MOTIVATION: REOPENING THE RESEARCH AGENDA

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0. Introduction

Motivation is not currently the subject of extensive investigation in applied linguistics, despite the interest that many teachers have in it. Although there is intermittent discussion of social-psychological explanations of second language (SL) learning in major journals (Au 1988; Soh, 1987; Svanes, 1987) and although introductory texts on second language learning inevitably contain a chapter or sub-unit on the topic of motivation (Brown, 1987; Dulay, Burt & Krashen, 1982; Ellis, 1985; Klein, 1986; Stern, 1983), one indication of the current

lack of vitality of research in this area is the fact that the discussion of motivation in such texts is curiously isolated from broader theoretical concerns. As far as second language acquisition theory is concerned, motivation is typically grouped together with various aspects of personality and emotion miscellaneous factors which may play a role in acquisition. Current SL discussion on this topic lacks validity in that it is not well-grounded in the real world domain of the SL classroom, nor is it well-connected to other related educational research (though this should be particularly important in an interdisciplinary area). In this paper, we first review the limitations in what the SL research community has generally termed "motivation". Then we note the difference between the way the term has been used by SL researchers and how it is used by regular teachers. Taking these two points as indicative of the problematicity of this area of work at present, we then go on to review educational and psychological research done on the topic which should inform SL studies. We conclude by setting out a research agenda which if carried out might redress the current unsatisfactory understanding of this topic in the SL field.

1. The traditional SL approach to motivation

All approaches to understanding the role of motivation in second language learning have shared in varying degrees two essential features, both of which have been limiting, in our opinion. First, the major approaches have been social-psychological. Motivation has been consistently linked with attitudes towards the community of speakers of the target language, with a willingness to interact with such speakers, and with some degree of self-identification with the target language community. The most influential work in the field by far has been that of Gardner and Lambert and their associates in Canada, beginning in the 1950's and continuing to the present (Gardner, 1968, 1980, 1983, 1985, 1988; Gardner, Clement, Smythe & Smythe, 1979; Gardner & Lambert, 1959, 1972; Lambert, 1967). Other models of the relation between motivation and second language learning, all of which have been heavily influenced by the work of Gardner and Lambert and maintain the social-psychological perspective, include those of Schumann (1978, 1986), Giles and

¹ In the sense used by e.g., Brinberg & McGrath (1985), with regard to their "conceptual" and "substantive" domains; or alternatively in terms of Glaser & Strauss' (1967) criterion of "fitness".

his associates (Beebe, 1988; Beebe & Giles, 1984; Giles & Byrne, 1982), and Krashen (Krashen, 1985; Dulay, Burt & Krashen, 1982).

Second, despite the traditional tripartite distinction between cognition, motivation, and affect (Isen, 1984), all of these lines of second language research have tended to group affect, especially attitudes, and motivation together. As Ellis has observed, there has been no general agreement on definitions of 'motivation' and 'attitudes' or of their relation to one another (Ellis, 1985, p. 117). Consequently, the term *motivation* has been used as

a general cover term—a dustbin—to include a number of possibly distinct concepts, each of which may have different origins and different effects and require different classroom treatment. (McDonough, 1981, p. 143)

1.1 Gardner's approach to motivation

Gardner & Lambert (1959) first made the distinction between integrative motivation and instrumental motivation that has influenced virtually all research on the topic of motivation and SL learning. The basic idea is appealing. Motivation is identified primarily with the learner's orientation towards the goal of learning a second language. Integrative motivation occurs when the learner's goals for learning a second language are derived from positive attitudes towards the target language group and the potential for integrating into that group, or at the very least an interest in meeting and interacting with members of the target language group. Instrumental motivation refers to more functional reasons for learning a language: to get a better job or a promotion, to pass a required examination, or just to be a well-educated person.

From the beginning of this line of theory and research, integrative motivation was held to be a superior support for language learning. Gardner (1979) suggested a link between integrative motivation and additive bilingualism, and between instrumental motivation and subtractive bilingualism. In a number of studies, Gardner found that success or failure in learning French in Canada was associated with whether students wanted to become part of French culture, as opposed to just learning French for instrumental reasons. Gardner has also been primarily responsible for the continued development of this model of motivation in second language learning, including the development of a validated battery of testing

instruments, the "Attitude/Motivation Test Battery" (ATMB: Gardner, 1985; Gardner, et al., 1979), which has stimulated a large number of empirical studies, together with attempts to synthesize the results of such studies into a revised model which Gardner now calls the socio-educational model (Gardner 1979, 1980, 1985, 1988).

Gardner's socio-educational model continues to stress the idea that languages are unlike other school subjects in that they involve learning behavior typical of another cultural group, so that attitudes towards the target language community will at least partially determine success in language learning. Having been elaborated considerably, the model differentiates among cultural beliefs arising from a social milieu, motivation as a source of individual differences in language learning, formal and informal learning situations, and linguistic and nonlinguistic outcomes. These elements of the model are considered to be causally linked, on theoretical and empirical grounds (Gardner, 1985). As suggested by Au (1988), the socio-educational model can be evaluated with reference to five hypotheses:

- 1) The integrative motive hypothesis: an integrative motive will be positively associated with second language achievement.
- 2) The cultural belief hypothesis: cultural beliefs influence the development of the integrative motive and the degree to which integrativeness and achievement are related.
- 3) The active learner hypothesis: integratively motivated learners are successful because they are active learners.
- 4) The causality hypothesis: integrative motivation is a cause; second language achievement, the effect.
- 5) The two-process hypothesis: aptitude and integrative motivation are independent factors in second language learning.

The degree to which empirical studies support these hypotheses is controversial. Three attempts have been made to synthesize research findings, by Oller (1981), Au (1988) and by Gardner himself (1985). Criticism of the model has focused on the integrative motive hypothesis and the causality hypothesis.

With regard to the superiority of integrative motivation, it is by no means clear that this is supported by the empirical evidence, since contradictory results have emerged from studies in different contexts. We will not attempt to review the numerous individual studies here, but as summarized by Oller and Au, the results from such studies have included nearly every possible relationship between various measures of integrative motivation and measures of proficiency: positive, nil, negative, and uninterpretable or ambiguous (Au, 1988). Other studies have found correlations that disappeared when other influences such as age were controlled for statistically (Oyama, 1978; Purcell & Suter, 1980). Oller (1981) suggests that such results indicate that the relationship between affective factors and motivation and language learning may be "an unstable nonlinear function that varies greatly across individuals, contexts, and learning tasks" (Oller, 1981, p. 15).

