

Learner profiles of our cohorts of ESL learners

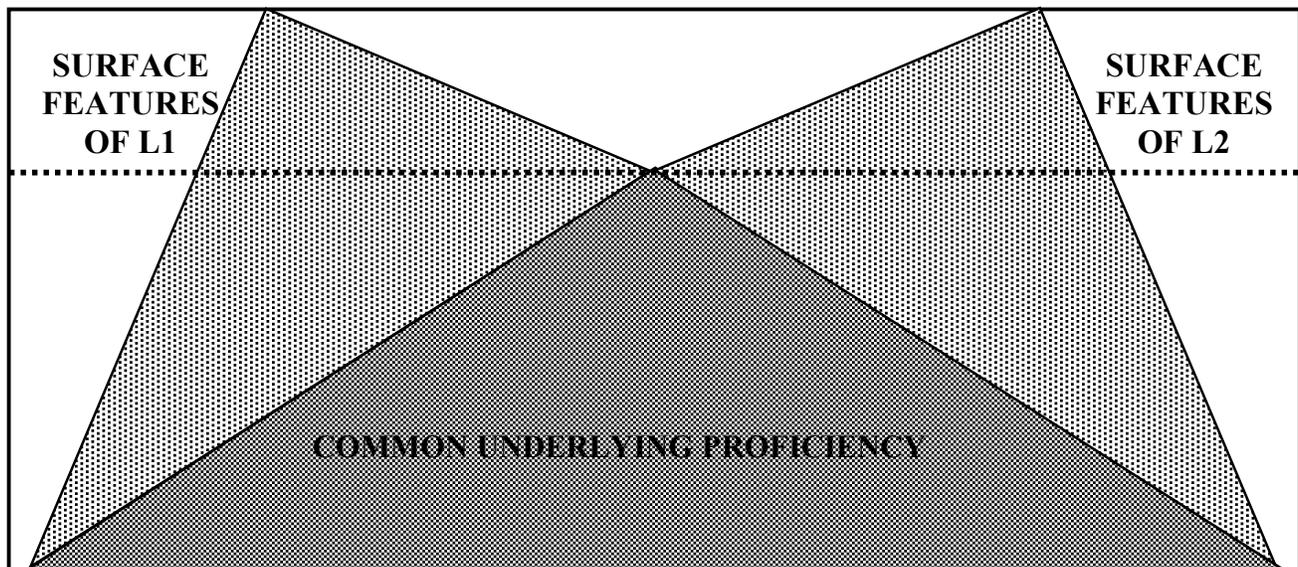
ESL learners are not monolithic in character. Even among those seen to be academically proficient, there is significant variability in the learner profile that will have consequences for how the individual learns, the rate of second language (L2) acquisition, and the level of eventual achievement relative to academic endeavors at school. The crucial learner variables identified by numerous researchers in the field (Collier, 1995; Klesmer, 1994; Cummins, 1981; Roberts, 1994; DiCerbo, 2000) include level of first language (L1) proficiency and age on arrival. From an instructional perspective, quality and duration of structured ESL support have a further impact on students' eventual levels of achievement (Thomas & Collier, 1997; Roessingh & Kover, 2002; Lucas, Henze & Donato, 1990). We begin by considering the closely intertwined learner variables of L1 proficiency level and age on arrival.

Cummins (1996, 110-111) posits a common underlying proficiency (CUP) model in which literacy related aspects of a bilingual's proficiency in L1 and L2 are seen as common or interdependent across languages. The CUP model of the linguistic interdependence principle is illustrated in the metaphor of an iceberg. For fully bilingual individuals, the two visible peaks of the iceberg are equal. But these are only "the tip of the iceberg". Much more significant is what is not seen: the below the surface cognitive academic language proficiency related to a much larger mass that is generally not manifest in daily communicative exchanges. In the depths of this model, we would locate the higher order thinking skills of analysis, synthesis, integration, reasoning, generalizing and transferring, for example.

The dual threshold theory posits that when both languages eventually reach equal levels and there is a large 'below the surface' mass, benefits accrue to those individuals over their unilingual counterparts. The model is depicted here in Figure 1.

Figure 1: The "Dual Iceberg" Representation of Bilingual Proficiency (Cummins, 1980, 36; 1996, 111)

The 'Dual Iceberg' Representation of Bilingual Proficiency



‘The surface features of L1 and L2 are those conversational features that have become relatively automatized or less cognitively demanding whereas the underlying proficiency is that involved in cognitively demanding tasks. Although the surface aspects (e.g. pronunciation, fluency, etc.) of different languages are clearly separate, there is an underlying cognitive/academic proficiency that is common across languages.’ (Cummins, 1996, 110-111).

