCarter and Jakes 2009).

In order for your learners to link words or establish patterns it is of great use to introduce unknown words in relation to others. This can be done in various ways which will be explained in the following.

Context

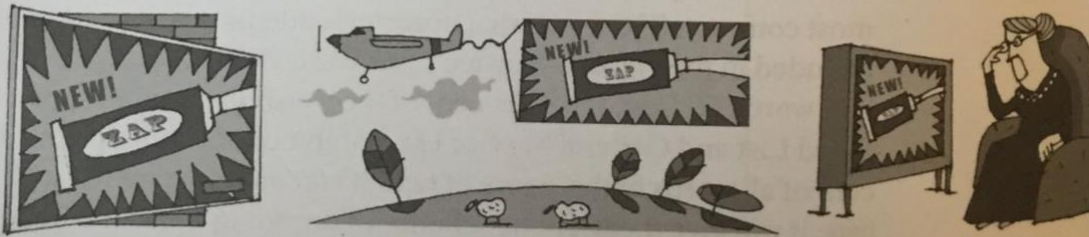
A context can basically be provided by either reading texts or listening texts. As your learners are still struggling with reading, listening texts can be used instead. If the topic and context is clear and familiar to your learners, you can expect them to already know some of the vocabulary items being used. This of course can help guessing the meaning of unknown items. The advantage of having a text (be it a reading text or a listening text) is that your learners get to know the items in a suitable context (they get an idea about the usage of the word, its grammatical function within the sentence/text, specific connotations, etc.). Existing texts can also be simplified or adapted to your learners' level(s). This increases the chance of using the item productively themselves (McCarter and Jakes 2009).

A good choice is to prepare or arrange the text in some way before presenting the actual text. McCarter and Jakes give an example of how to introduce a newspaper article about

advertising with questions that learners can answer in small groups or as a whole class. This also gives learners the chance to bring in their own experiences and express their own ideas. The most important aspect to be considered when doing so is to make sure that there is a limited number of subject-specific items. The example below is from what one might do with higher-level learners, but you can imagine how you might adapt it for learners who are at a lower level (McCarter and Jakes 2009: 94f).

New advertising regulations for low-cost airlines

You ask: *What do you think the article will be about?*



You ask:

How effective is advertising of this type?
What's your reaction when you see products advertised in this way?
What are the advantages and disadvantages of advertising in this way?

Think about advertising the following products or services.

Which advertising method(s) do you think would be most effective?

*billboard flyers the Internet local radio mail-shot national newspaper
 specialist magazine television*

a new, small, city car

a newly opened restaurant

a new chocolate bar

a chain of tourist hotels

safety equipment for engineers

a university course

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These pages may be photocopied for use in class.

Lexical Sets

Another way of introducing specialized vocabulary items is to create lexical sets, i.e. groups of lexical items which are meaning-related. Learners see the possibility of establishing patterns by relating new items to those they already know or to familiar areas of knowledge and/or personal experience. You likely already do this with your learners by choosing lexical sets for topics that are of relevance to them, for example *health*. Another example is the lexical set *location* where you download a map of a place with which your learners are familiar (their hometown or where they currently live, depending on what you think they are prepared to talk about). You then ask them to describe this to a partner and when learners share their words, this generates a new lexical set.

Individual items can also be related in systematic ways to other items. Synonyms are more often used by learners than antonyms. One possibility of integrating lexical relations into your teaching is to provide flashcards with words and prompt your learners to find synonyms or antonyms.

Register

You may have heard of formal vs. informal registers. Those with little formal education may be less aware of how language changes in formal settings such as interviews. You can support your learners in developing the formal register they will need in their new language by matching informal and formal items with the same meaning whose expression differs. Providing an appropriate context of when to use a formal register can show learners in which situations different words are required.

Vocabulary knowledge and reading

Vocabulary knowledge and reading comprehension are closely interrelated (Koda 2005). You may remember what we said about word knowledge earlier in this chapter; the idea of what makes up word knowledge is also important for its connection to reading comprehension as well as collocations and the register in which a certain word is used (Grabe 2009). The question is how reading and knowledge of a word are related. One perspective states that vocabulary knowledge enables the reader to comprehend concepts. Without this knowledge, one cannot comprehend a text. It's claimed that native English readers need to know up to 99% of the words in a text when it comes to reading for pleasure. There is another perspective that claims that through pleasure or extensive reading vocabulary knowledge grows. The idea behind this is that a great amount of words children learn in their first language are acquired from context; the vast number of words children come to know cannot be explained by explicit learning (Koda 2005).

Studies suggest that vocabulary knowledge is one of the strongest predictors of second language reading ability (Grabe 2009). There is also support that acquiring a vocabulary item is a by-product of reading because many words are learned through reading. Reading provides the second language reader with context-specific information and also enables him/her to achieve vocabulary depth (Koda 2005). Based on what researchers have found, you might want to consider teaching your learners how to make use of context when reading. Try asking them questions which activate the different types of knowledge you dealt with before e.g. linguistic knowledge your learners have already gained, knowledge from previously learned languages etc. (Aebbersold and Field 2003).

There are two perspectives on the connection between vocabulary knowledge and reading comprehension. One can claim that both perspectives go together, i.e. one needs a certain amount of vocabulary knowledge in order to be able to comprehend a given text but reading can also help deepen the knowledge of items as it provides a great source for learning new words as well as getting to know the words in their appropriate context.

Chapter 6: Acquisition and Assessment of Morphosyntax

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Introduction

As native speakers of a language, we place words in a certain order in a sentence and we understand and use a range of meaningless words and parts of words which represent certain functions in our language. This is morphosyntax and it is one of the aspects of a language we are also confronted with as we set out to acquire a second language (L2). Morphosyntax is essential in understanding and using oral or written language. The learners with whom you work might have acquired more than one language in childhood or later on. Nonetheless, researchers tend to use L2 to refer to any language acquired after early childhood, regardless of whether it is actually the third or fourth or nth language acquired.

In this chapter, we refer to a range of publications some of which were published decades ago. These might sometimes seem outdated, but gaining a sense of the foundations of the field of *Second Language Acquisition* (SLA) is helpful in understanding current trends. This chapter encourages you to apply new ideas to better support your learners as they strive to attain higher levels of morphosyntax. This relates to a question teachers and tutors have long asked: Why don't learners learn what we teach? There is another equally important question: How do learners learn what we don't teach? This chapter considers both of these questions to reach a nuanced understanding of adult second language learners' journey to proficiency in morphosyntax.

The CEFR

You might be familiar with the Common European Framework of References for Languages shown on the next page (Council of Europe 2001). The CEFR involves statements about what the L2 learner becomes increasingly able to do with language as they progress through six levels. Looking at learners' morphosyntax takes us much more deeply into what underlies these levels by revealing the dynamic interplay between the learner's mind, the instruction they get and their input outside of class. Patsy Lightbown in her 1985 article argued that teachers gain great expectations for their learners when they find out more about these internal acquisition processes.