With regard to the causality hypothesis, numerous researchers have proposed that achievement might actually be the cause instead of the effect of attitude (Backman, 1976; Burstall, Jamieson, Cohen, & Hargreaves, 1974; Hermann, 1980; Savignon, 1972; Strong, 1984). Successful SL learners might tend to acquire positive attitudes towards both language learning and the target language community as a result of doing well, while relatively unsuccessful learners might acquire negative attitudes.

Gardner's response to such criticisms (Gardner 1980, 1985, 1988) has been that while existing research demonstrates associations and cannot provide unequivocal answers to causal questions, his own review of the extensive literature assessing the modification of attitudes as a result of participating in various second language programs (often an objective of such programs) indicates "no support for the notion that achievement influences the nature and amount of attitude change" (Gardner, 1985, p. 99).

With respect to the interpretation of studies assessing the relationships among integrative and instrumental attitudes, motivation and language proficiency, while relationships among these variables do vary from sample to sample, Gardner believes (despite Oller and Au) that the variation seems meaningful given the nature of the community. Moreover, he admits that there is no reason that instrumental motivation should not play a dominant role in some cultural contexts and that there is no necessary link between integrative attitudes and language learning because "not everyone who values another community positively will necessarily want to learn their language" (Gardner,

1985, p. 77). Indeed, Gardner asserts that "the source of the motivating impetus is relatively unimportant provided that motivation is aroused" (1985, p. 169).

In his current version of the socio-educational model, Gardner (1985, 1988) points out repeatedly that motivation for language learning includes not only goal orientation, but the desire to learn the language (whatever the reason), plus attitudes towards the language learning situation and the activity of language learning, plus effort expended in furtherance of such goals. What is not often noticed or commented upon, however, is that the "integrative motive" in Gardner's model is no longer equivalent to attitudes towards the target language community and is not equivalent to a score on the "integrative orientation" subscale of the AMTB or any other subscale of the AMTB. Rather, it is a label applied to a factor analytic reduction of the data obtained for a particular sample, and refers to a factor to which scores from many different subscales of the AMTB have contributed. Since the various attitudinal and motivational measures that contribute to the operationalization of "integrative motive" vary, there is no constant definition of integrative motivation across studies, and in any particular study the contribution of integrative attitudes to what is called integrative motivation may be quite small.

It should also be noted that the "motivational intensity" scale of the AMTB (and possibly self-report measures in general) appears to be a poor measure of the degree to which learners are actually motivated to learn. The scale consists of items such as the following:

When it comes to French homework, I:

- a. put some effort into it, but not as much as I could
- b. work very carefully, making sure I understand everything
- c. just skim over it

Chapelle and Roberts (1986) conducted a study with Spanish and Arabic learners in an intensive English program, and found significant negative correlations between scores on the motivational intensity score and all eight measures used to measure language proficiency. One reason suggested by Chapelle and Roberts for this finding is that the measure was validated using Anglo students in a foreign language situation and that international students may respond differently to questions of effort. In this connection, it is noteworthy that Schumann (1978b) explicitly discounted the positive responses

of his subject "Alberto", an adult Spanish-speaking learner of English, on a self-report measure of motivation because aspects of his life style contradicted his claims of being strongly motivated to learn English.

1.2 Other approaches to motivation and SL learning

Speech Accommodation Theory shares with Gardner's socio-educational model a social-psychological approach to the relationship between motivation and SL learning. Giles and Byrne (1982) have presented a model in which motivation is seen as central to SL learning, and agree with Lambert (1967) and Gardner (1979) that identification with the target language community is crucial for learning. In contrast to Gardner's model, which is intended to account for language learning in a school context, speech accommodation theory is not limited to the educational context (nor to acquisition, since it encompasses style shifting in linguistic performance as well), but it is restricted to explaining the linguistic behavior of members of subordinate groups.

As outlined by Beebe (1988), speech accommodation theory stresses ethnolinguistic vitality and its relationship to an individual learner's self-concept. The particular contribution of the model has been the delineation of theoretical scenarios for success or failure in SL learning, based on factors related to in-group identification, in-group vitality, and group boundaries. The model has not been sufficiently tested to permit evaluation, and there have apparently been no studies dealing with the motivational component of the model.

Schumann's Accultural Model (Schumann, 1978, 1986), expressly restricted to SL learning in a naturalistic setting, also emphasizes the importance of some level of integrative motivation, predicting that learners will acquire the second language only to the degree that they acculturate to the second language community. Motivation is seen as only one of many social and psychological factors contributing to the construct of acculturation in this model. Schumann argued that Alberto failed to learn English because of psychological and social distance from target language speakers, and that learners with limited functional reasons for language learning (instrumental motivation) are likely to develop the type of pidginized language exhibited by Alberto. Other studies undertaken within the context of the acculturation model have failed to provide strong support for the model. Two possible reasons for this have been suggested by Schumann himself (Schumann, 1986).

First it may be impossible to gain consensus on the definitions and relative importance of the numerous variables subsumed under "acculturation" to test the model. Second, the effects of affect may be indirect and variable, so that strong direct correlations cannot be expected.

Thus, Schumann appears to have abandoned his earlier claim that acculturation is the major causal variable in SLA, demoting the concept to one that acts only as a remote cause in a chain of factors. In his current view (Schumann, 1986), the importance of acculturation, including the factor of motivation, is that it brings the learner into contact with TL speakers; verbal interaction with those speakers results in the negotiation of appropriate input, the immediate cause of language acquisition.

Schumann's acculturation model is therefore now tied to Krashen's well-known monitor model of SLA (Krashen 1981, 1982, 1985), and particularly to that part of the model known as the input hypothesis. Yet Krashen does not see the primary role of motivation in SLA as tied to the provision of comprehensible input. Instead, motivation is seen as a component of the "affective filter":

The filter is that part of the internal processing system that subconsciously screens incoming language based on ... the learner's motives, needs, attitudes, and emotional states. (Dulay, Burt & Krashen, 1982, p. 46).

Elsewhere, Krashen has referred to the filter as something that prevents input from reaching "that part of the brain responsible for language acquisition, or the language acquisition device" (Krashen, 1982, p. 31). It should be noted that (as in Schumann's model), motivation is now seen as a component of some more encompassing concept, and that once again, motivation is seen as affect.