These surface features have been coined basic interpersonal communication skills, or, **BICS**. There is general consensus in the field that this level of proficiency in L2 can be developed in a relatively short period of time (i.e about two years) for all ages of ESL learners. Our daily communicative tasks can be accomplished with perhaps 2500 – 5000 words of English. Academically proficient high school students, on the other hand, accomplish their work with approximately 40,000 words of English (Miller & Gildea, 1987). The metaphor of the iceberg, where the visible aspect comprises only about 10% of the whole, appears an apt one.

There is less consistency among academics concerning the threshold and the time it takes to reach the level of critical transfer between languages for successful engagement in academic demands of school, associated with cognitive academic language proficiency, or **CALP**. Collier (1995) suggests a grade equivalent (GE) of 4 as the linguistic threshold required in L1 for smooth transfer to L2 of underlying concept understanding central to cognitive development, and that this level can be attained (and sustained) after 4-5 years of schooling in both languages. Two-way bilingual programs are seen as holding the most promise for facilitating the development of full and balanced bilingualism (as seen in the iceberg model). In a recent study, Hakuta, Butler & Witt (2000) suggest a range of 4 – 7 years for the development of academic English proficiency.

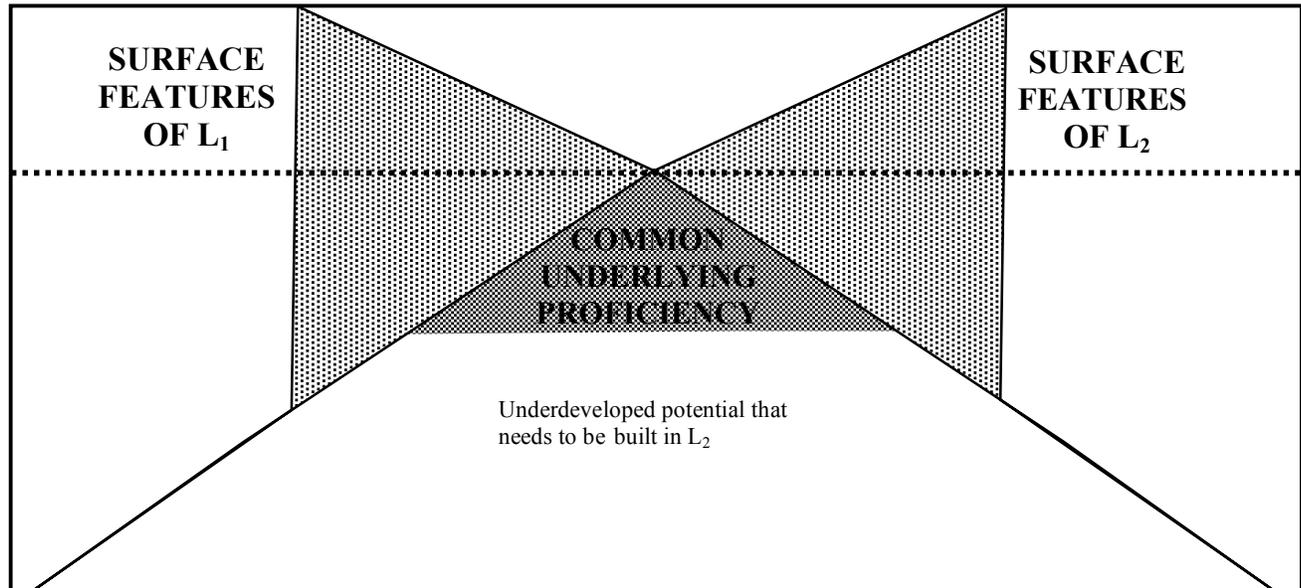
The reality for many ESL learners in many school jurisdictions across Canada and the United States, however, does not look like the iceberg depicted in Cummins’ model. For reasons of political expedience and budgetary constraints in education the vast majority of ESL learners do not have the opportunity to participate in quality, well-designed and professionally staffed two-way bilingual programs. Moreover, their ESL programs have been the target for budget cutbacks over the past decade (Neu & Taylor, 2000; Derworiz, 2001). In the following section we develop and illustrate learning profiles of ESL students who arrive at different ages and hence, stages in their L1 development. We frame our discussion of the educational risk for each learner profile around what we imagine their iceberg model to look like. Our hope is that through the visual representation of L1 and L2 development using the iceberg metaphor, our strategy for intervention will become clearer.

