

✧ CHAPTER ONE ✧

Making Sense of the Words — *and the World*

Knowing a second language ... enhances creativity and academic success, it makes connections between generations stronger, and it allows an individual to connect with more of the world. It is a “boundary eraser” in all senses of the word.

—Kendall King and Alison Mackey

FLUENT BILINGUALISM IS COMMONPLACE throughout much of the world. How strange that it's so difficult to achieve in the U.S.A.! Unless we came here as immigrants, grew up in homes where another language was spoken, or spent extended time in a non-English-speaking country, most Americans are likely to be monolingual. Not a devastating handicap—English is dominant internationally and becoming more so—but hardly an optimal condition, either. Despite the controversy it sometimes arouses, bilingualism has indisputable advantages: social, cultural, academic, professional, even cognitive. The evidence is clear: Speaking two or more languages not only enriches our lives; it can also make us smarter and more successful. Recognizing these realities, increasing numbers of Americans are seeking effective language-learning opportunities for themselves and especially for their children.

Our public schools are finally beginning to respond. Over the past twenty years, language immersion programs have mushroomed, both “one-way,” involving students from a single language background, and “two-way,” involving speakers of both target languages. While immersion models vary considerably in details, they have generally proven far more successful than the foreign-language classrooms that most of today’s parents were forced to endure. Rather than teaching skills out of context—remember the flash-cards, grammar exercises, artificial dialogues, and other mind-numbing activities?—well-designed immersion programs help students acquire a second language by using it for meaningful purposes, including subject-matter instruction. Such classrooms turn out graduates who tend to be much better at actual communication in the target language—more likely, for example, to converse easily with native speakers in real-life situations. These advances were made possible, in large part, by pedagogical insights gained from bilingual education programs for language-minority students in the United States and for language-majority students in Canada.

There’s another factor that also deserves mention: advocacy by determined parents, working in concert with educators who were able to contribute professional expertise and a willingness to take risks. Without such alliances, it’s unlikely that experiments in dual immersion would have ever been tried.

Origins of Dual Immersion

THE FOUNDERS OF CHICAGO’S INTER-AMERICAN Magnet School, Janet Nolan and Adela Coronado-Greeley, were both parents and educators. As parents, they organized community members to put pressure on the Chicago Public Schools and the Illinois State Board of Education. As professionals, they were able to access the growing research base on bilingualism to help with program design.

Janet had spent time teaching English as a second language (ESL) in Mexico, where she was impressed by young children’s capacity for language learning. She was also inspired by the work of Theodore Anderson, a pioneering researcher in the field of bilingual education, who stressed the benefits of early literacy in two languages. Fluent in Spanish, though a nonnative speaker herself, Janet created a bilingual environment

at home for her two preschool-age daughters. The initial results were promising. Yet it soon became clear that, to continue nurturing their Spanish development, more institutional support would be needed to balance the predominance of English outside the home.

Adela, a Mexican-American from East Los Angeles, was a community organizer who also worked at a school on Chicago's South Side. Though she had grown up speaking Spanish, she recognized that her own children faced similar obstacles as Janet's in becoming truly bilingual. So the two parent-educators joined forces to create what would become Inter-American.

Over a several-year period, they led campaigns to secure grant funding, find a building, hire teachers and aides, purchase books and materials, arrange transportation, and ultimately create a permanent dual immersion program. Their advocacy paid off when the Chicago Public Schools approved a bilingual preschool in the fall of 1975. Because of funding constraints, however, it was open to Latino students only. The next year a kindergarten classroom was added, the following year a first grade. Official designation as a magnet school, serving children from all language groups, finally came in 1978. The name *Inter-American*, suggested by the parent of a Spanish-dominant student, was quickly adopted.

Meanwhile, Adela and Janet drew on the pedagogical breakthroughs achieved in French immersion programs introduced in Quebec in the mid-1960s. Anglophone students there started school, learned to read, and were taught academic subjects in French, with lessons carefully adjusted to their level of proficiency. A class in English language arts was introduced in second grade, but most instruction continued in French. By the end of sixth grade, students achieved functional competence in the second language, at no cost to their academic progress when measured in English—a remarkable accomplishment. It turned out that, under the right conditions, bilingualism could be acquired incidentally and naturally. Over the years, variations of French immersion have become so popular that they now enroll approximately 317,000 Anglophone students throughout Canada.