The concept of the affective filter is often considered the weakest part of Krashen's theory of second language acquisition (Gregg, 1984; Pienemann & Johnston, 1987). From the point of view of theoretical adequacy, the affective filter hypothesis may make the monitor model unfalsifiable. Krashen has provided no explanation of why the filter is hypothesized to operate in adults but not in children. The concept appears close to that of a "mental block", and thus has more connections to popular than scientific psychology; whereas the

concept of filters in psychology has been traditionally related to attention and other cognitive aspects of information processing. In addition, it has been argued that the whole concept of filters in cognitive processing is misleading:

In mathematical information theory, a filter is any input-output device such that some of the information reaching the input has no effect on the output. Formally speaking, every human being filters out cosmic rays, insect pheremones, and every other kind of information that does not affect his behavior. Psychologically or biologically, however, this notion makes no sense.... Selection is a positive process, not a negative one. (Neisser, 1976, pp. 79–80)

1.3 Interim summary

The popularity of the integrative-instrumental contrast, together with the existence of standardized instruments, has meant that this particular conception of motivation has tended to dominate all other ways of looking at the idea in the SL field. The past represents an extensive line of work focused primarily on social attitudes, a distal factor, rather than on motivation per se. Since research focused on the question of integrative versus instrumental attitudes, motivation (not directly measured) and proficiency has produced results which are mixed and difficult to interpret, the best that can be said is that different attitudes and goal orientations seem to be important, but in ways that vary from situation to situation. For many SLA theorists, objections such as those advanced by Oller and Au add up to serious reservations regarding "the whole question of attitude as a predictor of any kind" (Pienemann & Johnston, 1987, p. 58).

Ellis (1985) has pointed out that it is not at all clear *how* motivation affects learning. In this respect, we find valuable Schumann's comment that motivation is important because it spurs learners to interact with target language speakers. We also tend to agree with Gardner's focus on the active learner. Gardner has pointed out the essential difference between his model of motivation and Krashen's concept of the affective filter:

That is, rather than assume that integratively-motivated individuals somehow find it easier to take in linguistic material, it seemed more parsimonious to hypothesize that they simply put more of themselves into the language learning task. (Gardner, 1988, p. 113)

In the past, suggestions such as these have not received much attention, partly because of the focus within SL learning theory on issues such as acquisition orders, developmental sequences, the role of Universal Grammar, and other matters over which language learners are presumed to exercise no choice. Chomsky (1975) has suggested that motivation is irrelevant for first language learning because learners can no more choose to learn languages than certain cells in an embryo can choose or fail to choose to become an arm or leg, matters that are biologically determined. However, it is obvious that there are many aspects of SL learning that are subject to active choice. In various learning contexts, one may be able to choose to take a course or not, to pay attention in class or not, to re-enroll or drop out, to study for an hour or two or not at all, to master the lexicon of one field rather than another, to talk to native speakers on particular occasions or to let the opportunity pass, and to persist in the struggle to communicate meanings in a second language or not. future, however, seems likely to accept that the successful SL learner is very involved in learning, both at the metacognitive level at which general executive functions or strategies such as planning (Crookes, 1988, in press) and the allocation of attention (Schmidt, in press) apply, as well as at the level of taskspecific, cognitive strategies (O'Malley, Chamot, Stewner-Manzanares, Russo, & Kupper, 1985). As the SL research community gradually pulls out of its anachronistic concern with unconscious learning, and accepts the conscious nature of developing command over a SL it seems reasonable that motivation, as it controls engagement in and persistence with the learning task, should also be considered worthy of renewed scrutiny.

2. Non-SL approaches to motivation

2.1 Practitioners' usage

We have referred to the invalidity of SL treatments of motivation in terms of their distance from ordinary language use of the word. When teachers say that a student is motivated, they are not usually concerning themselves with the student's reason for studying, but are observing that the student *does* study (or at least engage in teacher-desired behavior in the classroom and possibly outside it). Most teachers wish to motivate students (Fransson, 1984;

Marshall, 1987; McDonough, 1981), and attempt to do so in a variety of ways, of which altering attitudes to the subject matter is just one. In general, it is probably fair to say that teachers would describe a student as motivated if s/he becomes productively engaged on learning tasks, and sustains that engagement, without the need for continual encouragement or direction. They are, that is to say, more concerned with motivation than affect. Given the general lack of SL research on classroom matters until the present decade (Chaudron, 1988), it is perhaps not too surprising that this teacher-validated use of the term *motivation* has not been adopted by SL investigators. However, as will be seen, it is a theme which has been substantially explored outside SLA, particularly in social and educational psychology.

2.2 Motivation in psychology

The first psychological discussions of motivation centered on the concept of instinct (e.g., James, 1890), and subsequent development of the topic during most of the first half of this century concentrated particularly on organic survival-oriented needs, or "drives" (e.g., Hull, 1943; Woodworth, 1918). A more mature, cognitively-oriented treatment of the topic appeared early in social psychology, following the work of Lewin (e.g., 1951), but motivation was slower than other areas of psychology to recover from the influence of behaviorism, and at the same time, motivational approaches in social psychology were actually displaced by the strength of the cognitive line (Sorrentino & Higgins, 1986). Now that the cognitive revolution has been wellestablished, there has been a reformulation of approaches to motivation (Ball, 1984) following particularly the work of McClelland (e.g., 1965), Atkinson (e.g., 1964), and Weiner (e.g., 1972). The result of the emphasis on humans as information processors has been to allow psychologists to begin to investigate the extent to which cognition affects motivation, on the one hand, and affect, on the other (Isen, 1984; see also Bolles, 1974; Weiner, 1972). It should be noted, however, that most recent psychological theories still treat cognition as separate from motivation and/or affect (Kuhl, 1986).

What then, in current psychology, is motivation? A simple definition² is provided by Keller (1983, p. 389):

² Like most definitions, this oversimplifies somewhat. For a more thorough treatment of the matter, see Kleinginna & Kleinginna (1981), who provide 98 representative definitions grouped into nine categories.

Motivation refers to the choices people make as to what experiences or goals they will approach or avoid, and the degree of effort they will exert in that respect.