Table 1. The Common European Framework of Reference for Languages (2001)

Proficient User	C2	<ul style="list-style-type: none"> • Can understand with ease virtually everything heard or read. • Can summarise information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. • Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations.
	C1	<ul style="list-style-type: none"> • Can understand a wide range of demanding, longer texts, and recognize implicit meaning. • Can express him/herself fluently and spontaneously without much obvious searching for expressions. • Can use language flexibly and effectively for social, academic and professional purposes. • Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices.
Independent User	B2	<ul style="list-style-type: none"> • Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. • Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. • Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
	B1	<ul style="list-style-type: none"> • Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. • Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. • Can produce simple connected text on topics which are familiar or of personal interest. • Can describe experiences and events, dreams, hopes & ambitions and briefly give reasons and explanations for opinions and plans.
Basic User	A2	<ul style="list-style-type: none"> • Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). • Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. • Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.
	A1	<ul style="list-style-type: none"> • Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. • Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows and things he/she has. • Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.

Implications for learners and applications to teaching

When some researchers analyse language, they are interested only in how speakers use language. Alternatively, they may be interested in how a speaker's language is represented in the mind. We refer to this mental representation as linguistic competence. Morphosyntactic competence consists of rules and forms that a native speaker subconsciously knows and automatically uses. When considering a language learner's journey towards linguistic competence, think of these two scales:

easy -----difficult
simple -----complex

These scales should be viewed as separate dimensions. What is easy for the learner to acquire in a given language is not necessarily what linguists consider most simple. Conversely, what is difficult is not necessarily what linguists consider most complex. A good example from

English is third person singular –s. In the sentence Mary loves John, the function of –s is to show that the verb *loves* agrees with the subject Mary. The morphosyntax involved is the relatively simple attachment of –s to a verb. But researchers have found that children and second language learners take a long time to acquire third person singular, as we’ll see below. That is, it’s difficult for the learner. This raises a final dimension: How important is something for communication? With third person singular –s in English, the answer is ‘not very!’ But this applies to English, not to all languages. In some languages (the EU-Speak languages Finnish, Spanish and Turkish) also have agreement on verb. However, because in these languages, the speaker doesn’t always need to use a subject, agreement is communicatively more important because the verb shows who is being referred to.

Keeping these three dimensions in mind as you read this chapter will help you take the research findings discussed earlier and turn them into implications for your learners’ acquisition. This will ultimately enable you to discover more informed ways of actively supporting them. The rest of this section introduces you to the issues that have informed second language acquisition research for more than half a century. You will note that much of the relevant research is on English. English dominated early research and in fact, much early research revolved around universities and language learners in Massachusetts and southern California in the USA. By the 1980s, researchers in Europe and around the world had started to look at the acquisition of morphosyntax in languages other than English.

Child language acquisition

The generative view of language promoted by Noam Chomsky since the 1950s (e.g. Chomsky 1957) sees humans as innately predisposed to acquire language. For generative linguists, language, particularly syntax, is separate from general cognition. When linguists study language acquisition, they are interested in how linguistic competence comes to be represented in the learner’s mind. Chomsky put forward the idea that humans possess a Universal Grammar which accounts for similarities and certain differences across languages and also guides children’s acquisition of language. Universal Grammar, which we can shorten to UG, also explains the highly systematic steps children take where they often come up with non-adult versions of their language - in their journey towards adult linguistic competence. (See for example Chomsky 1981.)

Support for innately-driven language acquisition has come from researchers pursuing questions from different angles. For example, Newport et al. (1977) wanted to see whether there was a link between the simplified way in which the mothers spoke to their daughters and their daughters’ morphosyntactic development; they found only very tenuous links. Crain (e.g. 1993) in imaginative experiments has shown that certain aspects of complex syntax develop when there is no direct evidence in the input. Fascinating studies of children who received rudimentary input shows how they create a more sophisticated system, for example in studies of older and younger deaf individuals in Nicaragua (Senghas et al. 2004; also see <https://www.youtube.com/watch?v=pjtiolFuNf8> as well as http://www.pbs.org/wgbh/evolution/library/07/2/l_072_04.html). For an overview of these ideas, see Pinker’s (1994) now classic *The Language Instinct: How the Mind Creates Language*.

Other theories of language and of its acquisition include Halliday’s functional grammar (e.g. Halliday 1994), Goldberg’s (2007) construction grammar and, along similar lines, Tomasello’s (e.g. 2003) and O’Grady’s (2005) usage-based, emergentist theory of acquisition. These theories tend not to shun the idea of a separate module in the mind dedicated to language.

Second language acquisition

People have learned each other's languages for millennia and the effect of a learner's native language/L1 on an L2 has long been observed. This is easy to observe in the sound system of a language; it's not hard to identify an L2 speaker's native language by their pronunciation but not as easy to spot a speaker's native language by L2 morphosyntax that isn't like a native speaker's. In 1957 Robert Lado finally formalized these observations in his Contrastive Analysis Hypothesis. The hypothesis involves these simple equations: L1-L2 differences = L2 difficulties; L1-L2 similarities = L2 facilitation. That is, if there are rules or forms which are the different in one's native language and the L2 being learned, the learner will stumble and make errors. For rules and forms that are similar, the learner will smoothly acquire these aspects of the L2. Ever since Lado put forward this hypothesis, teachers and researchers have realised that the situation is more complicated. This more complicated situation has since the 1960s led to a worldwide explosion of research on generative-linguistics-based acquisition. Researchers continue to be intrigued by how learners represent in their minds the L2 they are acquiring.

There has long been a consensus that both younger and older L2 learners' acquisition of morphosyntax is as systematic as children's L1 acquisition. The majority of L2 morphosyntax researchers now hold the view that UG guides acquisition even after puberty. Still under debate is how the learner's L1 morphosyntax interacts with UG. We'll look at some of the seminal studies further below. Researchers use a term introduced in Selinker (1972) for the evolving system the L2 learner subconsciously creates in his or her mind: interlanguage, interlanguage system, interlanguage grammar or learner language. The now-commonly used term *interlanguage* refers to the learner's creative construction of the L2. The ingredients are the learner's L1, the input the learner receives and Universal Grammar. This means that L2 learners' errors are not random. Just like young children's non-adult sentences, L2 learners' sentences reveal their current interlanguage for the language they are acquiring, i.e. their progress in acquiring the L2 or the target language.

Several other important lines of research on L2 morphosyntax have emerged over the past several decades. They assume involvement of general cognition rather than a language module. One line of research focuses on how learners respond to the explicit teaching of language and to various types of feedback to learners that indicate their L2 production is not target-like; see R. Ellis' 1999 overview of research at the time. Richard Schmidt's 1990 article on conscious noticing inspired investigation of how conscious processing of L2 input drives acquisition (e.g. N. Ellis and Robinson 2008) and how input focused both on form and meaning does so (e.g. VanPatten et al. 2004). A related line of research focuses on the role of interaction with interlocutors (Gass and Madden 1985; Long 1996).