Some Learner Profiles of ESL students

Figure 1 above illustrates the profile of a balanced bilingual learner – one who presumably is successful in developing full academic proficiency in both L1 and L2. Here we attempt to depict the learner profiles of ESL students with varying degrees of L1 and L2 proficiency. The profiles provide concrete visual representations for the accompanying text explaining the challenge that faces these students.

Figure 2: Cohort A

**Elementary arrivals: Low Levels of L₁ and L₂
(balanced but inadequate bilingualism)**



For younger arriving as well as for Canadian-born ESL students, the challenge of ‘growing’ their first language while developing ESL is often overwhelming. De Vries (1999) notes a gradual loss, or at the minimum, a low plateau in L1 (‘kitchen Chinese’), and the inability of L2 (ESL) to overcome to any significant extent this low plateau, resulting in ‘schoolyard English’. While these students ‘sound good’ in English, there is little below the level of the waterline in the iceberg model.

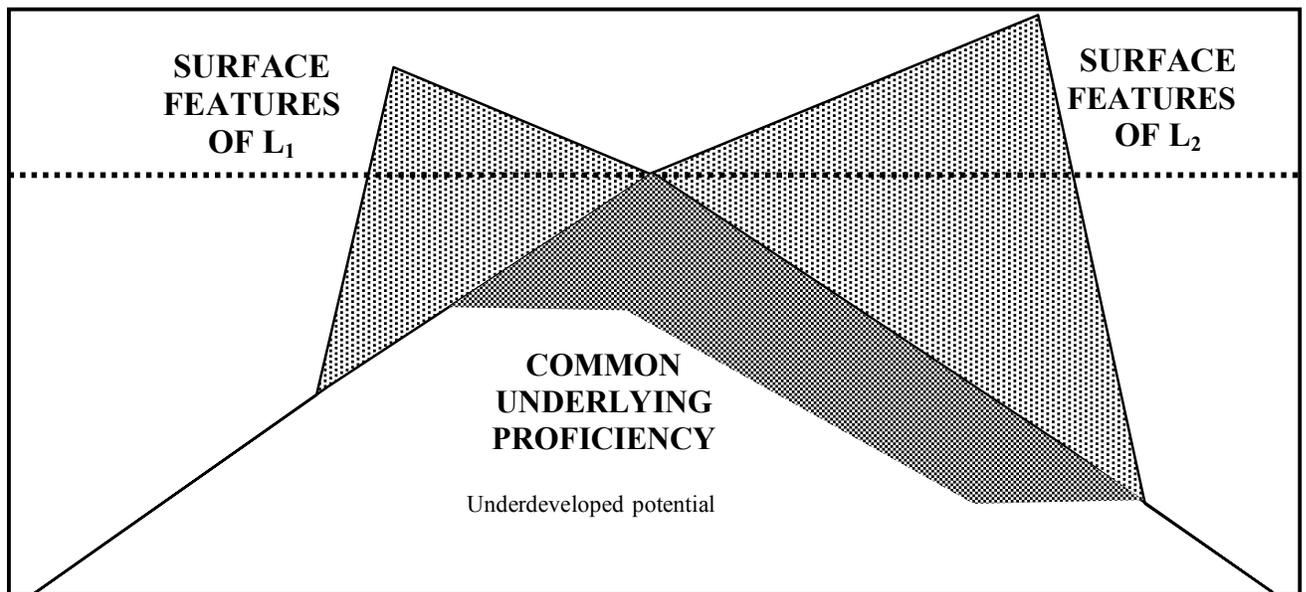
This phenomenon, called bilingual semi-lingualism, was noted and described in various contexts in other countries more than two decades ago (Skutnabb-Kangas, 1981, 248-263). It may be likened to a blackberg -- a very dangerous kind of iceberg. The exposed portion of the berg melts in the sun, losing mass at the level of the water line (i.e. subtractive bilingualism), as it is carried by the gulf stream toward warmer climes. With the center of gravity heightened, the entire berg topples over to expose the transparent icy underside – there is simply not enough ‘under the surface’ mass to stabilize the berg as it journeys and tumbles along. The berg that dealt a devastating blow to the Titanic was thought to be this type – the lookout, Frederick Fleet, was unable to discriminate the exposed piece from the underside of the blackberg in the clear of that April night in 1912 (Ballard, 1987). In other words, the exposed and the invisible portions are about equal – one is mirrored in the other, and what is exposed is all there is.

ESL students of this profile are at high risk for academic failure (Roessingh & Kover, 2002). The impoverished levels of both L1 and L2 means there is little beneath the surface transfer, and the higher order thinking skills of reasoning, integrating, synthesizing, hypothesizing, analyzing and imagining for example, are left under

developed. And sounding good only compounds their problems at school, since so many of these students' teachers will attribute their academic failure to a cognitive impediment (i.e. little beneath the surface). Disproportionate numbers of students of this profile will find themselves (often wrongly) relegated to non-academic track studies in high school, Special Education placements, failure and dropout (Oakes, 1993). The blackberg metaphor seems to be a fitting description of the learner profile of the younger arrivals.

