

The Past: The Skill-Building Hypothesis Approaches to language teaching in the recent past have been based on 'skill-building', the hypothesis that we develop competence in language and literacy by first 'learning about' language, that is, consciously learning the rules, and by deliberately studying vocabulary. (It may be impossible to test pure forms of these hypotheses: while traditional methods are based on Skill-Building, they will inevitably contain some comprehensible input. Also, students in classes using methods based on the Comprehension Hypothesis may engage in self-study. The case for reading has been strengthened by a new wave of research from Asia, studies demonstrating the efficacy of in-school for elementary school children in Korea (K.-S. Cho and H. Kim 2004; K.-S. Cho and H.-J. Lee 2007; C.-K. Liu 2007). (A more subtle version of the Comprehensible Output Hypothesis maintains that the 'need' to use certain structures in production makes acquirers more sensitive to these structures when they occur in input.) I have presented arguments against the strong form of the Comprehensible Output Hypothesis (i.e. the view that it is the primary mechanism for language development). Jackson, von Eye, Biocca, Barbatsis, Zhao and Fitzgerald (2006) provided computers with Internet access to 140 children from low-income families who previously did not have access and reported that more Internet use resulted in improved reading, as reflected by grades and standardized tests. In both first and second language development, students who participate in classes that include in-school self-selected reading programs (known as sustained silent reading) typically outperform comparison students, especially when the duration of treatment is longer than an academic year (reviews include Krashen 2003a, 2004; Renandya 2007). The first sub-step in applying this aspect of the Comprehension Hypothesis is to simply make good reading material available, the establishment of super-libraries, filled with good books, magazines, and comics, with a selection wide enough to ensure that each student of English can read for pleasure in a variety of areas for hours at a time and for years, if desired. Nearly all pedagogical applications of the computer to language education have assumed the correctness of the Skill-Building Hypothesis, and experiments in Computer-Assisted Instruction typically compare one form of skill-building with another and are therefore of peripheral value. The manifestation of the Comprehension Hypothesis in literacy is the Reading Hypothesis, the claim that we learn to read by reading, as well as the claim that reading is the source of much of our vocabulary and spelling competence, our ability to handle complex grammatical structures, and to write with an acceptable writing style. (Cho and Krashen 1997; Stokes, Krashen and Kartchner 1998): Those who get more comprehensible input in the form of reading do better on a variety of measures, a result that holds when other possible confounds are controlled. James Asher and Harris Winitz, among others, also hypothesized that comprehension is the mechanism underlying language acquisition in publications that predate mine. But there is no doubt that traditional methods involve more skill-building than those based on the Comprehension Hypothesis.) For beginning language teaching, methods based on the Comprehension Hypothesis, such as TPR, the Natural Approach, and Focal Skills have been shown to be more effective than traditional methods on tests of communication, and at least as effective on tests of 'skills' (Krashen 1981, 2003a; Hastings 1997). According to this definition, the Communicative Approach is implicitly based on the Comprehensible Output Hypothesis (Swain 1985), the view that we acquire language when we try to produce it, fail to make ourselves understood, and keep trying until we

achieve communicative success when we finally get it right. There is no need to fear that surfing will take the place of reading: in fact, studies show that it results in more reading (for adolescents in the Netherlands; de Haan and Huysmans 2004; for adults in Taiwan; Liu, Day, Sun and Wany 2000). According to the Comprehension Hypothesis, most of our language competence is the result of what we have subconsciously acquired, or absorbed, not what we have learned consciously, and real language competence is stored in the brain subconsciously. A number of short-term comparisons have been done that claim to compare the impact of grammar instruction and comprehensible input, and the results have been interpreted as support for grammar, or the SkillBuilding Hypothesis. Briefly, instances of comprehensible output are too rare for it to make any substantial contribution to language competence and language acquisition is possible without output of any kind. Nearly all texts in foreign language education are based on skill-building, with presentations of grammar and vocabulary followed by very short texts and exercises designed to help the student 'automatize' the rules. The Present: The Comprehension Hypothesis Newer approaches to language teaching do not rely on painful 'skillbuilding' but are based on the idea that we acquire language when we understand what we hear and read. Not so. The 'comprehensible input' treatment in these studies has always been an impoverished version of comprehensible input, subjects in every study were experienced 'learners' who valued conscious learning of language, and in all studies the conditions for the use of conscious learning were met. Distinguishing between the Comprehension Hypothesis and the Communicative Approach Communicative language teaching has been defined as an approach that 'makes use of real-life situations that necessitate communication. The methodology of the future will, I hope, include sheltered popular literature, an introduction to what is available in the target language, taught in a way to reveal aspects of current culture in other countries, and to stimulate interest in reading. For aural input, students of English as a foreign or second language, eslpod.com provides free listening experiences on a wide variety of topics. In FVS, as in free voluntary reading, students read what they want to read (within reason), with no accountability, no follow-up exercises, no assigned topics, and no vocabulary list that they must try to remember. Zhu and He (2002) reported that 52% of the 1007 Hong Kong residents they interviewed were connected to the Internet at home, averaging 350 minutes per week on the net at home. In addition, the children studied by Jackson et. al. clearly liked web-surfing: when asked what their main activity on the computer was, 33% said it was 'web search' (Jackson, von Eye, Biocca, Barbatsis, Zhao and Fitzgerald 2005: 263). In Taiwan, for example, over 90% of Internet use is in Chinese (Liu, Day, Sun and Wany 2000), and I suspect that the few who are reading texts in other languages are already highly proficient in these languages. They assume that children must first consciously learn all soundspelling correspondences (phonics), and then practice applying the rules of phonics in reading simple texts. In fact, expert linguists admit that they have not succeeded in fully describing the grammatical rules of any language or the rules of phonics, and those they have come up with are often forbiddingly complicated. The Comprehension Hypothesis and the Skill-Building Hypothesis have squared off in a number of direct confrontations and the Comprehension Hypothesis has been a consistent winner. For intermediate language teaching, methods involving teaching content (sheltered subject matter teaching) have been shown to be just as effective or more effective than