Yet the one-way immersion model also has its limitations. Because English-speaking students rarely interact with native speakers of French,

they often have difficulty developing native-like proficiency in French or close relationships with Francophone peers. At Inter-American, by contrast, the founders brought together children from Spanish- and English-language backgrounds, creating an educational environment that was both bilingual and bicultural.* By learning together in the same classrooms, students from each group acquired a second language more effectively and also forged cross-cultural friendships and understanding. From the school's beginnings, it embraced diversity, socioeconomic as well as racial and ethnic, while stressing respect for the two languages and the two language communities. Not surprisingly, Inter-American also encouraged the active involvement of parents, who were welcomed as an integral part of the school community and who participated in most important decisions affecting children. By the 1990s, it enrolled more than six hundred students from prekindergarten through eighth grade.

Initially, instruction was provided half in English and half in Spanish, a policy that required all teachers to be fully bilingual. This “50-50” model is common in dual immersion programs, often in response to parents’ anxieties. If my child is taught mostly in another language, they wonder, how will she keep up academically in English? While the concern is understandable, research shows it is largely unfounded. In well taught bilingual and immersion programs, whether one-way or two-way, the skills and knowledge that students acquire in one language easily “transfer” to another. Reading ability, for example, is something that children need to learn only once; it can then be applied to each new language they acquire.†

By 1990, it became clear that Inter-American students were doing quite well in English, but their Spanish proficiency was lagging. The founders recognized that the minority language, which had limited support outside of school, especially for English-dominant students, needed a stronger emphasis in the classroom. So they adopted an “80-20” ratio

*In practice, children from more than two linguistic and cultural backgrounds often participate in dual immersion programs. The most common ethnic group represented at Inter-American in the 1990s—after Latino, African-American, and non-Hispanic white—was Vietnamese.

†The transfer effect is well documented even between writing systems that differ widely, such as Chinese and English or Turkish and Dutch.

of Spanish to English from prekindergarten through fourth grade, combined with ESL and SSL (Spanish as a second language) as needed.* Until the end of second grade, children were taught reading primarily in their native language. This was the dual immersion model during the 1995–96 school year in which our story takes place, and it proved quite successful. Academic outcomes at Inter-American have been impressive, with students from both language groups scoring well above city and state norms in English and Spanish.

Beyond Language

WHAT HAS FURTHER DISTINGUISHED dual immersion schools like Inter-American, contributing to their successes, is a break with traditional, teacher-centered classrooms in favor of constructivist approaches that guide rather than prescribe what children learn. In many ways, this change has been less a conscious choice than a practical necessity.

Transmission models of education, which are designed to “deliver” a predetermined body of knowledge and skills, treating children as passive receptors of “content,” simply don’t work well when it comes to learning languages. Witness the failure of traditional foreign-language classes to cultivate functional bilingualism. The same could also be said of most “transitional” bilingual classrooms, which seek to push children into English as quickly as possible, at the cost of neglecting their native-language development. It is no coincidence that this “subtractive” bilingual approach tends to favor transmission models as well, using “drill and kill” methodologies in the false hope that they will speed up English acquisition.

Dual immersion programs have often proved superior, both in promoting fluency in two languages and in fostering academic learning. This has been true in large part because they require children to become active learners. Instead of drilling students in formal aspects of the target languages (phonics, grammar, vocabulary, spelling, punctuation), dual immersion relies on using the two languages for meaningful purposes. As children focus on subjects that excite them—the world of insects, for example—and on interacting with peers from a different

*In grades 5–8, the ratio shifted to 50-50.

culture, bilingualism comes naturally. In this way, the classroom environment creates a strong motivation to learn. Equally important, it gives students the key that unlocks proficiency in a second language: meaningful communication in that language, also known as *comprehensible input*.

The term was coined by Stephen Krashen, an influential researcher whose work has helped to shape programs for English language learners over the past generation. While the linguistics—rooted in the theories of Noam Chomsky—may seem complex, the basic idea is simple. We acquire a second (or third) language in much the same way as we acquire our first. Not by studying grammar books or memorizing vocabulary lists or “practicing” verbal skills, but by *receiving and understanding messages* in a new language.

To ensure that children are receiving comprehensible input, dual immersion teachers use various techniques—physical cues, pictorial aids, or simplified vocabulary,

[Humans] acquire language in one fundamental way. We acquire language when we understand it. What is spectacular about this idea is that it happens incidentally, involuntarily, subconsciously, and effortlessly.

—Stephen Krashen

for example—to make instruction as accessible as possible. Students acquire both language and subject matter as they “construct meaning” from what they experience. Hence the term *constructivism*. This principle applies not only in language education but, more broadly, in an approach to curriculum that

builds on instead of undermining students’ innate desire to make sense of the world—that is, to learn.

Constructing Knowledge

RATHER THAN AN EDUCATIONAL STRATEGY or a methodology, constructivism can best be described as a philosophy of knowledge and how it is acquired. In other words, it is a theory about how “knowing” takes place. Drawing on the work of developmental psychologists Jean Piaget and Lev Vygotsky, constructivists conceive learning as a process of reconciling prior knowledge and understandings of the world with

new experiences and social interactions, resulting in new knowledge and new understandings.