Looking in more detail, the term may be considered both with regard to its external, behavioral characteristics and its internal structure. Maehr and Archer (1987) point out some key behavioral aspects of motivation. First is direction—a decision to choose one among a set of possibilities, and particularly to attend to one thing and not another, or engage in some activity and not others. Second is persistence—concentrating attention or action on the same thing for an extended duration. Third is continuing motivation, which is the inclination to return to previously interrupted action without being obliged to by outside pressures. Fourth is activity level, which is more or less equivalent to effort, or intensity of application.³

In considering internal characteristics of motivation Keller's (1983) learning-oriented theory⁴ of motivation identifies four major aspects of motivation: a) interest; b) relevance; c) expectancy; d) outcomes.⁵ The first of these, *interest*, in cognitive terms is a response to stimuli on the basis of existing cognitive structures such that we make a decision to attend to them, and possibly to attend at length, and become involved in complex active behavior which revolves around such stimuli. The second, *relevance*, is a prerequisite for "sustained motivation [and] requires the learner to perceive that important *personal* needs are being met by the learning situation" (1983, p. 406). The most basic of these is what Keller calls "instrumental needs", which are served when the content of a lesson or course matches what the student needs to learn. Other important needs arise not out of what must be learnt but from the way human beings need to learn (and how they need to behave in social situations in general). Keller observes that humans have needs for

³ Maehr & Archer also identify a fifth, "performance"—this seems more of an indicator of motivation. When otherwise unexplainable changes in performance occur, they say, this may be the result of motivation.

⁴ Motivation is not an area in want of theories. We are utilizing Keller's here, in preference to more well-known mainstream psychology theories of motivation, because of its breadth, and because of its specific orientation to learning.

⁵ See also Wlodkowski (1985), who has developed a very similar approach.

achievement, for affiliation, and for power. That is to say, we like to be successful, and usually find activities in which we can achieve success pleasurable. We like to establish ties with people—solitary activities being often less valued—and adults are accustomed to and desire a measure of control over the situations in which they find themselves. The third heading, expectancy, concerns a person's attitudes towards the likelihood of success or failure on a task, which in turn appear to affect actual success. Finally, there is that aspect of motivation which is perhaps the most traditional: motivation which results from reward or punishment, or outcomes. Activities for which the motivating forces are outcomes have been referred to as extrinsically motivated, as opposed to those which are intrinsically motivating (e.g., Deci, 1975).

3. Implications of current conceptions of motivation for SL learning

A thorough understanding of the interface between motivation and SL learning requires viewing language development broadly. Relevant limitations to SL research and theory during the past decade have been the emphasis on informal learning as the archetypal SL learning situation, and a corresponding lack of attention to classroom learning; a shortage of long-term studies; and a non-cognitive approach stemming from a tendency to see SL learning as unconscious and therefore difficult to reconcile with the concept of motivation, which is associated primarily with effort, choice, voluntary behavior and other phenomena associated with consciousness. Together, these may explain why theories such as Lambert's social psychological model and Giles' accommodation theory have simply posited a connection between attitudes/affect and language learning outcomes without any discussion at all of intervening psychological processes of learning, while the role of motivation in Krashen's theory is limited to that of a filter on unconscious processes. In contradistinction to these positions, we see SL learning as a long-drawn out process, often taking place both inside and outside the classroom over a number of years; and above all, as one in which the learner can often take an active role, at many levels of the process. We will consider motivational concerns in terms of (1) the micro level, which is concerned with motivational effects on the cognitive processing of SL stimuli; (2) the classroom level, dealing with techniques and activities in motivational terms; (3) the syllabus level, where instructional design considerations come into play; and (4)

considerations relevant to informal, out-of-class, and more long-term factors.

3.1 The micro level

Of Maehr and Archer's (1987) major behavioral aspects of motivation (mentioned in Section 2.2), perhaps "direction"—attending to stimuli and engaging in activities—is most relevant here. In terms of SL learning theory, engaging in a language learning activity allows for the possibility of input, while attending to something and persisting in concentrating attention on it relate directly to the concept of "intake" (Chaudron, 1985, Corder, 1967).

The importance of attention in SL learning has been emphasized by McLaughlin, et al. (1983), and more recently by Scovel (1989), who has proposed a model of SL acquisition containing twelve interacting variables or factors. In Scovel's model, the attention interface is central: All components influence the amount of attention paid to all other components at any point in time, and attention affects the importance of each component. Schmidt (in press) has claimed that conscious awareness of SL stimuli always co-occurs with learning, and that what the learner attends to and becomes aware of (or notices) is what becomes intake.

Noticing and attending are cognitive processes mediated by both motivational and affective factors. This is not to claim that attention is entirely under voluntary control, since what one pays attention to at a particular time is clearly constrained by such factors as frequency, perceptual salience, linguistic complexity, skill level, expectations, and task demands (Schmidt, in press). In addition, attention may be involuntary, as when events capture our attention. However, control of attention may be voluntary, for example when we decide to pay attention to something and do, whether guided by enduring dispositions and goals or momentary intentions (Kahneman, 1973; Kihlstrom, 1984). In Baars' (1988) cognitive theory of consciousness, attention (defined as control of access to consciousness) is guided by sets of hierarchically structured goals and subgoals, ranging from life plans to attempts to achieve social influence or get good grades in a class to momentary intentions such as answering a question that has just been asked (Baars, 1988, pp. 225–245).

Processing of the stimuli, too, may be influenced by motivational factors. For example, in a series of studies of motivation (summarized in Eysenck, 1982), participants were told that a monetary reward would be given for recall of (first language) vocabulary items (a high-incentive condition), or would be

given for only some items (a "mixed list" condition), or for none (low-incentive condition). The typical finding was

that high-incentive items are significantly better learned than low-incentive items with mixed lists, but there is no incentive effect [within a list] with unmixed lists. (Eysenck, 1982, p. 69)

This results from differing rehearsal of items in short-term memory according to whether or not a reward is expected (Atkinson & Wickens, 1971). Since the reward will be the same for all items in unmixed lists, no effect is seen there. (See also Cuvo, 1974; Loftus, 1972.) In a related study of cued recall of word list items (Eysenck & Eysenck, 1980) there were two different types of cues: those with a sound connection to the learned items and those with a meaning connection. Both connection types could be close (strong) or distant (weak). High incentive items were recalled better than low incentive items regardless of the type of cue (sound or meaning), but interestingly, "high incentive improved recall to weak cues but had no effect with strong retrieval cues". Eysenck infers that "high-incentive words were processed in terms of both readily accessible and less accessible features"—that is, a more extensive kind of processing was taking place for those words which subjects knew were going to be useful, important, or specifically, remunerative and that such processing must involve differential allocation of attention. Similar patterns have been found in reaction time tasks, where knowledge of results is regarded as motivational. In tasks done under knowledge of results conditions, alertness precedes the task and decreases reaction time. Studies of vigilance, too, attest to the fact that motivated (i.e., better paid) participants are better able to maintain the necessary levels of alertness over long periods (Eysenck, 1982).