Age in second language acquisition

You may be aware of the idea of a period of heightened sensitivity to language input that lasts until around puberty and you will have observed immigrant families where the children acquire native-speaker skills in the L2, but the adults do not. Lenneberg (1967) formulated this in his Critical Period hypothesis. There was a flurry of activity in the 1970s when the so-called wild child 'Genie' was discovered (in southern California) without any language. It emerged that this was due to extreme deprivation. Genie's case seems to support the existence of a critical period for first language acquisition which is due to biological development (see Curtiss 1977 and Fromkin et al. 1974). Whether the critical period applies to L2 acquisition has never been clear. Early on, some argued for multiple critical periods (Seliger 1978). Others even rejected the idea of a critical period (Bialystok and Hakuta 1999; Krashen 1973). Herschensohn in her 2007 book provides a still-current overview of what

research says about biologically-based age differences for various aspects of language. We'll revisit this important factor at the end of the chapter.

Unlike older learners, young children do not have a sophisticated ability to reflect on their own learning processes. Adults differ from children: regardless of adults' level of literacy, they are more cognitively sophisticated than pre-schoolers in that they can think about their acquisition processes, they can engage in conscious learning of a second language and they can respond effectively to correction. Children slowly become aware of their own language as they acquire linguistic competence. Through education their conscious awareness of language, their metalinguistic awareness, develops even further. By late childhood and adolescence, educated individuals are able to consciously learn a second language. You may be familiar with Krashen's acquisition-learning distinction (Krashen 1985). This idea arose out of Chomsky's claims about the separation of language and general cognition noted above. This distinction in L2 acquisition was taken further by one of Krashen's students, Bonnie D. Schwartz, who published an important article in 1993 in which she pointed out the difficulty of knowing when a learner's utterance has drawn on what they have consciously learned or on their linguistic competence.

Another view, under the assumption that there is no special module for language, holds that this involves two types of knowledge: declarative knowledge - what we consciously learn and consciously apply - and procedural knowledge - what we subconsciously learn and automatically apply (Ullman, 2001; Paradis, 2009). The fourth section in this chapter explores the ongoing issue of what is taught and either learned or acquired. In that section, we also consider another aspect of learners' morphosyntax. Formulaic speech – or holistic chunks, memorized chunks, unanalysed chunks, holofoms, routines - are multi-word utterances that the learner treats like single words. It is possible to learn formulaic speech without instruction, but it's typical for learners to be exposed to these as useful communicative sequences. From the time they set foot in a classroom, learners are encouraged to learn by heart sequences such as "I'm from" and "My name is".

Studies of immigrant adults

This section starts with a look at the studies of adults' acquisition of morphosyntax which have informed thinking in SLA for the last half century. As noted above, studies of children acquiring English as their L1 dominated early research. In the UK, similar work was being carried out around the same time, presented in Crystal et al. (1976), but was aimed at discovering procedures for analysing the morphosyntax of children suspected of having language problems. There is an extremely rich line of research dating back to the 1970s which focuses on immigrant adults. But the story begins with children.

Not long after Chomsky introduced his ideas, child language experts began to search for evidence of the universality of human language in the patterns young children follow. In the early 1970s at Harvard University, Roger Brown and his then PhD student Jill de Villiers conducted two studies which were to have far reaching consequences. Brown examined the acquisition of 14 grammatical morphemes in English which were initially absent in the earliest oral production of three intelligible, talkative monolingual children who had started combining words into sentences (names are pseudonyms), Adam, Eve and Sarah. Eve was more advanced than the other two (she started combining words when she was one year and six months old) which underscores an important observation: children acquire their first language at different rates. Their ages were (where the number after the semi-colon indicates months): Eve from age 1;6 to 2;3, Adam from age 2;3 to 3;6 and Sarah from age 2;3 to 4.

The methodology was simple: the researcher engaged each individual child in typical play several times a month and these sessions were audio recorded and then transcribed. In determining acquisition of a morpheme, the notion of *suppliance obligatory context* was applied. For example, the child might say: 'Daddy counting toe'. The singular auxiliary 'is' is obligatory, but it's not supplied; the plural -s is obligatory, but it is not supplied. This is another way of saying the child is making errors. Brown concluded that the child had acquired a morpheme when the child almost always used it (he set this at 90%) three data collection sessions in a row. Brown's study was a longitudinal study, looking at the same children over time. De Villiers and de Villiers conducted a cross-sectional study: they collected data once, from 21 monolingual children learning English at different ages (16 to 40 months) who were likely to be at different points in their acquisition of these morphemes. Again, the researchers played with the children and managed to collect hundreds of utterances from each child. They limited their analysis to a subset of eight morphemes and then used the same technique of suppliance in obligatory context and calculated a percentage of morpheme accuracy. The researchers found that these 24 unrelated, unacquainted children who growing up in different environments followed the same, common route of development. Brown refers to this as a "phenomenon of substantial generality"; that is, it can be applied to all children acquiring English (Brown 1973 p. 277). The data from Adam, Eve and Sarah – along with data from many other children - can be found on *CHILDES*, the child language portion of this data bank. These findings strengthened what Jean Berko had already observed 15 years earlier in 1958 with respect to irregular and regular past tense and plural marking in English: children impose their own system on the input they receive.

Second language acquisition

The question for SLA researchers was: Do learners impose their own order on the input they receive? The work by Brown and de Villiers and de Villiers studies inspired two studies that changed the way we think about L2 acquisition. In the formal and informal testing of Robert Lado's 1957 Contrastive Analysis hypothesis, researchers and teachers had begun to notice that the CAH's simple comparison of the differences and similarities between the learner's L1 and their L2 fails to predict the errors learners make.

Even before the 1970s studies on children, in the UK in 1967, Corder put forward the idea that L2 learners' errors are systematic. Drawing on the idea that like children, L2 learners regardless of their age impose their own order on the input they receive. Empirical evidence for learners' creative construction of an interlanguage came from studies by Dulay and Burt (1974) of 151 Spanish-speaking 5-8-year olds and of 60 Spanish- + 55 Chinese-speaking 6-8 year olds and by Bailey, Madden and Krashen (1974) of 73 adults from twelve L1 backgrounds. The children and the adults were living in the USA and acquiring English. Methodology involved oral description of pictures. The data from these studies were subjected to statistical analyses and these showed a common morpheme accuracy order across L2 learners regardless of their L1 or their age. Note that the L2 researchers also focused on what learners could do rather than on what they weren't getting right.

