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Principles of Instructed Second Language Acquisition

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Second language acquisition (SLA) researchers do not agree how instruction can best facilitate language learning. Given this lack of consensus, it might be thought unwise to attempt to formulate a set of general principles for instructed language acquisition. However, if SLA is to offer teachers guidance, there is a need to proffer advice, providing that it is offered in the spirit of what Stenhouse (1975) called "provisional specifications." The principles described in this digest, therefore, are intended to provide teachers with a basis for argument and for reflection and not as a set of prescriptions or proscriptions about how to teach. They are designed to be general in nature and therefore relevant to teachers in a variety of settings, including foreign and second language situations and content-based classrooms.

Principle 1: Instruction needs to ensure that learners develop both a rich repertoire of formulaic expressions and a rule-based competence

There is now widespread acceptance of the importance played by formulaic expressions in the acquisition of a second language. Examples of such formulaic expressions are shown in Figure 1. Native speakers have been shown to use a much larger number of formulaic expressions than even advanced second language learners (Foster, 2001). Formulaic expressions may also serve as a basis for the later development of a rule-based competence. Classroom studies by Ellis (1984) and Myles, Mitchell, and Hooper (1999) demonstrate that learners often internalize rote-learned material as chunks and then break them down for analysis later on. For example, a learner may learn *I don't know* and *I don't understand* as chunks and then come to see that these are made up of *I don't* + *x* where *x* is a verb. Later they may see that it is possible to substitute the pronoun *I* with other pronouns such as *you* or *we*.

I don't know.
I don't understand.
I don't want ___.
Can I have __?
What's your name?
I'm very sorry.
No thank you.
How much does ___ cost?

Figure 1. Formulaic expressions in second language learning

Ultimately, however, learners need to develop knowledge of the rules that govern how language is used grammatically and appropriately. For example, they need to internalize rules for subject-verb agreement and for modifying terms of address to suit the person to whom they are speaking. Rules are generative and so enable learners to construct their own sentences to express their own ideas. They also enable them to use language creatively—for example, for purposes of irony and humor.

If formulaic chunks play a large role in early language acquisition, it may pay to focus on these initially, delaying the teaching of grammar until later. A notional-functional approach (Wilkins, 1976) lends itself perfectly to the teaching of formulaic sequences and may provide an ideal foundation for instruction in the early stages. Clearly, though, a complete language curriculum needs to cater to the development of both formulaic expressions and rule-based knowledge.

Principle 2: Instruction needs to ensure that learners focus predominantly on meaning

When we learn a language naturalistically, we do so by focusing primarily on what we want to say (i.e., meaning) rather than on how we say it (i.e., form). Instruction needs to cater to this capacity for learning naturally by creating contexts in which learners focus on message content. A task-based approach to language teaching is perhaps the best way of achieving this. In this approach, no attempt is made to design lessons around specific linguistic teaching points. Instead, the teacher selects a series of communicative tasks designed to create learning opportunities of a general nature. In task-based teaching, teacher and students both function as communicators and view the second language as a tool for communicating rather than as an object to be analyzed and studied.

There are a number of reasons why learners need to focus on meaning:

- In the eyes of many theorists (e.g., Long, 1996; Prabhu, 1987), only when learners are engaged in decoding and encoding messages in the context of actual acts of communication are the conditions created for acquisition to take place.

- To develop true fluency in a second language, learners must have opportunities to engage in real communication (DeKeyser, 1998).
- Engaging in activities focused on creating meaning is intrinsically motivating for learners.

When learners focus on meaning, they develop both the skills needed for fluent communication and the vocabulary and grammar needed to use the language effectively.

Principle 3: Instruction needs to ensure that learners also focus on form

There is now widespread acceptance that acquisition also requires learners to attend to form. Indeed, according to some theories of second language acquisition, such attention is necessary for acquisition to take place (Schmidt, 2001). Instruction can cater to a focus on form in a number of ways, as shown in Figure 2.

Teachers can achieve a focus on form

- through inductive or deductive grammar lessons. An inductive approach to grammar teaching is designed to encourage learners to notice pre-selected forms in the input to which they are exposed; a deductive approach seeks to make learners aware of the explicit grammatical rule.
- through communicative tasks designed to provide opportunities for learners to practice specific grammatical structures while focused primarily on meaning.
- through opportunities for learners to plan how they will perform a communicative task before they start it and/or by corrective feedback (i.e., drawing attention to learners' errors during or after the performance of a task).

