Chapter 10
Using E-Learning to Achieve Fluency in Foreign Languages

Michael Zock
LIF, CNRS, France

Stergos Afantenos
LINA, Université de Nantes, France

ABSTRACT
Speaking a language and achieving proficiency in another one is a highly complex process which requires the acquisition of various kinds of knowledge, declarative and procedural (skills), like the learning of words, rules or patterns and their connection to communicative goals (intentions), the usual starting point. In order to help the learner acquire these skills we propose an electronic version of an age old method: pattern drills (henceforth PDs). While being highly regarded in the fifties, PDs have become unpopular since then, partially because of their rigidity and lack of contextual and communicative grounding. Despite these shortcomings we do believe in the virtues of this approach, at least with regard to the acquisition of basic linguistic reflexes or skills (automatisms), necessary to produce language at a ‘normal’ rate. Of course, the method needs improvement, and we will show here how this can be achieved. Unlike tapes or books, computers are open media, allowing for dynamic changes, taking users’ performances and preferences into account. Our DT, a small web-application still in its prototype phase, allows for this. It is a free, electronic version of PDs, i.e. an exercise generator, open and accommodatable to the users’ ever changing needs.

1. INTRODUCTION
Spontaneous speech is a cyclic process involving a loosely ordered set of tasks: conceptual preparation, formulation, articulation (Levelt, 1989). Given a goal one has to decide what to say (conceptualization) and how to say it (formulation), making sure that the chosen elements, words, can be integrated into a coherent whole (sentence frame) and do conform to the grammar rules of the language (syntax, morphology). During vocal delivery (articulation), in itself already a quite demanding task, the speaker may decide to initiate the next cycle, namely starting to plan the subsequent ideational fragment.
Obviously, smooth execution of such a complex task requires not only access to a huge library of ready made fragments in more or less abstract form (expressions/patterns), but also excellent organizational skills. Speed and knowledge are not all; proficient speakers are also flexible, capable to change on the fly incompatible elements (dynamic accommodation). Not everything is necessarily planned in advance, local adjustments may become necessary.

If speaking in one’s mother tongue is already a daunting task, to do so in a foreign language can be overwhelming. There are at least three, probably related reasons for this: lack of knowledge, lack of assurance and lack of remembrance. Indeed, learning to speak a new language requires not only learning a stock of new words and rules, but also to have the necessary confidence to dare to speak, which supposes, of course, quick access and remembrance of what has been learned.

To achieve these goals (increase/consolidation of knowledge, boosting of confidence, fixation/memorisation) we have refurbished and enhanced an age-old method, pattern drills, by building an electronic version of it. While the drill tutor is built for learning Japanese, we believe that the method is general enough to be applied to other languages.

PDs are a special kind of exercise based on notions like: analogy, task decomposition (small steps), systematicity, repetition and feedback. Important as they may be, PDs, or exercises in general, are but one of the many tools teachers rely on for teaching a language. Dictionaries, grammars, video and textbooks being supplementary resources. None of them, except the first one will be taken into consideration here. PDs are typically used in audio-oral lessons. Such lessons are generally composed of the following steps:

1. Presentation of a little story, where people try to solve a communication problem (hotel reservation, train station, barber shop). The student hears the story and is encouraged to play one of the roles

2. Contrastive presentation of examples to allow rule induction

3. Use of pattern drills for rule fixation

4. Rule-transposition, i.e. re-use of the learned patterns in a similar but different situation

These four stages fulfill, roughly speaking, the following functions (a) symbol grounding, i.e. illustration of the pragmatic usage of the structure; (b) conceptualization, i.e. explanation/understanding of the rule; (c) memorization/automatization of the patterns, and (d) generalization/transposition/consolidation of the learned material.

Obviously, there are many ways to learn a language, yet, one of them has proven to be quite efficient, at least for survival purposes: PDs. Since PDs are neither a new nor an uncontroversial method, let us show how many, if not most, of their shortcomings can be overcome.

Linguists describe languages in terms of rules, but people hardly ever learn such descriptions, at least not at the initial stages of acquiring a new language. What people do learn though are patterns complying with these rules. This is definitely the case for beginners and this holds both for first and second language acquisition. R. Weir (Weir, 1962) provided evidence for this by showing that children do spontaneously what we do when being asked: rehearse linguistic structures. Recording her daughter at bedtime, she heard her doing spontaneously, what we do in school: drilling patterns. This kind of behavior has been confirmed by other studies. As the learner makes progress, i.e. acquires more knowledge about the language, s/he will see the limitations of the pattern (overgeneralisation), possibly refining it such as to accommodate for the exceptions. Of course, people learn not only patterns, but also the situations (context) in which they occur. The latter can be seen as goals: introduce oneself when meeting someone, ask for a favor or offer help, etc. Seeing a strong correlation between a situation and verbal behavior, the learner realizes that people tend to use over and over the same pattern, though not