Brown; de Villiers and de Villiers

L1 children

1. plural -s
2. progressive -ing
3. irregular past
4. articles
5. contractible copula

Dulay and Burt

L2 children

1. plural -s
2. progressive -ing
3. contractible copula
4. contractible auxiliary
5. articles

Bailey, Madden and Krashen

L2 adults

1. progressive -ing
2. contractible copula
3. plural-s
4. articles
5. contractible aux

6. possessive-s	6. irregular past	6. irregular past
7. third person singular -s	7. third singular -s	7. third singular -s
8. contractible auxiliary	8. possessive -s	8. possessive -s

The similarities were confirmed through statistical analysis, but they might not be apparent from the table. You can see how similar the accuracy orders actually are across L1 children, L2 children and L2 adults if you look at the order in which learners acquire the three nominal morphemes (plural, articles, possessive) and the five verbal morphemes (progressive, irregular past, copula, third person singular, auxiliary). When the results were published, there was criticism; for example, the child L2 researchers did not play with the learners but used a set of pictures designed for data collection. Learners also overgeneralise in their production; we return to this in the fourth section of this chapter. Wagner-Gough (1978) noted in her longitudinal study of a young child that he supplied *-ing* in obligatory contexts, but he also supplied *-ing* in contexts where it wasn't required, such as past tense (Mark and Fred going in = Mark and Fred went outside). She argued that the child had not truly acquired *-ing* since he had acquired the form but not its function in marking of progressive aspect.

The 1970s studies led to an explosion in research on L2 adults which also involved an on-going search for the source of the L1-L2 learner differences and for the source of the common route of acquisition. The search has continued, for example with Goldschneider and deKeyser's (2001) proposal that certain cognitive factors are responsible rather than purely linguistic ones. And researchers continue to look for often only microscopically detectable patterns in the acquisition of this set of English morphemes by conducting both longitudinal and cross-sectional studies; see for example Bliss (2006); Cox (2005); Haznedar (1997); Klein et al. (2004); Lardiere (2003); Kahoul et al. 2018. Early on, data were usually from various types of production, usually oral, but sometimes written (e.g. free compositions). Over the years, researchers have increasingly turned to experimental studies and to exploring what learners comprehend or perceive. And they have looked at the L1 and L2 acquisition of many, many more languages than English. Lightbown and Spada's, *How Languages are Learned*, originally published in 1993 in further editions and remains an accessible guide to earlier and later SLA research.

From the 1970s onwards, some of the most important major studies of L2 morphosyntax were of immigrants. The study by Bailey et al. (1974) was of immigrant adults in the USA and it was mirrored by contemporaneous and subsequent studies on L2 English as well as on the L2 acquisition of other languages. The methods used to collect data in these studies have included techniques such as oral interviews and conversation with the researcher as well as oral retelling of silent films. The table provides an overview of these studies which will be discussed below

Table 2. Studies of immigrant adults

Study	L1 → L2	Description
Heidelberger Pidgin 1970s	Spanish → German	Cross-sectional: 48 learners
ZISA 1980s	Spanish, Portuguese, Italian → German	Cross-sectional: 45 learners Longitudinal 2 years: 12 learners
ESF 1990s	Five L1s → Five L2s	Longitudinal 2 ½ years: 40 learners

LEXLERN 1990s	Korean and Turkish → German	Cross-sectional: 17 learners
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One of the best known studies of immigrants acquiring a language other than English is the ZISA study (Zweitspracherwerb italienischer, portugiesischer und spanischer Arbeiter). It set out to look at adult migrant workers in Germany who were receiving no instruction but were instead acquiring their L2 *naturalistically* at the workplace and in the community. It was preceded by a similar study, the Heidelberger Pidgin study (e.g. Becker et al. 1977), but the ZISA study is better known because of two publications in English which sparked heated debate about the mechanisms responsible for the patterns exhibited by the learners. We return to this below. The *ESF study* (European Science Foundation) was another important study of L2 acquisition by adult migrants, this time not only learners from various L1 backgrounds but learners who were also acquiring a larger set of languages: Dutch, English, French, German and Swedish. The study involved 40 Arabic, Finnish, Italian, Spanish and Turkish learners, with a study design whereby the L1s overlapped for each L2; there were two Turkish learners of both German and Dutch, two Italian learners of German and English, two Arabic-speaking learners of Dutch and French and so on.

Hawkins (2001) points out that over the years, SLA research on morphosyntax has converged on the conclusion that there are common stages of development which are largely independent of (1) the learner's first language; (2) the learner's age at initial exposure to the L2; (3) the type of exposure (naturalistic vs. classroom); and (4) the learner's educational background. These conclusions are very strong and tempt one to take issue with them. These conclusions have very important implications for the learners with whom you work. So rather than debate these conclusions, we'd like you to instead discuss on the forum what acceptance of (2), (3) and (4) above means for how you would approach the learners with whom you work.

What about the influence of the learner's L1 or of other languages they know during L2 acquisition? SLA researchers have continued to look closely at learners' interlanguages for evidence of L1 influence, also referred to as L1 transfer. An older observation by Zobl (1980) is that this influence can lead to slower progress. If a learner's interlanguage at a certain point in their development mirrors their L1, this could impede the learner's further progress. For example, in Spanish the way sentences are negated resembles how learners negate sentences in L2 English regardless of their L1: they do not include the pronoun and they put the word 'no' (and sometimes 'not') before the rest of the sentence as in 'No have money' which is exactly the same in Spanish: *No tengo dinero*. 'I have no money/I don't have any money.' Spanish learners of English will remain at this stage longer than speakers of languages which don't reflect this interlanguage stage. In a highly influential hypothesis, Full Transfer/Full Access, Schwartz and Sprouse (1996) expressed the idea that the learner's L1 shapes acquisition from the start; this is Full Transfer. Then continued operation of Universal Grammar enables the learner to go beyond their L1; this is Full Access. The languages of the world vary in which functions they mark and researchers have also re-considered the difficulties learners have when L1 differs from L2, as Lado did back in 1957. They frame the issue in current terms: is it possible for a learner to acquire a functional category in the L2 which is absent in their L1? (See for example Hawkins and Chan 1996; Hawkins and Liszka 2003.) For example, articles and tense are marked in many European languages but not, for example, in Mandarin. Does this mean it is impossible for an adult L2 learner to acquire these?

Stages in the acquisition of L2 morphosyntax

L2 acquisition is affected by external and internal factors. These factors influence learners' *rate* of acquisition and learners' *end state*, the level they finally reach and stabilize at. For LESLLA learners, external factors include the social and political conditions surrounding their emigration and immigration. Internal factors include those which have more serious consequences for all adult L2 learners such as motivation as well as memory capacity which is affected by literacy. Tarone et al. (2007; 2009) have explored memory capacity, processing of input and literacy in their research. The research discussed in this section shows that these external and internal factors do not influence L2 learners' *route* of acquisition of morphosyntax.