Figure 3: Cohort B

Elementary arrivals: Low L_1 , Better Developed L_2

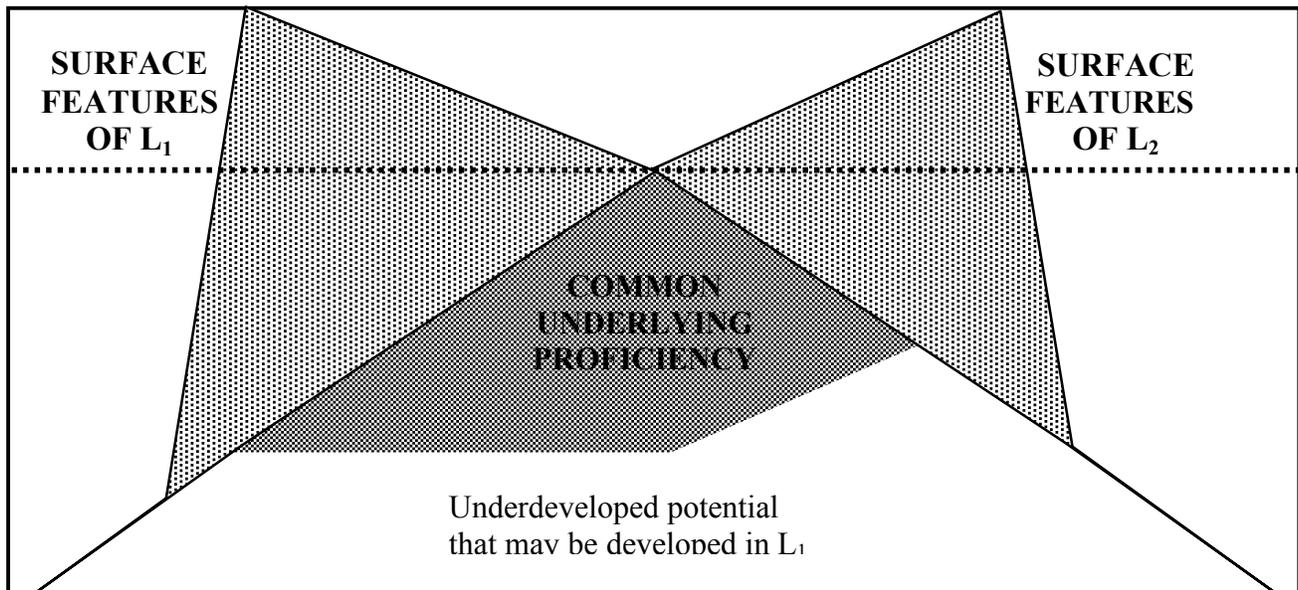


Sometimes elementary arrivals receive ESL support to the degree that L2 becomes the dominant language and is developed to a level sufficient for academic success in the context of high school and university. Sometimes young arrivals survive in the school system despite the lack of ESL support. This is a significant challenge for these students, since they do not have recourse to their first language to facilitate cognitive development in the second: in sum, they must pull on the harness with double the effort in order to develop both language and the associated concepts in English. Unless these students are identified for ESL support (Roessingh & Kover, 2002), we have little insight into their educational experiences, their successes and failures.

We have developed a hypothetical trajectory that reflects what we think elementary arrivals can achieve, given early ESL support that is ongoing even throughout Jr. and Sr. high school. It seems they can 'beat the academic clock' by reaching the 40,000 word threshold, albeit late. In our estimation, this would put them outside of the risk zone by their grade 12 year.