The connection from this first language experimental work on the motivation/attention interface to SL learning exists first, simply in terms of the likely importance of attention in SL learning, and second, by way of research on learning strategies. O'Malley, et al., (1985) include as important metacognitive learning strategies both "directed attention" (deciding to attend to a learning task and to ignore distractions) and "selective attention" (deciding to attend to specific aspects of language input). It is important to note that language learners can do this, as shown in studies by Hulstijn and Hulstijn

(1984) and Van Patten (1989) in which language learners were asked to selectively attend to either language form or language content, but equally important to note the need for motivational support for selective attention. While conscious goal images may be temporarily invoked to support the allocation of attention simply in response to an experimenter's request, personal relevance is a critical variable, and individuals will have a difficult time forcing themselves to attend for long to tasks that they perceive as irrelevant (Baars, 1988, p. 235).

3.2 The classroom level

3.2.1 Preliminaries

At the opening stage of a lesson, Keller's *interest* factor may have particular implications for classroom practice. It is possible that interest may be engendered in students partly by remarks the instructor makes about the forthcoming activities. In a typical SL lesson, the initial, "presentation" stage is likely to have some preparatory framing remarks, but these usually only refer to the content of the material, or the teaching point. Brophy & Kher (1986), in discussing "student motivation to learn" (loosely, classroom-specific aspects of motivation) in content classes have referred to the comparative absence of such remarks. In regular elementary and high school classes, students demonstrate little motivation, and teachers make little attempt to motivate. Brophy & Kher are of the opinion that students can be socialized to see some aspects of classroom learning as actually engaging and enjoyable, but in the absence of teacher statements to this effect, such a perception is unlikely to emerge in the prevailing school climate. They conclude:

If the students we have been studying are typical ... then it appears that there will continue to be little evidence of student motivation to learn in the typical classroom until teachers are trained to socialize such motivation in their students. (1986, p. 285)

We would like to think that the picture is not so bleak in SL classrooms (particularly those ESL classes where motivation arises from the 'relevance' of the content). The point is, however, that even the straightforward framing remarks initiating an activity or the presentation stage of a lesson deserve to be

assessed in the light of motivational considerations.

3.2.2 Materials

The factor of *interest* is also important for materials, though the others are also of concern. The commonsense idea that materials which are interesting aid learning has been documented for content subjects (Shirey & Reynolds, 1988). However, there is as yet no direct indication that this finding applies to SL learning, despite the suggestions of some SL writers that learning proceeds best when students are engaged in real communication. It is not a foregone conclusion, either, as it might be that in SL learning cognitive resources would be allocated to the interesting message or stimulus itself, rather than the language in which it was couched. (On the other hand, this is not an argument for the use of uninteresting or meaningless materials.) In discussing materials (as opposed to the activities they embody) we may consider them in terms of format and content.

In the absence of direct studies in this area, some indirect evidence may be relevant. It is difficult to be sure of the reasons for the success or failure of any method in ESL, given the general absence of strong empirical evidence for or against, and given the presence of the support of governments and publishers (Richards, 1984). But one striking characteristic of audiolingual materials (particularly so-called first generation ALM materials, e.g., Lado & Fries, 1957) was their repetitive content and unstimulating appearance on the page. Stern (1983, p. 465) remarks that "teachers ... complained about ... the boredom they engendered among students", and Prator (1980, p. 15) notes that as a result of ALM techniques "much of the motivation for studying the language [was] lost". In contrast, more recent textbooks (particularly those influenced by "communicative approaches") increasingly use varied typographical layouts, color illustrations, photographs, and often page formats which have been borrowed from the world of journalism (see e.g., the bestselling Streamline series: Hartley & Viney, 1984, for all of these characteristics). Since the publishing market is subject to Darwinian pressures concerning the degree to which their products attract buyers (who are usually teachers, however, rather than students) this is one case where what is on the market may have some justification. It is also interesting that although SL researchers have hitherto rarely utilized the practitioner-validated meaning of

"motivation", discussions of SL textbooks often adopt it (e.g., Long, 1977; Allen & Robinnett, 1984).

Besides format, it seems that materials writers, at least, give consideration to the appropriacy of content, both with regard to age and to culture. That is to say, the same linguistic material might be manifested rather differently in texts aimed at children, teenagers, and adults; and differently again in texts targeted at particular countries. Anecdotal reports of the learning of less-common SLs attest to the considerable reluctance of adults to learn from children's texts, even when they are the only available simple materials. Although we are not aware of any studies of the motivational effects of age-appropriate materials on learning, publishing companies obviously assume it to be of relevance to sales.

3.2.3 Activities

As mentioned, relevance as used by Keller deals not only with instrumental needs (ascertained in SL course design through needs analysis, discussed below) but also "personal-motive needs" such as our needs for power, affiliation and achievement. Other things being equal, it may be hypothesized that activities which allow for these factors to come into play are more likely to result in sustained engagement than those which do not. The various recent "communicative approaches" are characterized by a fairly extensive use of group work⁶, which has been said to result in greater motivation among students (Long & Porter, 1985). Group work allows students to influence both each other, and also, for example, the sequence of activities followed by a group (Littlejohn, 1983). Collaborative group effort serves the need for affiliation, and makes it easier for a feeling of achievement to be attained, since it removes to some extent the need for one individual's achievement to be attained at the expense of another's — the condition which would obtain in more competitive arrangements. It can also be noted that cultural values can play a part in motivating students: "Individual motivation is increased to the extent that an activity is positively valued by the individual's cultural reference groups" (Keller, 1983, p. 414).

Interest is closely related to curiosity, and given standard SL teaching practices, developing curiosity means using less orthodox teaching techniques and/or materials. (An example of an ESL text which contains exercises which

⁶ By no means a new idea in ESL—see Billings (1961).

encourage students to express their curiosity about how a SL works is Jones & von Baeyer, 1983.) Also, change is an essential part of maintaining attention, since otherwise habituation will set in. Therefore, a too-regular pattern of classroom routine (as may be produced by adherence to the many traditional SL texts which use the same format for each unit) should probably be avoided.