This insight has profound implications for education. If knowing is inherently subjective—the product of activity occurring in the minds of individual learners—then it cannot be transmitted directly from teacher to students by means of lectures, worksheets, homework, quizzes, and similar devices. Of course, facts and formulas can be loaded into children’s short-term memory, where some of these items may be retained until the next round of multiple-choice tests. But true learning only occurs when students are stimulated to think critically, to build and rebuild their own mental models of reality, to achieve a deeper understanding. Or, as early-childhood educator Beverly Falk puts it, “Learning is something that a learner does, not something that is done to the learner.”

Thus constructivism values questioning, reasoning, analysis, reflection, problem-solving, cooperation, and creativity among the intellectual assets that children will need in school and in life beyond school. As such, it stands in sharp contrast to *behaviorism*, a philosophy that defines learning as an externally directed activity: the acquisition of desired behaviors through repetition and reinforcement. Explicitly or otherwise, behaviorist assumptions guide most transmission models of education. In particular:

- that a predetermined body of knowledge and skills can be broken down into component parts, then taught in logical sequence;
- that student progress toward mastery of the curriculum can be measured at various points on a linear continuum from “below basic” to “advanced”;
- that behavioral competence—ability to recall knowledge or employ routine skills—is the primary goal of schooling; and
- that external rewards (grades, prizes, recognition) are essential in motivating students to learn.

Entirely missing from the behaviorist framework is the concept of *cognitive change*. Nor is there any place for self-directed learning, the intellectual growth that occurs through experiences and discoveries that challenge prior perceptions of the world. Instead, behaviorists promote preconceived notions of “what students should know and be able to do”—

deceptively described as “standards”—around which curriculum must be designed and “achievement” must be measured.

Scaffolding and Sheltering

CONSTRUCTIVISTS, BY CONTRAST, believe that the fundamental challenge for educators is to create an open and stimulating environment that is conducive to learning. Toward that end, classroom instruction must take into account what Vygotsky calls the “zone of proximal development,” the gap between what a child can already do and what he or she can potentially accomplish when given appropriate assistance from teachers and collaborating peers. That assistance can take the form of *scaffolding* or *sheltering*.

Scaffolding enables students to reach higher levels of problem-solving than they could achieve independently—in effect, providing a series of manageable steps on which to climb. It might include introducing key concepts, asking questions to encourage observation or analysis, modeling the structure of a narrative, organizing collaborative teams, or performing a practical demonstration. For the constructivist educator, the function of scaffolding is not to steer students toward the “correct” answer, but to provide them with temporary supports until they are able to pose questions and discover answers on their own. The goal is not to avoid making errors. Indeed, discussing and analyzing children’s misconceptions in the classroom can be a powerful form of scaffolding, to the extent that it enables them to discard their original concepts in favor of new, more viable ones.

Sheltering may be defined as a form of scaffolding adapted to the demands of second-language teaching. It describes a range of strategies that help to make lessons comprehensible, both by using context that is familiar to students (e.g., building on prior knowledge, providing visual cues) and by adjusting “teacher talk” to their level of language proficiency (e.g., using plain language rather than abstract terminology). This approach may be used in a language classroom or, better yet, in the course of teaching academic subjects. Sheltered instruction enables students to internalize a second language naturally, without conscious effort, purely through understanding messages. Thus direct language instruction, or “skill building,” becomes largely unnecessary. So does

correction of children's grammatical or pronunciation errors. In fact, such techniques are likely to be counterproductive because they bore students, make them overly self-conscious, and generally make drudgery out of language learning.* In effect, sheltering maximizes comprehensible input in a stimulating, low-anxiety environment, which in turn maximizes acquisition. Rather than "focus on form," students direct their attention to more interesting matters.

Dual immersion adds another rich source of input: the presence of two groups of children learning each other's native language. At an obvious level, they serve as peer tutors for each other simply by interacting socially and academically.

More important, to take full advantage of this demographic mix, dual immersion programs must value and validate two different cultures. That is, they must acknowledge and build upon two different foundations of prior knowledge that children bring to school. In doing so, they offer both groups a bicultural experience, an understanding that there is more

We teach a subject not to produce little living libraries on that subject, but rather to get a student to think mathematically, to consider matters as an historian does, to take part in the process of knowledge-getting. Knowing is a process, not a product.

—Jerome Bruner

than one way to make sense of the world. And if reality can be constructed in different ways, the whole concept of education is transformed. It becomes a process of active discovery and evaluation, rather than one of passive reception of official knowledge.