Figure 2. Different ways of focusing on form in instruction

The term *focus on form* can mean different things. First, it might refer to a general orientation to language as form or to attending to specific forms (as argued by Schmidt, 2001). Second, it might be taken to suggest that learners need to attend only to the forms themselves and not to their meanings. However, theorists such as Schmidt insist that focus on form refers to form-function mapping—that is, the correlation between a particular form and the meaning(s) it realizes in communication. Third, focus on form might be assumed to refer to awareness of some underlying, abstract rule. Schmidt, however, claims that attention to form refers to the noticing of specific linguistic items as they occur in the input to which learners are exposed, not to an awareness of the underlying grammatical rules.

Instruction can seek to provide an intensive focus on linguistic forms as in grammar lessons based on a structural syllabus, or it can offer incidental and extensive attention to form through corrective feedback in task-based lessons. There are pros and cons for both approaches. Grammar lessons may be needed to provide repeated practice for those structures that cause persistent problems. Incidental and extensive attention to form ensures that learners attend to a wide range of grammatical structures, many of which will not require intensive practice (i.e., they can be learned easily and quickly).

However, intensive instruction is time consuming and thus there will be constraints on how many structures can be addressed. In contrast, extensive grammar instruction, where the teacher corrects the errors that learners make as they make them, affords the opportunity for large numbers of grammatical structures to be addressed. In this way, many of the structures will be attended to repeatedly over a period of time. Further, because this kind of instruction involves a response to the errors each learner makes, it is individualized. Ellis, Basturkmen, and Loewen (2001) reported that attention to form through extensive instruction occurred relatively frequently in communicative adult ESL lessons, while Loewen (2005) showed that learners who experienced this kind of instruction demonstrated subsequent learning.

Principle 4: Instruction needs to focus on developing implicit knowledge of the second language while not neglecting explicit knowledge

Implicit knowledge is procedural, is held unconsciously, and can be verbalized only if it is made explicit. It is accessed rapidly and easily and thus is available for use in rapid, fluent communication. In the view of most researchers, competence in a second language is primarily a matter of implicit knowledge. Explicit knowledge is conscious and declarative and can be verbalized. It is typically accessed through controlled processing when learners experience some kind of linguistic difficulty in the use of the second language. Some language learners rely primarily on their explicit knowledge.

Given that implicit knowledge underlies the ability to communicate fluently and confidently in a second language, this type of knowledge should be the ultimate goal of any instructional program. How then can it be developed? There are conflicting theories regarding this. According to skill-building theory (DeKeyser, 1998), implicit knowledge arises out of explicit knowledge when the latter is automatized through practice. In contrast, emergentist theories (N. Ellis, 1998) see implicit knowledge as developing naturally out of meaning-focused communication—aided, perhaps, by some focus on form. Irrespective of these different theoretical positions, there is consensus that learners need to participate in communicative activity to develop implicit knowledge.

In order to make sense of the different positions relating to the teaching of explicit knowledge it is necessary to consider two separate questions:

- Is explicit knowledge of any value in and of itself?
- Is explicit knowledge of value in facilitating the development of implicit knowledge?

Explicit knowledge is arguably of value only if learners are able to utilize this type of knowledge in actual performance. Again, there is controversy. Krashen (1982) argues that learners can use explicit knowledge only when they "monitor" their language use and that this requires them to be focused on form (as opposed to meaning) and to have sufficient time to access their knowledge. However, it can also be argued that many learners are adroit in accessing their explicit knowledge while communicating (Kormos, 1999).

Whether or not explicit knowledge has any value in and of itself, it may assist language development by facilitating the development of implicit knowledge. This involves consideration of what has become known as *interface hypothesis*, which addresses whether explicit knowledge plays a role in second language acquisition. Three positions can be identified. According to the non-interface position (Krashen, 1981), explicit and implicit knowledge are entirely distinct, and explicit knowledge cannot be converted into implicit knowledge. The interface position (DeKeyser, 1998) argues that explicit knowledge can become implicit knowledge providing learners have the opportunity for plentiful communicative practice. The weak interface position (Ellis, 1993) claims that explicit knowledge makes it more likely that learners will attend to the structure in the input, which facilitates the processes involved in acquiring implicit knowledge.

The three positions support very different approaches to language teaching. The non-interface position leads to a *zero grammar* approach: that is, one that prioritizes meaning-centered approaches such as task-based teaching. The interface position supports *PPP*—the idea that a grammatical structure should be first *presented* explicitly and then *practiced* until it is fully *proceduralized* (i.e., automatized). The weak interface position has been used to provide a basis for consciousness-raising tasks. These are grammar discovery tasks that provide learners with data that they use to work out the grammar rule for themselves.