3.2.4 Feedback

From the viewpoint of current motivation research, teacher feedback should be primarily informative (Keller, 1983). An intriguing aspect of recent developments in this area is the apparent weakness of extrinsic rewards (those imposed or provided from outside) compared with those inherent in the activity or task (intrinsic rewards).

While an emphasis on external evaluation may momentarily enhance performance, it may negatively affect continuing motivation by ruling out the establishment of more intrinsic, task-related goals. (Maehr & Archer, 1987, p. 97)

The classic study of Lepper, Greene, & Nisbett (1973) dealt with preschoolers who were offered an opportunity to draw pictures with materials familiar to them from an art class. One group got no reward for the activity, one got a surprise reward, and one was shown a reward and told they could win it by performing the activity. Subsequent observation of the children found that those who had experienced the latter condition then chose the activity less when it was freely available without any reward. This finding has been extensively investigated: Lepper (1983) cites 47 studies covering all age ranges from preschool to college which bear out the original results.

For teacher feedback to be most efficiently utilized, it needs to be provided not only at the end of an activity, but also at the onset of a similar, subsequent activity (Keller, 1983). In addition, teachers' feedback should be informational, directing the student's attention to what s/he did that resulted in success (see below, re ascription of success). In providing feedback, instructors need also to take into account the cultural variation in need for achievement versus need for affiliation (Cooper & Tom, 1984; Sloggett, Gallimore, & Kubany, 1970), recognizing that some cultures allow for individual excellence, with toleration of competition (sometimes intense)

whereas others strive mainly for group excellence. In some cultural areas, therefore, individuals may feel a great sense of unease if forced to stand out from the group, with associated demotivating effects if classroom SL practices call for this.

3.2.5 Effects of student evaluation

Student expectations of self, and self-evaluations of likelihood of success appear to have important motivational effects. As a result of their experiences, some students develop the impression that events are under their control, and that effort will lead to academic success. Others, through repeated failures or through being in situations where they cannot influence the contingencies of reward conditional on their behavior, have learned that they cannot bring about comfort or success through their actions. These patterns are variously referred to as locus of control (deCharms, 1984), self-efficacy (Bandura, 1982), or learned helplessness. The work of deCharms (1984) is particularly prominent in this area. Extending the findings which exist concerning a variety of learning experiences to language (see Weiner, 1984, for a summary), it seems likely that students who have experienced failure in SL learning (arguably a large proportion of SL learners—Gatenby, 1948; Ingram, 1982) and attribute this to their own inabilities rather than problems with the course or text, are likely to have a low estimate of their future success in SL learning, which may in turn lead to low risk-taking, low acceptance of ambiguity, and other behaviors which are probably negatively correlated with success in SL learning. It is desirable both to prevent, or at least to modify such ascriptions.

One way to do this is by using cooperative, rather than competitive goal structures (Ames, 1984, 1986). In cooperative learning (e.g., Slavin, 1983), groups of students work on learning activities structured so that there is positive interdependence: typically, all parties have information or a specific role, and for success to be achieved all must collaborate; in addition, often the reward or grade for the work is assigned on the basis of the overall group performance. A study by Ames (1981) indicated that whereas in a competitive learning situation (typical of most schools), self-perceptions following success or failure were based on how a student performed relative to his/her fellow students, in the cooperative situation investigated

group success tended to alleviate the otherwise negative self-perceptions that evolve from a poor individual performances; however, group failure tempered the positive self-perceptions of a high performer... we might suggest that cooperative structures can serve to modify intrapersonal perceptions of students either positively or negatively depending on the outcome of the group (Ames, 1984, p. 182)

This finding can serve to explain how it might be that a gifted child placed into a highly competitive academic school can yet develop feelings of inadequacy, and contrariwise how the under-achiever, placed in a supportive learning environment, can begin to change self-perceptions and develop the feeling that for him or her, success is in fact possible.

A related issue concerns the effect which setting or having "performance goals" has on behavior. Research suggests that that if the goal of individuals is to achieve positive judgments concerning their behavior (i.e., good grades), they will wait till certain that ability is high before displaying it for judgment, and will otherwise avoid behavior which could expose them to evaluation (Dweck, 1986). If students actually have learning as an objective, they are more likely to engage in challenging tasks and activities where errors may be made. That is to say, in SL classrooms, teachers may need to discourage a concern with grades, and structure classes so as to encourage real learning, otherwise unsolicited participation and especially risk-taking will be low.

3.3 The syllabus/curriculum level

For some time now, ESL course design has paid explicit attention to the concept of needs analysis (Richterich, 1972; Robinson, 1987), on the reasonable assumption that a program which appears to meet the students' own expressed needs (or whatever their supervisors believe to be their needs) will be more motivating, more efficient, and thus more successful. Although the proponents of this aspect of curriculum design rarely if ever make explicit reference to motivational research, they have taken for granted the importance of the matter (see, e.g., Wilkins, 1976), and their aims are entirely congruent with recent developments in this area.

At one level, the findings on e.g., locus of control and the need to change inefficient self-perceptions implies, for example, allowing a measure of flexibility in the curriculum, so that students can contract for a particular grade in accordance with a particular level of performance, or, to take another simple example, it means allowing a gradual approximation to a particular level of work through repeated revision of initially ungraded assignments.

From a different perspective, the work of McCombs (1984, 1988) suggests the possibility of adding instruction in motivational control strategies and other metacognitive strategies to syllabus content. In a detailed description and evaluation of a motivational skills training program designed to enhance "continuing motivation to learn", she states that

students receiving such training prior to entering a technical course are more motivated and achieve higher performance scores than control students... the format for such training must be carefully chosen to reflect a combination of self-instructional materials (wherein students can experientially take responsibility and control of their own learning), augmented by instructor facilitation and group activities (wherein students can observe relevant role models and participate in group sharing and problem solving experiences). (1984, p. 213)

Teachers who engage low-achieving students in this sort of modification of attitudes are themselves working on their own teacher expectancies—finding ways to ensure that their high expectancies for students actually result in success (Eccles & Wigfield, 1985). The development of this aspect of motivation is particularly relevant to SL learning, given its long-term and out-of-class aspects, and would be in line with other recent developments in what should constitute the content of SL instruction, in that it increasingly seems desirable that SL teachers not only teach the language but teach how to learn the language (e.g., O'Malley, et al., 1982).