traditional intermediate methods (Krashen 1991). Evidence against the weak form, that comprehensible output contributes to language development, is the fact that there is no clear empirical evidence supporting it (Krashen 2003b). If the Comprehension Hypothesis is correct, students need to know about it, and not devote their time to vocabulary flash cards and extensive grammar review. There is no empirical evidence supporting this practice (Krashen 2003b, 2005), and there is the danger that if we reward a pleasurable activity we send the message that the activity is not really pleasant and that nobody would do it without a bribe (Kohn 1999). Not only do many people use the Internet, many surf: Fallows (2006) reported that 'surfing for fun' is the second most popular online activity, behind using email. I have referred to it as the Input Hypothesis in previous publications. Lee 2005; Witton-Davies 2006; Gradman and Hanania 1991; Constantino, S.-Y. Nevertheless, in general, the impact of grammar study was surprisingly small (Truscott 1998; Krashen 2003a). (Of course, 'real-life situations' entail input as well as output, but nearly all manifestations of the Communicative Approach I have seen focus on the output side.)

2. Thus far, the language teaching profession has not come close to applying the Comprehension Hypothesis with full force. Funding for such an enterprise is modest, compared to the millions we are willing (and eager) to spend on computer technology, despite the fact that there is no solid evidence that computer-aided instruction helps language development (but see below). In terms of reading, the Internet has a wide selection of pedagogical texts in English, but they are inevitably followed by exercises and comprehension questions. There was no impact on mathematics test scores, and the data did not support the hypothesis that better readers used the Internet more; rather, Internet use improved reading. The cure may be wandering through the Internet and finding reading material that is truly compelling, so compelling that the reader is absorbed in the message and matters of form become irrelevant. (Back in the 1950s, we were sure that by 2000 we would have colonies on Mars, we would be free of most diseases, and we would have world peace.) So instead of predicting the future, I have made up a wish-list, but of course we know from experience that sometimes we are better off when not all of our wishes come true. Correction helps us, it is claimed, by forcing us to reformulate our rules, to change our idea of the rules until we get them right. The Skill-Building Hypothesis is a delayed-gratification hypothesis. Skill-building cannot be the major means of producing competence in language and literacy. Second, there are abundant cases of those who have acquired all or nearly all of a second language but who do not have conscious knowledge of more than a handful of rules (for cases, see Krashen 1981, 2000, 2004). Third, the effect of error correction on language development has thus far been shown to be weak or nonexistent (Truscott 1996). Kim 2005), college students in Japan (Mason and Krashen 1997), and high school and college students in Taiwan (Smith 2006, 2007; S.-Y. Correlational studies also support the Comprehension Hypothesis (e.g. S.-Y. The Communicative Approach (again, as I understand it) is thus not only not the same as the Comprehension Hypothesis, it is the opposite. This is important for two reasons: first, it signals to students how important self-selected reading is; second, a small amount of daily regular reading will stimulate more reading outside of school (Sims 1996). (eslpod.com also has some materials for sale; I am enthusiastic about their material, and I have no financial interest in this enterprise). More interesting is the fact that 81% of high school students use the Internet, which indicates that Internet use among the general population will continue to increase

(DeBell and Chapman 2006). Second, just as is the case with free voluntary reading, few have any idea that surfing would be good for them, having only been presented with the Skill-Building point of view. Ironically, this will result in more acquisition of the language and literacy development (Krashen 2004). For the public, the Skill-Building Hypothesis is not an hypothesis: it is an axiom. Most approaches to literacy development are also based on skillbuilding. Real reading is delayed until phonics is mastered. The Comprehension Hypothesis has had several inventors and has been known by several different names. Well before my work began, Frank Smith and Kenneth Goodman hypothesized that 'we learn to read by reading', by understanding what is on the page. For beginning literacy development in the first language, students in classes in which more real reading is done outperform those in classes in which less reading is done (Krashen 1999). Taking Full Advantage of the Comprehension Hypothesis in Language Education The second step forward I hope for is for the language teaching profession to take full advantage of the Comprehension Hypothesis. In my view, the most under-utilized application is the easiest one to use: extensive reading. The third sub-step is to inform students how language and literacy are acquired. The best way to use the Internet as a source of reading may be 'free voluntary surfing', or FVS. Evidence so far suggests that surfing is beneficial to first language development. In the US, for example, it has been estimated that 42% of the entire population uses the Internet (Horrigan 2006). For most language students, if they try the Internet at all in another language, the temptation is to do intensive reading, making sure they understand every word and focusing on form. Real language use is delayed until the rules are 'mastered'. First, the system to be consciously learned is simply too complex and has not even been completely described. There are also far too many vocabulary words for language students to memorize one at a time. We have to know the rule, be thinking about correctness, and have time to retrieve and apply the rule. For most people, this happens only when they take grammar tests (Krashen 1981). They are based on the Comprehension Hypothesis. We are not aware we are acquiring when we are acquiring, and after we acquire, we are not aware that anything has happened. The teacher sets up a situation that students are likely to encounter in real life' (Galloway 1993). The second sub-step in applying the Reading Hypothesis is to give students some time to read. How can the computer be used to deliver comprehensible input? The Popularity of the Internet and Surfing. Fortunately, the future is already here. Problems and Solutions.