We all observe children learning to walk. Thinking about this in terms of stages starts with the question: What are the characteristics or properties of the child's ambulatory system at a given point in time? Once the child can sit up, she or he usually moves on to crawling or perhaps to sitting while using legs for pulling around. We typically next observe the child standing but not yet walking, then teetering and toddling and finally walking easily. Children might skip stages, but what we don't observe is a reverse order of these stages. Children do not walk before they crawl. Walking is probably not the best metaphor for language because children do not seem to need any particular input while they certainly do require input to develop language. In the study of language acquisition, researchers ask the same question: What are the linguistic properties of a learner's interlanguage at a given point in time? (see e.g. Gregg 1996 p. 51). A description of properties at various successive points in time can be expressed as a series of stages that describe the steps the learner is taking on a route or path towards their end state of acquisition. It is useful to consider how we can decide whether to describe as stages certain language behaviour. David Ingram in his 1989 book on child language offers the criteria below. Think of certain functional morphemes in the language you teach which are initially produced in a non-target way (in earlier parlance, as errors).

1. The behavior we observe stabilizes for a certain period of time (for example, the learner uses the same non-target forms for weeks or months).
2. The learner continues to receive input, resulting in that behavior changing (for example the learner shifts from producing non-target forms to producing target forms).
3. That behaviour increases in frequency (for example, mostly target forms are produced).

Ingram also notes that to consider a behaviour a stage, what is identified as stage 1 logically precedes what is identified as stage 2. As you will see below, stages proposed in L2 acquisition are based on what researchers have commonly observed in learners' oral production. As you will also discover, researchers differ in what they think underlies these stages. Evidence for a stage can come from learners' non-target forms or non-target syntax (word order), but evidence can also come from what is absent in a learner's production. Consider data from Jorge (Hilles 1986; based on a Cazden et al.'s study of six Spanish immigrants to the USA) where the researcher and Jorge were playing various games. Because of the dominance of English in early research, we start here with English.

Researcher: What does she look like?

Jorge: *The pelo black and the eyes is I don't know what colour, and is fat.*

Jorge's utterances several months later:

What time is it?

It doesn't even spin.

You can't tell her.

In the 1970s and 1980s, researchers explored the acquisition of questions in English because they could look at functional morphemes such as 'do' together with the different word order in yes/no and wh-questions questions. That is, there is inversion of the subject (S in the table below) and the auxiliary verb (as well as copula and modal verbs; V in the table below). The position of the object (O) remains the same. A number of researchers found that L2 learners regardless of their native language followed a common route of development in acquisition of questions. This strengthened the claim mentioned above, that L2 learners creatively construct their interlanguages.

Table 3. Stages in the acquisition of question formation

Stage	Word order	Description	Examples
1	Single words	Rising intonation	Spinach?
2	SVO	Rising intonation	You like spinach?
3	Wh-SVO Do-SVO	Initial wh-words 'Do' initial in yes/no Qs	What you like? Do you like spinach?
4	aux-SV wh-cop-S	Auxiliaries before subjects in yes/no Qs Copula before subjects	Have he seen it? Where is he? Is he at work?
5	wh-aux-S	Auxiliaries before subjects but also in embedded wh-Qs	Where is he working? Do you know where is he working?

Analysis of data from the ZISA study pointed to five stages common to learners from these three language backgrounds (Clahsen, Meisel and Pienemann 1983). Under their account, acquisition begins with the –typical, canonical, word order in German declarative clauses: SVO. Note that these ideas can straightforwardly apply to languages with similar morphosyntax, e.g. to Dutch.

Table 4. ZISA-study-based stages in adult L2 German (Vainikka and Young-Scholten 2011: 168)

1. SVO order	<i>Die Kinder spielen mit dem ball.</i> 'The children play with the ball.'
2. Adverb preposing	<i>Da Kinder spielen.</i> target: <i>Da spielen Kinder.</i> 'There children play.'
3. Verb separation	<i>Alle Kinder <u>muss</u> die Pause <u>machen</u>.</i> target: <i>müssen</i> 'All children must take a break.'
4. Inversion	<i>Dann <u>hat</u> sie wieder die Knocht <u>gebringt</u>.</i> target: <i>gebrungen</i> 'Then she brought the bone again.'

5. Verb-end	<i>Er sagte, dass er nach hause kommt.</i> 'He said that he'll come home.'
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Several years later, in two important publications, Clahsen and Muysken (1986; 1989) argued that these stages did not reflect learners' application of linguistic mechanisms, but reflected their use of general cognitive mechanisms. That is L2 adult immigrants do not have access to Universal Grammar. Pienemann took this original analysis and expanded the ideas into his *Processability Theory* (1998; 2003) which views these stages as the result of operation of linguistic mechanisms other than Universal Grammar. Clahsen and Muysken's publications also prompted a flurry of re-analyses of the ZISA data and of ESF data (see below) to argue that adults indeed have access to Universal Grammar.

Of particular relevance to LESLLA learners are the earliest stages of development. One of the ideas emerging from the European Science Foundation project mentioned earlier from Manfred Klein and Clive Perdue (1992; 1997) who observed in speakers from the various L1 backgrounds learning Dutch, English, French, German and Swedish these six common characteristics in their oral production. They named this the *Basic Variety*.

1. aspectual distinctions made
2. VO word order
3. no movement (i.e. same word order)
4. no inflectional morphology or other grammatical morphemes
5. optional determiners
6. lack of subordination and lack of overt complementizers

These publications prompted a flurry of responses, one of which was from Bonnie D. Schwartz (1997) who argued that the Basic Variety ignores early L1-based word order differences: Punjabi and Turkish speakers use OV order and Arabic and Italian speakers exhibit VO order at the start of their acquisition, based on their L1s. Researchers now generally agree, regardless of whether they think general cognitive mechanisms or UG is involved, that adult L2 learners start acquisition with their basic L1 word order. If we disregard the subject - since beginners (both children and L2 learners) don't always produce subjects - we can consider the following:

- both languages are VO (English and Spanish)
- both languages are OV (Turkish and Farsi)
- the L1 is VO (Arabic) and the L2 is OV (Turkish)
- the L1 is OV (Farsi) and the L2 is VO (Spanish)

The Basic Variety can be conceptualised as three stages (Vainikka and Young-Scholten 2005) if we take into account findings from Myles' (2005) study of educated young adolescents in the UK learning French whose initial oral production corroborated what many have long observed: there is an initial stage where learners produce verbless utterances.

- Stage 1: the earliest Basic Variety data without verbs at all
- Stage 2: the earliest Basic Variety data with L1 word order (VO or OV)
- Stage 3: slightly later Basic Variety data where learners use L2 word order

Another approach to stages also emerged from re-analysis of the ZISA data and then from another cross-sectional study of immigrant adults in Germany, the LEXLERN project. In developing Organic Grammar, Anne Vainikka and Martha Young-Scholten started with Clahsen's (1991) idea that children learning German, in response to the input in their

environment, incrementally build up syntactic structure with the help of UG. For LEXLERN, data were collected in much the same way as for the ZISA and ESF studies, exclusively using techniques that prompted oral production. Vainikka and Young-Scholten proposed UG-driven stages of acquisition, with an analysis of the acquisition of German by Korean and Turkish immigrants (1994), a re-analysis of the ZISA Romance-language immigrants' data (1996), an analysis of data from a longitudinal study of uninstructed American exchange students (2011), a cross-sectional study of L2 English learners from a range of L1 backgrounds (Young-Scholten and Ijuin 2006) and a cross-sectional study of Arabic- and Urdu-speaking immigrants learning English (2017).