A Natural Combination

AS IT HAPPENS, CONSTRUCTIVIST APPROACHES to learning coincide with the most successful approaches to language teaching. Krashen hypothesizes that second-language acquisition occurs when readers or listeners receive messages just beyond their current level (" $i + 1$," or input plus more), but close enough to make sense in context. With skillful

*According to Krashen's theory of second-language acquisition, factors such as anxiety and boredom "raise the *affective filter*"; in other words, they create barriers that keep comprehensible input from getting through.

sheltering to make instruction comprehensible, students can progress to a higher level of proficiency.* While engaged in actual communication, they subconsciously test hypotheses, for example, about the meaning of a new word or grammatical form. Prior understandings (and misunderstandings) give way to new understandings based on the learners' experience.

Constructivism is derived from the recognition that knowledge is constructed rather than absorbed: we form beliefs, build theories, make order. We act on the environment rather than just responding to it—and we do it naturally and continually. It's part of who we are. Learning isn't a matter of acquiring new information and storing it on top of the information we already have. It's a matter of coming across something unexpected, something that can't easily be explained by those theories we've already developed. To resolve that conflict, we have to change what we previously believed. We have to reorganize our way of understanding to accommodate the new reality we've just encountered.

—Alfie Kohn

not only on a grasp of syntax and vocabulary. It also depends on their active engagement with the world around them, which prompts them

In other words, acquiring a second language is an active process of constructing meaning, not unlike the acquisition of knowledge in other subjects, except that it occurs incidentally, without conscious effort. Krashen's concept of $i + 1$ is analogous to Vygotsky's zone of proximal development, in which scaffolding techniques enable children to reach higher levels of learning.

Another connection between constructivism and dual immersion is the role of literacy, a form of meaning-making that extends well beyond the boundaries of the printed page. Reading nourishes—and is nourished by—bilingualism. The more children comprehend what they read in a second language, the more of that language they will acquire.

But their ability to make sense of print in any language depends

*Teachers need not worry about precisely aiming for $i + 1$ or introducing grammatical forms in any particular order. As long as they provide sufficient amounts of comprehensible input in the second language, Krashen says, " $i + 1$ will be there."

to construct new knowledge, to build and rebuild conceptual understandings that, in turn, make the written word more meaningful. As the Brazilian educator Paulo Freire once said, “Reading the world always precedes reading the word, and reading the word implies continually reading the world.” The same principle applies to the process of becoming bilingual.

It is only natural, then, that dual immersion tends to incorporate constructivist strategies. Indeed, the fact that it does so may help to account for its academic successes, especially for English language learners (a hypothesis that admittedly remains untested by researchers). This is not to say that most dual immersion programs are constructivist by design. Far from it. For teachers in these schools, the label is often unfamiliar or poorly understood. The primary focus tends to be on bilingualism, especially on how the two languages are used for instruction, rather than on questions of educational philosophy. Where dual immersion programs are academically impressive, as many are, the results have usually been attributed to linguistic rather than curricular factors. So their constructivist features tend to be overlooked.

In addition, today’s relentless pressures for “accountability” are pushing schools away from student-centered pedagogies and toward rote teaching of material likely to appear on achievement tests. Despite their popularity with parents at the local level, dual immersion programs are not exempt from state and federal mandates that place “high stakes” on test results. Low scores can close a school, derail an educator’s career, or keep a student from graduating. It’s no wonder that, in many classrooms, test-prep activities have become a substitute for actual teaching, especially for English language learners and other minority children. Even well-established dual immersion programs must now strike a balance between “covering the standards” and fostering language acquisition. So, at times, educators are forced to rely on transmission methods to ensure that students are demonstrating “adequate yearly progress” on tests designed to measure basic skills. Inter-American’s creative curriculum had to be suspended for a week or two every spring to prepare students for state-mandated tests.

Despite these obstacles, however, constructivist approaches remain possible where committed educators find spaces in which the excitement

of learning can break out. We believe that dual immersion is one of those spaces.

The narratives that follow will offer vivid evidence of why this is so. They illustrate, over the course of a school year, how bilingual instruction was blended with constructivist pedagogy adapted to the needs of second-language learners and how this combination was not only natural but necessary. Rather than isolated vignettes, these are interconnected stories that demonstrate the potential of the best dual immersion schools. They unfold in a second-grade classroom inhabited by teacher Jill Sontag, her eighteen bilingual collaborators, and an unending supply of insects—bugs that crawl, fly, mate, lay eggs, hatch, and die—to the fascination of their human care-givers. To help orient the reader, we begin with a synopsis of the pedagogical principles at work, the fundamentals of dual immersion and constructivism.