3.4 Outside the classroom (informal learning)

The possibility often exists for SL learning to continue beyond the classroom. This applies most obviously to ESL countries, but in many "FL" countries the target language is available in some way to the learner outside the classroom. Even in those where there are no speakers of English or other media, learners do have each other. One of the characteristics of good

language learners (Naiman, Fröhlich, Stern, & Todesco, 1978) is their utilization of strategies to contact and sustain interaction with native speakers of the target language. Anecdotal reports attest to the success of some learners from countries where there have been no sources other than those originally provided in the classroom, but where determined learners have gone far beyond the requirements of formal courses, so that they seem near-native in performance on first arriving in an English-speaking country. As Rubin & Thompson state (largely on the basis of experience rather than empirical data):

language success may ultimately depend not only on ability but on persistence. You may have the potential to be a brilliant language learner, but if you fail to put effort into it, chances are you will not learn much. (1982, p. 5)

The role of motivation in informal SL learning contexts has been examined by both Krashen (1981, 1982) and Gardner (1985). However, while Krashen emphasizes the importance of motivation for subconscious "acquisition", Gardner sees the link between motivation and learning in informal contexts as due to the importance of opting in or out of opportunities for learning, which is greater than in formal instruction, where attendance may be forced:

Once students enter into an informal context, their level of intelligence and aptitude will how much language material is learned, but since their effects are contingent upon students entering the situation, they play secondary roles. (1985, p. 148)

We propose that the conception of motivation discussed in the present paper is as applicable to informal, naturalistic learning as to classroom learning, and that no different processes of learning are involved. In informal learning, as in formal classroom learning, the basic motivational issues are the same, although their relative weights may differ: does the learner seek out and take advantage of opportunities for input, and does the learner actively process the input for intake?

It is not easy to assess the role of motivation in informal learning at

present, as careful studies of adult informal learning in general are comparatively rare, and while some treat motivation explicitly (Kessler & Idar, 1979; Shapira, 1978; Schmidt, 1983, 1984; Schumann, 1978b), there are inherent problems with attempts by researchers to describe the motivations of language learners without bias. In essence, it is too easy to assume that an unsuccessful learner is lacking in motivation.

Diary studies may offer a better way to investigate the dynamics of motivational factors in learners, and a few studies have offered interesting insights into some of the factors mentioned here. Bailey (1983) has emphasized the force of competitiveness as motivation in her own and other's learning. Schmidt (1986) documented his motivations (including some obvious rationalizations) for deciding to stay in a Portuguese language class in Brazil: the other students were more advanced (competitiveness); he could not follow the lesson on the first day of class (expectation of failure due to task difficulty—see 'Expectancy', Section 2.2); the content of the course would focus on the subjunctive (perceived irrelevance of instruction). Schmidt examined his goals ("Would I rather get up early to go to class, or stay out very late at night partying with Brazilians, in Portuguese?"), and dropped the class (Schmidt, 1986:246).

Unger (1989) has provided an example of a more successful resolution of motivational conflicts. Enrolled in a residential Swedish language program in a rural setting, his long range goals were to develop Swedish as a second language for research purposes and to improve his spoken language proficiency. Frustrated by a class and an external learning situation that did not meet those needs, he redefined his learning goals, shifting priority back to the passive skills of reading, listening and vocabulary expansion that could be met through the course, with a consequent re-emergence of motivation.

It may thus be hypothesized that a number of strategies can be used to manipulate motivation, including the selection of appropriate goals and their periodic reevaluation (Larson & Smalley, 1972), periodic review of learning procedures and situations, and so on. Baars (1988) stresses the importance of metacognitive skills such as the ability to label one's goals and to guide one's own processes, and suggests that one way to make new goals effective is to tie them in with existing deep goals—thus it might be profitable to introduce instruction in such strategies into second language programs in foreign language as well as second language contexts.

4. A research agenda

Future research on a topic should be guided by more than a simple collection of questions drawn up by those familiar with the area. At present we can discern three alternatives to the usual process of selecting the most promising hypotheses solely on the basis of intuition and experience. First, an ethnographic approach may be used in obtaining careful observations of motivation in educational contexts. (See Watson-Gegeo, 1989, for a useful survey of this research strategy in the ESL field.) Second, action research can direct enquiry to practitioners' immediate concerns (see, e.g., Argyris, Putnam & Smith, 1985). Third is a slightly more structured approach, which would utilize the first two at various points, deriving from the work of Bunge (1967). He argues that scientific problems are problem systems, and suggests that the first step in dealing with poorly-defined problem systems should be an analysis leading to a partial ordering of questions relating to the topic or problem. This follows the basic sequence of description, analysis (of conceptual and methodological issues) and the more direct investigation of relationships. With regard to the topic of motivation, general answers to a number of questions are to some extent in hand, but as we have observed before, SL aspects of the matter have not been adequately dealt with. We have therefore stated these questions in terms of SL-specific motivation (developed from Bunge, 1967, pp. 193-4).

⁷ Ideally, there should a tested search procedure, but methodologists of science have not adequately addressed this area. The procedures advocated by the "received view" (Polkinghorne, 1983) in philosophy of science are the result of rational (i.e., non-empirical) reconstructions of scientific practice, influenced by value judgments concerning the epistemological priority of a given mode of argumentation and explanation. They do not necessarily correspond to the actual practices of scientists. Little is known of how best to generate hypotheses or research questions because philosophers of science have ruled this topic, "the context of discovery" (Reichenbach, 1938), out of court. Statements relating to how best to obtain or state a research problem, or how best to set out a research program, must therefore be taken as plausible heuristics, rather than proven effective procedures. For some discussion of recent developments in this area, see Crookes (1988).

- 1. How can motivation for SL learning be described?
 - 1.1 What are typical instances of situations in which motivation is intuitively recognized as acting (considering both formal and informal contexts)?
 - 1.2 What are factors on which SL motivation depends? What factors are concomitant with them?
 - 1.3 What types of individuals are motivated and under what conditions?
 - 1.4 What kinds of SL motivation are there? How are they related? (Attempt the development of a taxonomy.)