Under this theory, Organic Grammar, once learners produce utterances with verbs, their syntax is still very simple and involves no functional morphology. Under generative linguistics, syntactic projections have long been represented as trees, and in linguistic terms, this simple syntax is a verb phrase (= VP) or a 'minimal tree' representing the trunk of the tree. A CP (= complementizer phrase), the syntax involved in questions and subordination, is the upper branches of the tree. As with the other approaches described above, this theory involves common stages and these involve both functional morphology and word orders.

Because there has been less work on stages of acquisition in the L2 acquisition of languages other than English and German, to find information on the language you teach, visit: <http://talkbank.org/access/SLABank/>

The role of instruction

Under a generative approach to child language acquisition, researchers ask how all children (even those who are cognitively impaired) acquire the complex syntax and functional morphology of their speech community after only three or four years, before they have mastered cognitive challenges of similar sophistication. Researchers point out that caregivers are inconsistent in their correction of children's non-adult language and caregivers and others around the child provide imperfect input, for example their speech may contain false starts and even random mistakes. More importantly than these two observations is that the input is not labelled. When the child hears words, she/he has no idea what their function is. We previously saw that evidence began to confirm that there was something innate. Brown and then de Villiers and de Villiers found a common order of acquisition. Dulay and Burt (1973) and Bailey et al. (1974) found much the same common order for L2 learners regardless of their age or their native language. There must be something innate that enables the child to accomplish the task of language acquisition; in fact, there must be something innate which is responsible for L2 learners' common order of acquisition. Generative researchers agreed this was Universal Grammar. The search was on for evidence of access to Universal Grammar not only by children acquiring their first language but also by younger and older L2 learners. White's (1989) now classic *Universal Grammar and Second Language Acquisition* is one of the best guides to the beginnings of a very fruitful line of research. Further advances since the 1980s in the study of formal linguistics have resulted in more sophisticated understanding of functional morphology and of syntax of now a very wide range of languages. This has given child and second language acquisition researchers new ideas on what to investigate and in turn has exponentially expanded the number of languages whose acquisition is investigated. Alternative lines of research continue to flourish with some such as Halliday (1994), Goldberg (2007), O'Grady (2005) and Tomasello (2003) taking various cognitive approaches to the study of child language, others such as Ellis and Robinson (2008) and VanPatten (2004) considering cognitive approaches in second language acquisition, while others such as Gass and Mackey (2006) take interactionist approaches.

Two questions were posed at the start of this chapter: Why don't learners learn what teachers teach? How do learners acquire what hasn't been taught? The first question is not a new one (see e.g. Allwright 1984). The second question might be a new one, so we begin with it. Answers discussed above point to the ability even older second language learners have to apply mental mechanisms to the analysis of language input. It's worth keeping in mind that views on this are divided; generative second language acquisition researchers argue that these mental mechanisms are purely linguistic and operate entirely subconsciously. Others argue that these mechanisms are of a more general, cognitive nature and can also operate consciously. What takes place during instruction can, depending on the age and level of education of the second language learner, require conscious analysis of language, including conscious learning and application of rules. This leads to the question we addressed previously "Why don't learners always learn what teachers teach?" We will address answers to this question from two different perspectives: the memorisation of multi-word expressions which are indispensable in social interaction and the learning and application of rules.

Memorisation of multi-word expressions

The multi-word expressions we will focus on are conventional expressions which are memorised in the same way single words are. Much like a dictionary, a speaker's *mental lexicon* contains entries for single words, but it also contains entries of two or more words. When we speak a language we know well, we rely on such expressions and we recruit them as rapidly as single words from our mental lexicons. These expressions are also referred to as formulaic speech, formulaic language, formulaic sequences or holistic chunks. These expressions include idioms such as *kick the bucket*, clichés such as *the good old times*, compounds such as *motorway roundabout*, collocations such as *keep a secret*, social expressions such as *nice to meet you* and other fixed expressions such as *I don't understand*. Foreign language phrase books for travellers present lists of expressions useful in the various situations a tourist might encounter. It requires a superior memory (especially for pronunciation) and a lot of practice to be able to produce these under communicative pressure and then be understood. There is always the danger that if the message has been understood, the response will not be understood at all. There is also the danger that they will be over-used. The young immigrant boy, Homer, whose acquisition of English Judy Wagner-Gough (1978) studied, used various memorised expressions in his communication in his primary school classroom. For example, Homer used *Is it* to form questions such as *Is it bicycle is Judy?* 'Is it Judy's bicycle?' and he used *Where's* to make statements as in *Where's Mark is school* 'Mark is at school' before he had mastered the target language morphosyntax. For a wider view of this, see Martinez and Murphy (2011) on the difficulties younger immigrants have with the shorter multi-word expressions more relevant to vocabulary learning.

Clark (1974) observed her three-year-old son learn the formula *Wait for it to cool* which he used during mealtimes, and then applied the *Wait for it* pattern to other verbs, later using *Wait for it to dry*. In foreign language teaching, memorisation of expressions can be tied to dialogue memorisation and to the pattern drills which were part of the Audio-Lingual Method created in the USA in the 1940s. A pattern drill involves taking one of the patterns from a memorised dialogue and changing one component of the pattern, for example changing a declarative: *My name is Mary* to a question: *Is your name Mary?* or *What is your name?* More recently Vainikka et al. (2017) found that immigrant adults, some of whom were LESLLA learners, deploy multi-word expressions similarly to Wagner-Gough's learner. Others have found similar patterns in adult immigrants' acquisition of other languages, for example Dutch.

The *usage-based* view assumes that language is made up of such expressions and in the process of amassing these, the language learner becomes aware of the components of these expressions, detects patterns and then applies these patterns for creative use of language. Second language researcher Myles (2004; see also Myles et al. 1999) has argued that when it comes to the memorisation of multi-word expressions, this also applies in second language acquisition. Bardovi-Harlig and Stringer (2017) have contested this view. They report on a study whose results indicated that the learner's route of acquisition is not affected by the multi-word expressions they have memorised. An important observation they share is that L2 learners do not fully master these expressions until they reach higher levels of proficiency; that is, their morphosyntax has to catch up with the morphosyntax in these expressions before they produce them effortlessly. The aim of their study was to investigate whether memorisation of multi-word expressions acted as a catalyst for acquisition of morphosyntax. They first collected a corpus of such expressions used in the US community in which the learners they were going to study lived. Then they created test scenarios in which these expressions were expected and made sure that native speakers chose the answers they expected. They recruited 271 English learners at four proficiency levels on a seven-level programme that served learners from a range of L1 backgrounds and they gave them an oral conversation simulation task and an imitation task to see how well learners had memorised expressions. Results showed that learners knew when to use which expressions and they knew the most essential words in these expressions. But whether they could produce these was not connected to their stage of acquisition of morphosyntax. Multi-word expressions do not seem to act as a catalyst for acquisition of morphosyntax.

