

Think about it

List three common speaking problems you have observed among second / foreign language speakers. Based on the explanation of speech production given above, suggest the kind of processing demands that might have caused these problems.

Rate of speech production

Language learners do not all produce speech at the same rate, nor do they produce speech at the same rate all the time. On one occasion, a learner may produce speech that is halting and unclear, while on another, he or she may be able to speak fluently and clearly. So what factors influence the rate of speech processing? One important factor is the degree of automatization. Cognitive processes that have been automatized are those that involve skills and knowledge that are well-learned, through constant use and rehearsal (Shiffrin & Schneider 1977; Segalowitz 2003). Automatized processes make little or no demand on processing capacity because they do not require attention or effort to perform.

For example, language learners who are used to narrating stories will automatically begin each story with an orientation or context (e.g., *one day, once upon a time*). The working memory is, therefore, free from one level of processing (how to structure discourse) and is able to attend more closely to other demands (the content of the story). A learner's conceptual preparation and formulation processes in a particular task may become automatized because of his or her prior knowledge of facts, social, or academic conventions; discourse structures; and linguistic knowledge. The articulation process can also be automatized when the learner has developed control over the production of sounds and prosody of the target language.

The rate of speech production also depends on the speed of lexical access; that is to say, how fast or slowly an individual is able to recall and select from words stored in long-term memory (Levelt 1989, Levelt et al. 1999). This access may be instantaneous, or it may require several intermediate steps before the final desired word is recalled. Learners who have a large store of vocabulary will thus potentially have more alternatives to choose from, but this does not necessarily guarantee quicker processing. Some learners lose processing time when deliberating which word to use, and in face-to-face interaction, they may even lose their turn (Hughes 2002).

One way lexical access can be improved among learners is for them to learn to use prefabricated formulaic language (Bygate 1998;

Schmitt 2004). Formulaic phrases may be used for specific occasions (for example, *Congratulations on your promotion, Pardon my ignorance*), or speakers may rely on collocational units – words that usually go together – in normal language use (for example, *a tall order, a terrible mistake, a remarkable achievement*, and so on). (See Chapter 4.) Using prefabricated formulaic language is a facilitation strategy for coping with limited processing capacity and time pressure. To buy processing time, some speakers may even use entire sentences such as, *What you've said is extremely interesting!* (Hughes 2002).

Discuss it

Make a list of formulaic expressions that are commonly used by speakers of English in academic settings or conversations among friends. Have you ever introduced formulaic language in your teaching? If so, what kind of formulaic phrases did you teach, and who were the learners? Did the learners find the expressions useful?

High-proficiency learners typically produce speech more rapidly than beginning learners because they know more about the language and can apply this knowledge quickly when constructing their utterances. This does not mean, however, that high-proficiency learners can do the same in all situations. The reason is that the degree of automatization varies according to differing demands made on the speaker and the kind of output expected. For example, when talking about a familiar topic with friends, a learner may be able to speak clearly and fluently. The same topic, however, may require greater attention, planning, and monitoring when it has to be communicated to a large audience in a formal situation. On the other hand, in spontaneous interactive talk, learners usually have very little time to plan and prepare what they have to say. Furthermore, they also have to listen to what others are saying and respond appropriately. In contrast, preparation for an oral presentation involves longer planning time, and opportunities for rehearsals are often available. This kind of pre-task planning allows conceptualizing and formulating to take place before articulation, thus creating less pressure and fewer demands on the individual's processing capacity. Planning also enables monitoring to take place before the actual presentation in front of a live audience.

Clearly, learners face many demands when trying to speak in the target language. How can teachers support them in their learning so that they can achieve small successes that can motivate them to further improve their speaking? Teachers can start by planning speaking tasks that provide a realistic level of challenge, in light of the various speech-production

processes. If learners have to produce spontaneous speech on an unfamiliar topic, they will experience tremendous cognitive demands on all fronts: conceptual preparation, formulation, and articulation. This may result in cognitive overload, causing some learners to stop talking altogether or to communicate in an unclear manner. If, however, learners have sufficient prior knowledge about the topic, the load may be eased a little, as they need to pay attention only to how to formulate and articulate their ideas.

Another strategy teachers can use is to plan speaking activities that include opportunities for planning and rehearsals. This will help to increase the degree of automatization of one or more of the processes. Finally, it would also be useful to bear in mind that some learners who appear to be quiet or even unmotivated may, in fact, want to participate, but they are unable to cope with the cognitive demands of speaking and, therefore, choose not to participate at all. To understand more about these learners, you can include activities where they are encouraged to describe challenges they face and explore sources of their language anxiety. You can then plan activities that help them alleviate or manage some of these feelings of anxiety.

Think about it

How do you prepare for a talk? Would you take your learners through the same processes? Why or why not?

Fluency, accuracy, and complexity

The interplay of cognitive and affective, or emotional, factors during speech production exerts heavy demands on language learners, and this, in turn, can have a direct impact on the quality of their spoken language. We can talk about the quality of learners' speech according to three characteristics: fluency, accuracy, and complexity (Bygate 1998; Skehan 1996). (See Table 2.1.)

One of the effects of cognitive-processing demands on learners' language use is that they may not have adequate cognitive resources to produce speech that is both fluent and accurate. Under time pressure when speaking, language learners experience limited cognitive capacity for processing meaning and linguistic knowledge at the same time. Thus, even when they know the grammatical "rules" in their heads, some language learners may not always use correct grammar when they speak. Their first priority is to