2. How is motivation for SL learning to be analyzed?

- 2.1 What point of view should an investigation adopt? Should a particular aspect of motivation be investigated, or should it be investigated across the board? Should investigations be descriptive, or should an attempt be made to manipulate motivation?
- 2.2 How is SL motivation to be defined conceptually?
- 2.3 How is SL to be measured or operationalized?

3. How is motivation for SL learning to be interpreted?

- 3.1 What SL motivation goes on under normal (equilibrium) circumstances?
- 3.2 Are there circumstances in which SL motivation emerges spontaneously? How can it be induced? How does it change over time?
- 3.3 Are there conditions under which it increases, or decreases?
- 3.4 What are the effects of motivation for SL learning on other relevant variables?
 What predictions can be made?

Many of the questions in this set have already been addressed partially, though by no means always in educational contexts, and rarely in SL contexts. Referring to section 1 of the list above, we need, quite simply, descriptive studies of motivation in SL contexts. Of the small number of case studies which exist (e.g., Bailey, 1983; Schmidt, 1986; Schumann, 1978; Schumann & Schumann, 1977; Unger, 1989; Wong-Filmore, 1976) most utilize the conception of motivation we have argued against in this paper, and generally do not address the more common classroom contexts. They certainly do not deal with motivation from the teacher's point of view.

The question 'What are factors on which SL motivation depends?' directs our attention to materials and teacher procedures, as discussed above.

Various points of departure are suggested by mainstream educational research in this area, with regard to the use of intrinsically motivating materials, teacher feedback, and so on. But we need to know whether, given the rather different nature of SL learning from that of regular content subjects, the implications of this research transfer directly.

The work of McCombs (1984, 1988) and others has suggested that certain types of learners are not motivated, and has indicated both why this is and how it may be altered. We are aware of SL learners who fail to persevere, who lack confidence in their abilities, but studies of failure to learn L2s are rare (despite the fact that this is the most common experience with SL learning: Long, 1988—see, however, Schumann, 1975; Shapira, 1978). Yet given the extended duration of effort needed (particularly under regular classroom conditions) for even the smallest reward8, long-term motivation would seem prima facie a most likely candidate for SL success.9 Bunge suggests generally the need to develop a taxonomy as part of the initial investigations of a phenomenon or topic area. In dealing with SL motivation, we are in a sense dealing with one element of a broad taxonomy of motivation, but we may be able to do justice to this particular heuristic by seeing to what extent various classifications of motivation apply to SL learning. The distinction between extrinsic and intrinsic motivation, for example, seems to apply; and as a matter of ground clearing we have already suggested that integrative and instrumental 'motivation' be redefined as affective rather than motivational. "Assimilative" motivation has been suggested (Graham, 1984), though again this may fit more in the affective camp. Other sub-categories of motivation may emerge with study, and their applicability to SL learning needs to be considered.

Section 2 of the list above sets out questions which are both matters which each investigator will need to decide before beginning work, and are topics which will need perennial surveying as research proceeds in this area. One may expect periodic reviews of the concept, and particularly of its operationalization. At the same time, a prudent researcher, embarking on an

⁸ Witness, for example, the modification of the Council of Europe's 'Threshold Level', setting a half-way point ('Waystage') as a major curriculum goal because of the supposed negatively-motivating effects of setting a base target which required more than two years of study (van Ek & Alexander, 1975, p. 13).

⁹Apart from case studies, factors affecting the continuation of SL learning, specifically, have been rarely considered, but see McGroarty (1988) on persistent learners.

investigation in this field, might do well to restrict his/her study to an comparative exploration of methods of measuring SL motivation in, say, a classroom context. Since we have so little work in this area, merely developing measuring instruments is a quite demanding enough task (as elsewhere in SL research).

Finally, section 3 contains questions which should aid the orderly development of hypotheses about SL motivation. Since we are arguing for a careful approach to hypothesis-testing and believe that much groundwork has yet to be done, we will not attempt to list here a set of specific hypotheses. At present, investigators would be hard put to provide responses to the questions posed in 3.1 and 3.2, for the SL context (as opposed to other areas of education, for which a small amount of data is available), and only speculation is possible concerning 3.3 and 3.4. The latter two elements of the list, however, constitute the most important questions. If researchers make use of this agenda, they may be tempted to address them first, forming specific hypotheses on the basis of the non-SL investigations we have discussed earlier. But prudence would dictate that they be addressed, at very least, in concert with basic research addressing the first two sections of the list, so that the hypotheses developed are as well-grounded as possible. We began this paper by noting the difference between practitioner use of the concept of motivation, and we would not wish to loose sight of this concern. Unless basic descriptive work is done as a foundation for hypotheses and intervention in this applied area, research will continue to be insufficiently well-founded.

5 Summary

In this paper we have argued that work to date on the topic of motivation in SL learning has been limiting, in two senses: it has been almost exclusively social-psychological in approach, and it has failed to distinguish between the concepts of attitude and motivation.

We would certainly not dispute that language learning takes place within a social context, nor that socially grounded attitudes may provide important support (or lack thereof) for motivation. We do not claim that there are no interesting relationships among social contexts, individual attitudes, and motivation, and we find that Gardner, in particular, has been sensitive to many of the issues raised in this paper (see especially Gardner, 1985).

Our claim is that the dominance of this particular approach has been so

strong that alternatives conceptions have not been seriously considered. The failure to distinguish between social attitude and motivation has made it difficult (1) to see the connection between motivation as defined in previous SL studies and motivation as discussed in other fields, (2) to make direct links from motivation to psychological mechanisms of SL learning, and (3) to see clear implications for language pedagogy from such previous SL research.

The problem, as we see it, is in fact that much of the work on motivation in SL learning has not dealt with motivation at all. Consequently, we have adopted here a definition of motivation in terms of choice, engagement, and persistence, as determined by interest, relevance, expectancy, and outcomes. We suggest that this will allow the concept of motivation to continue to be linked with attitudes as a distal factor, while at the same time providing a more satisfactory connection to language learning processes and language pedagogy. We suggest also that a theory of the role of motivation in SL learning ought to be general and not restricted to formal or informal contexts, nor to members of only certain groups.

In addition, we have laid out a research agenda which we hope will stimulate a cautious, thorough approach to this topic, through the use of wide variety of investigative techniques. We hope to see developments away from exclusive reliance on self-report questionnaires and correlational studies towards a research program which utilizes survey instruments along with observational measures, ethnographic work together with action research and introspective measures, as well as true experimental studies, to center on the concept of motivation that teachers know is critical for SL success.

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