Learning and application of rules

In much of the discussion above, the focus was on adults who had little or no instruction. There is a long tradition of research investigating whether L2 learners learn what they are taught. There is even a journal - *Instructed Second Language Acquisition* - which focuses on entirely on classroom learners. Accompanying discussion about instruction is on-going debate about the distinction between what is consciously learned – leading to *explicit knowledge* – and what is subconsciously acquired – leading to *implicit knowledge*. These types of knowledge were termed *acquisition* and *learning* by Krashen in 1985 and were also being discussed in Europe in German; see Felix (1985). The debate revolves around three issues: whether there really is such a distinction; if there is, how we can distinguish between these two knowledge types and if we can, whether this is useful.

Three studies address the first question posed at the start of this chapter: Why don't learners learn what we teach them? None of these studies are of adults with little or no formal education because, unfortunately, most researchers have little contact with learners like yours and may have little awareness of their situation.

The first study, Rothman (2008) is based the acquisition-learning distinction in his *Competing Systems* hypothesis. L2 learners use linguistic mechanisms/Universal Grammar for *acquisition* but there is interaction with other cognitive subsystems, with general cognitive mechanisms for *learning* an L2. Here we note that from linguists' on-going work on explaining native speakers' mental linguistic systems, we know that languages are highly complex. Rules taught to learners often fail to reflect the complexity of language phenomena. Aspect is an example. Rothman compared native speakers with two groups of highly advanced English-speaking post-puberty learners of Spanish. Of the L2 group, 20 were instructed learners and 11 were uninstructed learners who had lived in a Spanish-speaking country for at least seven years. The details can be found in the Spanish chapter resources under 'Rothman'. Learners were

tested with examples of aspect in multiple choice story task and in a fill-in-the-blanks task. These examples related to how aspect is typically taught in the classroom. The native speakers in the study chose forms and filled in the blanks as expected, validating the test. The naturalistic learners performed as well as the instructed learners on both tasks. This supports the view that even older L2 learners subconsciously engage with the input to acquire language. The results also showed differences between the two groups. First, the uninstructed group learners were slightly better on the story task. Second, the instructed group showed clear evidence of operating with the oversimplified set of rules they had been taught.

Noting that Spada and Tomita (2010) in a meta-analysis of a number of studies on the effectiveness of instruction found no significant relationship between the effectiveness of teaching and its simplicity, in a later paper, Marsden et al. (2017) looked at something that is assumed to be simple to teach but is not easy to learn, namely the quantifier *any* in English. They considered 26 popular English textbooks in worldwide use and they found that the books give these rules. *Any* is used in questions: *Do you want any cake?* and *any* is used in negative responses: *No, I don't want any*. There are additional and common uses of *any* which the textbooks did not include:

- Conditional: *If anyone comes, please shout. If you see any bears, call for help.*
- After before or without: *Go before anyone sees you.*
- After a negative main clause: *I'm sorry I said anything about your driving test.*
- Free-choice: *Anyone can learn to bake a cake. Choose any cake that you like.*

The three researchers wanted to find out what L2 learners knew about the distribution of *any* in relation to what textbooks cover and what they do not. They recruited 97 Arabic-speaking adult learners of English, categorized them into three proficiency levels and asked them to judge sentences with grammatical and ungrammatical uses of *any*. To see what these learners had got out of their textbooks and whatever their teachers might have emphasised or added, they also interviewed the learners to find out what they recalled about *any* from their teaching. Results confirmed that they were either unaware of the rules or only aware of the simple rules taught. Results from the judgement task showed that the learners were best at judging grammatical and ungrammatical uses of *any* based on what they had been taught. Learners also showed evidence of incorrect overgeneralisation of rules they had been taught, even when the interviews showed that they were unaware of these rules, i.e. they had been explicitly taught these rules but they had begun to apply the rules subconsciously. But what intrigued Marsden et al. was that the most advanced groups were able to correctly judge the grammaticality of what they had not been taught; that is, they had also acquired some characteristics of *any*.

The final study, by Slabakova et al. (2017), provides another example of how it is useful to take a closer examination of what we think is simple and what we think is difficult. Their focus was on full and reduced object pronouns, i.e. *him* vs. *'m* as in *I saw him* vs. *I saw'm*. We might assume that it is easier for learners to acquire words such as these when they are pronounced clearly, especially if these are learners at lower levels of proficiency whose input is mostly in the form of listening. Slabakova et al.'s study suggests that reverse is the case. Even though all languages have pronouns, and the learner can straightforwardly transfer their knowledge of the concept of pronouns from the native language, low proficiency learners may have difficulties with the meaning of these pronouns and if they cannot comprehend the meanings of pronouns this may be undetected by teachers and others. These results are very interesting

when reflecting on our practice in terms of how we speak to learners; most of us don't realise that reduced forms (in this study object pronouns *him*, *her* and *them* in English) could be easier to interpret than full forms.

Assessment

Testing and assessment brings together in a very compelling way the various ideas discussed above. We start with definitions of two key concepts, reliability and validity. *Reliability* refers to consistency in whether the test or assessment tool measures a certain set of skills or knowledge in the same way every time it is used. *Validity* refers to whether a test or assessment tool measures what it claims to measure. Three main factors can undermine validity: 'failing to measure adequately what ought to be measured, measuring something that should not be measured and using a test in [the wrong or a different] manner' (Koretz 2008: 220). Reliability and validity are just as important when measuring the skills and knowledge of low-educated adult learners. In fact, these two constructs are even more important because learners have no or limited previous experience with the sort of testing and assessment typical in the countries to which they immigrate. Moreover, tests and assessment tools that assume literacy will not be valid measures of their skills and knowledge. *Testing* usually refers to the so-called high stakes exams used to measure the test-taker's knowledge and skills at a certain point of time. Examples range from institutional placement and end of year tests to standardised, norm-referenced, discrete item tests such as the TOEFL, IELTS and Cambridge tests of English as a second language. Norm-referenced relates to the validity and reliability of measuring a certain set of knowledge of skills for a given group of learners. *Assessment* refers to a continuous process of documenting knowledge and skills as shown in written or spoken samples produced by a learner. The distinction between testing and assessment is important because testing seems to be a less valid measure of what your learners can do than assessment.