Principle 5: Instruction needs to take into account the learner's built-in syllabus

Early research into naturalistic second language acquisition showed that learners follow a natural order and sequence of acquisition. In other words, they master grammatical structures in a relatively fixed and universal order, and they pass through a sequence of stages of acquisition en route to mastering each grammatical structure. This led researchers like Corder (1967) to suggest that learners had their own "built-in syllabus" for learning grammar as implicit knowledge. There followed a number of empirical studies designed to compare the order of acquisition of instructed and naturalistic learners (e.g., Pica, 1983), compare the success of instructed and naturalistic learners (Long, 1983), and examine whether attempts to teach specific grammatical structures resulted in their acquisition (Pienemann, 1989). These studies showed that, by and large, the order and sequence of acquisition were the same for instructed and naturalistic learners, that instructed learners generally achieved higher levels of grammatical competence than naturalistic learners, and that instruction was no guarantee that learners would acquire what they had been taught. This led to the conclusion that it is beneficial to teach grammar but that it must be taught in a way that is compatible with the natural processes of acquisition. Figure 3 suggests a number of ways in which this can be achieved.

- Adopt a zero grammar approach. That is, employ a task-based approach that makes no attempt to predetermine the linguistic content of a lesson.
- Ensure that learners are developmentally ready to acquire a specific target feature. However, this is probably impractical as teachers have no easy way of determining what individual students know. It would necessitate a highly individualized approach to cater to differences in developmental level among the students.
- Focus the instruction on explicit rather than implicit knowledge, as explicit knowledge is not subject to the same developmental constraints as implicit knowledge. That is, learners can learn facts about the grammar of a language in any order, but they will follow a definite sequence when mastering grammar for communicative use.

Figure 3. Ways in which instruction can take account of the learner's built-in syllabus

Principle 6: Successful instructed language learning requires extensive second language input

Language learning, whether it occurs in a naturalistic or an instructed context, is a slow and laborious process. Children acquiring their first language take between 2 and 5 years to achieve full grammatical competence (Wells, 1985), during which time they are exposed to massive amounts of input. The same is undoubtedly true of second language acquisition. If learners do not receive exposure to the target language, they cannot acquire it. Krashen (1985) has argued that all that is needed for successful acquisition is motivation and "comprehensible input"—input that is made easy

to understand either by simplifying it or by using contextual props. Other researchers, however, have argued that output is also important (see Principle 7 below), but they agree about the importance of input for developing the implicit knowledge that is needed to become an effective communicator in the second language.

How can teachers ensure their students have access to sufficient input? In a second language teaching context, most—although not all—learners can be expected to gain access to plentiful input outside the classroom. In a foreign language teaching context (as when French or Japanese is taught in the United States), there are far fewer opportunities for extensive input. Thus, to ensure adequate access, teachers need to maximize use of the second language inside the classroom. Ideally, this means that the second language needs to become the medium as well as the object of instruction. Teachers also need to create opportunities for students to obtain input outside the classroom. This can be achieved most easily by providing extensive reading programs based on carefully selected graded readers suited to the level of the students, as recommended by Krashen (1989). Also ideally, schools need to establish self-access centers (i.e., rooms containing carefully selected language learning materials that students can use on their own time). Successful foreign language learners seek out opportunities to experience the language outside class time, but many students are unlikely to make the effort unless teachers make resources available and provide learner training in how to make effective use of the resources. If the only input students receive is in the context of a limited number of weekly language lessons based on a course book, they are unlikely to achieve high levels of second language proficiency.

Principle 7: Successful instructed language learning also requires opportunities for output

Contrary to Krashen's insistence that acquisition is dependent entirely on comprehensible input, most researchers now acknowledge that learner output also plays a part in second language acquisition. Figure 4 summarizes the contributions that output can make.

The importance of creating opportunities for output, including what Swain (1985) has called "pushed output" (i.e., output where the learner is stretched to express messages clearly and explicitly), constitutes one of the main reasons for incorporating communicative tasks into a language program. Controlled practice exercises typically result in output that is limited in terms of length and complexity. They do not afford students opportunities for the kind of sustained output that theorists argue is necessary for second language development.

- Language production (output) serves to generate better input through the feedback elicited by learners' efforts at production.
- Output obliges learners to pay attention to grammar.
- Output allows learners to test hypotheses about the target language grammar.
- Output helps to automatize existing knowledge.
- Output provides opportunities for learners to develop discourse skills, for example, by producing long turns in conversation.
- Output helps learners develop a personal voice by steering conversation to topics to which they are interested in contributing.
- Output provides the learner with auto-input—that is, learners can attend to the input provided by their own language production.

(Based on Swain, 1985; Skehan, 1998; and Ellis, 2003)

Figure 4. The role of output in second language acquisition

Principle 8: The opportunity to interact in the second language is central to developing second language proficiency

While it is useful to consider the relative contributions of input and output to acquisition, it is also important to acknowledge that both occur in oral interaction and that this plays a central role in second language acquisition. As Hatch (1978) famously put it, "One learns how to do conversation, one learns how to interact verbally, and out of the interaction syntactic structures are developed" (p. 404). Thus, interaction is not just a means of automatizing what the learners already know but also about helping them to acquire new language.

According to the Interaction Hypothesis (Long, 1996), interaction fosters acquisition when a communication problem arises and learners are engaged in negotiating for meaning. The interactional modifications that arise help to make input comprehensible, provide corrective feedback, and push learners to modify their own output by repairing their own errors. According to sociocultural theory, interaction serves as a form of mediation, enabling learners to construct new forms and perform new functions collaboratively (Lantolf, 2000). According to this view, learning is first evident on the social plane and only later on the psychological plane. In both theories, social interaction is viewed as a primary source of learning.

Figure 5 identifies five key requirements for interaction to create an acquisition-rich classroom. Creating the right kind of interaction for acquisition constitutes a major challenge for teachers. One solution is to incorporate small group work into a lesson. When students interact among themselves, acquisition-rich discourse is more likely to ensue. However, there are also dangers in

group work (e.g., excessive use of the native language in monolingual groups) that teachers need to guard against.

To create an acquisition-rich classroom, teachers need to
- create contexts of language use where students have a reason to attend to language,
- allow students to initiate topics and to control topic development,
- provide opportunities for learners to use the language to express their own personal meanings,
- help students to participate in language-related activities that are beyond their current level of proficiency, and
- offer a full range of contexts that provide opportunities for students to engage in a full performance in the language.

(Ellis, 1999; Johnson 1995)

Figure 5. Creating acquisition-rich interaction in the classroom

Principle 9: Instruction needs to take account of individual differences in learners

While there are identifiable universal aspects of second language acquisition, there is also considerable variability in the rate of learning and in the ultimate level of achievement. In particular, learning will be more successful when the instruction is matched to students' particular aptitude for learning and when the students are motivated.

Teachers can cater to variation in the nature of their students' aptitude by adopting a flexible teaching approach involving a variety of learning activities. They can also make use of simple learner-training materials designed to make students more aware of their own approaches to learning and to develop awareness of alternative approaches. Studies of good language learners suggest that successful language learning requires a flexible approach to learning. Thus, increasing the range of learning strategies at learners' disposal is one way in which teachers can help them to learn. Such strategy training needs to foster an understanding that language learning requires both an experiential and an analytical approach. School-based students often tend to adopt an analytical approach to learning, even if this does not accord with their natural aptitude, as this is the kind of approach generally fostered in schools. They may have greater difficulty in adopting the kind of experiential approach required by task-based language teaching. Some learner training, therefore, may be essential if learners are to perform tasks effectively.

While it is probably true that teachers can do little to influence students' extrinsic motivation, there is a lot they can do to enhance their intrinsic motivation. Dornyei (2001) makes the obvious point that "the best motivational intervention is simply to improve the quality of our teaching" (p. 26). He points in particular to the need for "instructional clarity" by "explaining things simply" and "teaching at a pace that is not too fast and not too slow." Teachers also need to accept that it is their responsibility to ensure that their students stay motivated, and they should not complain that students do not bring any motivation to the classroom.

Principle 10: In assessing learners' second language proficiency, it is important to examine free as well as controlled production

Norris and Ortega (2000) distinguished four types of measurement:

- Metalinguistic judgment (e.g., a grammaticality judgment test)
- Selected response (e.g., multiple choice)
- Constrained constructed response (e.g., gap-filling exercises)
- Free constructed response (e.g., a communicative task)

They found that the magnitude of the effect of instruction was greatest in the case of selected response and constrained constructed response, and least in free constructed response. Yet, arguably, free constructed response constitutes the best measure of learners' second language proficiency, as this corresponds most closely to the kind of language use found outside the classroom. The ability to get a multiple-choice question right amounts to very little if the student is unable to use the target feature in actual communication.

Free constructed responses are best elicited by means of tasks. Task-based performance can be assessed either by means of a direct assessment of task outcomes or by external ratings. The former is possible only with tasks that have a single correct outcome. An example would be a spot-the-difference task, where learners are asked to interact in order to find a specified number of differences in two similar pictures. In this task, assessment would consist of establishing whether the learners were able to identify the differences. External ratings involve assessing different qualities of a task performance such as accuracy, complexity, and fluency. Considerable expertise is required to ensure that the ratings are valid and reliable.

Conclusion

These general principles have drawn on a variety of theoretical perspectives, although predominantly on what Lantolf (1996) refers to as the computational model of second language learning. This model has its limitations and is open to criticism, in particular that it is not socially sensitive because it fails to acknowledge the importance of social context and social relations in the language learning process. It would be clearly useful to attempt to formulate a set of principles based on the

broader conceptualization of second language acquisition—one that emphasizes the importance of the social as well as the cognitive aspects.

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