A snapshot of a community college system in a large US city a decade ago illustrates this. The student body included 58% permanent residents; 18% student visa holders; 15% naturalized citizens; 8% visitor/ non-immigrant visa holders; and 2% refugees. The English as a second language programme included students from a range of academic and language learning backgrounds who (1) had completed secondary school in their native country; (2) had completed US secondary school as immigrants and (3) whose secondary education was not completed due to circumstances resulting in emigration. Admission to the college system required non-native English speakers to produce certain results from the Scholastic Aptitude Test (SAT) on the TOEFL. For college applicants who scored below a certain level on the verbal part of the SAT, an in-house reading and writing placement test was required. If the applicant was required to take English as a second language classes, progression from level to level was a programme-internal assessment of a written sample and a reading test.

In the UK there is rigorous and multi-level testing of adults who do not attend universities. Yet adult immigrants without native language literacy and/or education have largely been ignored. Thus, while there are standardised tests for levels slightly above A1 of the Common European Framework of Reference and higher, there are no tests that measure the skills and knowledge of those below this level. Allemanno (2013), for example, discusses three groups of learners: (1) well educated, highly literate learners with a background in a language that uses the Roman alphabet; (2) well educated, highly literate learners with a background in a language that uses a script other than the Roman alphabet; (3) learners who had little or no schooling and no background in any other language. Although the first two groups are considered beginners in the L2, both have literacy skills to draw on when learning a second

language. The third group not only have no or limited literacy skills in their native language, they might even be grappling with the notion that print carries meaning. However, learners in all three groups are tested against the same standards. As we can easily predict, learners in the first two groups do well and they raise the average score on the tests. Those with limited native language and second language literacy skills in the third group struggle to meet these standards. In addition, there are factors relating to context and the test-taker which can impact on their performance. The process of test development “should begin by clearly defining the test taking population in terms of the three sets of characteristics (physical, psychological and experiential) where psychological includes the cognitive processing required for the successful completion of the test” (O’Sullivan 2014: 262). Janssen et al. (2009) promote portfolio assessment for LESLLA learners involving their production of samples of authentic writing which they put into their portfolio which is used for ongoing assessment.

We should also consider what we are actually testing. The findings from studies discussed were based on learners’ production. But if we just test production, aren’t we missing something? We know from considerable research on children acquiring their first language and also from research on second language acquisition that comprehension precedes production. Babies produce their first identifiable single words between 10 and 12 months. They comprehend words several months earlier. We also have evidence from *first exposure* studies of adults that comprehension precedes production. These studies show how adults are actually very similar to children in their ability to pick things up from what we call the *speech stream*. This indicates that in a second language, our listening can be considerably better than our production. The same applies to LESLLA learners.

Young-Scholten and Ijuin (2006) report on the application of Organic Grammar to measure the morphosyntactic progress of learners on the US English as a second language programme described above. They began by criticizing terms used in assessment as being subjective and relative; for example words such as ‘adequately’, ‘intermediate’ and ‘competent’ refer to the assessor’s ideas of what is inadequate, elementary, simple or unacceptable. Results showed that applying the Organic Grammar morphosyntactic criteria successfully placed all learners at the right programme levels. More importantly, the criteria identified learners who were misplaced at too high a level and were struggling. See also the Rapid Profiling tool which Pienemann (1988) introduced.

Implications of L2 morphosyntax research for working with LESLLA learners

This chapter has introduced you to both the history and to state-of-the-art research on the acquisition of morphosyntax by adult second language learners. This has included discussion of the role of the learner’s memorisation of multiword expressions, the role of explicit teaching of rules and the testing and assessment of learners. We hope you have been encouraged to consider the implications of these ideas for your work with learners. There are a few final ideas to consider before bringing the chapter to a close.

Regardless of your view on how acquisition takes place, it is a given that the L2 learner needs input and lots of it. Some critics of ideas put forward by Chomsky on humans’ innate predisposition for language draw the erroneous conclusion that generative linguists are uninterested in input. Chomsky (2005) reaffirms that linguistic experience is one of the three components involved in our acquisition of languages:

- (i) genetic endowment for language;
- (ii) linguistic experience (= exposure to a language);

- (iii) principles of data analysis (of the input) and efficient computation (not specific to the language faculty).

Let's consider the three aspects of language acquisition, namely the *route* learners follow (their order of development), the *rate* at which they progress and the *end state* they finally reach. Now consider the decades of evidence that the learner's route of acquisition is impervious to outside influences such as memorising multiword expressions or applying rules learned in the classroom. Rate and end state are, however, subject to outside influences. Rate can be accelerated by an increase in exposure to the target language, and an accelerated rate then means that learners will be able to reach a more advanced end state, i.e. when their morphosyntax stabilises. Getting sufficient input may have a greater effect for beginners. LESLLA researchers have shown that input intensity is more important than amount; see e.g. Condelli et al. (2003). That is, a learner who is exposed to the target language for 20 hours a week over 10 weeks will be further along than a learner who is exposed to the target language for 5 hours a week for 40 weeks.

Let's also briefly reconsider the age factor. An older but still important study by Snow and Hoefnagel-Höhle (1978) of children, adolescents and adults learning Dutch in the Netherlands who were studied for a year showed that the adolescents and adults were faster than the children. The researchers continued to study some of them and observed that the children were eventually better than the older learners in their Dutch pronunciation. There could be various reasons for this but the take away message here is that, with sufficient exposure, post-puberty learners can achieve high levels of linguistic competence in a second language.

Getting sufficient exposure is tricky for all older learners. The more freedom we have to order our lives, the easier it is to cleave to our ethnic enclaves whether we are teachers of English in Japan or refugees in Italy. This is because as adults, there is little pushing us into situations where we are immersed in the second language. Children are required to attend school, to sit in assigned seats and their parents may involve them in range of activities that put them in situations with children they do not yet know. We end this chapter with questions the answers to which have implications for your work with learners:

How much of learners' time outside the classroom is spent responding to or using only their L1? *What opportunities exist for more exposure to the L2?*

How much comprehensible L2 input do learners receive? (Krashen 1985.) If your learners do not understand what they are hearing, they probably won't continue listening. *Are there strategies you could help them develop to deal more effectively with L2 input?*

How rich is the input they receive? There is an initiative regarding children's vocabulary which might be relevant to LESLLA learners. Hart and Risley (1995) argue that some children hear 30 million words fewer than other children do before starting school and that this has a negative effect on their achievement in school. To close this gap, they and others urge caregivers to increase and enrich their linguistic interaction with their children. This applies to second language learners, too. One facet of enriched linguistic interaction relates to cross-situational learning where it is more effective to present words (or examples of morphosyntax) in different situations than to repeat these in the same context. In her 2016 PhD, Smyser found positive results for this when she tested this idea with LESLLA learners' reading. Varied exposure has long been advocated and also to exposure a variety of sources of input, from listening and viewing to reading of simple texts. *Aim to make the learning environment multi-sensory and multi-faceted.*

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