Figure 4: Cohort C

Junior High Arrivals: Uneven L₁ and L₂

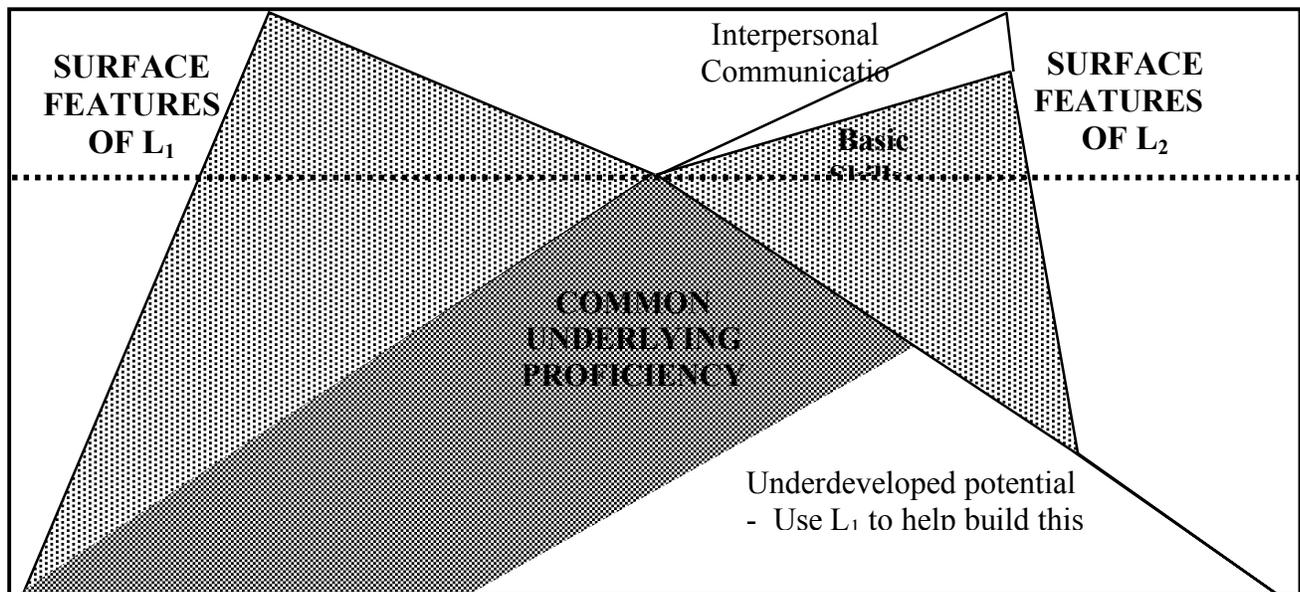


ESL learners who arrive in the junior high school years (grades 7 – 9), have more developed L1, and may have acquired some English language proficiency before their arrival by way of EFL (English as a foreign language) studies in their home country. These students are at risk in that they do not have full linguistic and cognitive maturity in L1, and now must pursue academically demanding content area studies in a language they do not have under control. Moreover, many of these students may not have access to quality ESL programs in their local school in Alberta. In Alberta, there is no mandated ESL curriculum at this level.

These Junior High arrivals (aged 12- 15) face an enormous challenge. They must work very hard to beat the academic time clock. Most tracking data that suggest a time frame of 4 - 7 years to compete academically would place these students at high risk for failure in Canadian English-speaking school settings. Our growth model suggests that time simply runs out for these students, and that a 4 year high school program might benefit them. ‘Pay now or pay later’ ... most of these students wended their way more slowly through university where tuition costs, failed/repeated courses and an overall low GPA all took their toll.

Figure 5: Cohort D

**Senior High Arrivals: Full L₁ Proficiency,
Intermediate L₂ Proficiency**



ESL learners who arrive at the age of 15-16 from the Pacific Rim, typically have studied English to the level of Intermediate (reading GE 5), and have full cognitive

academic language proficiency in L1. In fact, in various content areas of study (typically sciences and mathematics) they are advanced. These students have a significant gap to close within only 3 years, if they wish to pass the provincially mandated English literature examination and register for university. However, they have advantages that the junior high and elementary aged arrivals (as well as the Canadian born) do not possess, that is, beneath the surface CALP level proficiency in L1 that will transfer and support the development of CALP in L2. Perhaps the biggest challenge these learners face is finding the courage to develop interpersonal communication skills and strategies (they have the basic skills of the BICS equation developed from text book learning of English as a foreign language – EFL). The other challenge is to beat the academic time clock.

These students have a good chance of academic success. In the case of ‘just right’ teaching and placement decisions, it becomes clear that understanding minimum threshold levels is critical to these students’ success. Their on-going development of CALP-like proficiency in English will take many years beyond high school, and transitional programming/counseling to carry them into university settings may be helpful. Others remain at risk and may never reach the threshold required to graduate from university.

While the learner profiles described above all share the common characteristics of approximately similar above the surface, BICS, proficiency in English, what becomes clear is that the below the surface unevenness in their development of CALP-like proficiency in L1 will have an enormous impact on instructional considerations.

The context of our work: site description, participants, research question

The study took place in a small academically oriented high school in a large urban setting. There are approximately 1200 students, evenly divided between junior high (grades 7 – 9) and senior high (grades 10 – 12) ... the only school in the city that accommodates both junior and senior high students. The school is centrally located in the city core. The immediate neighborhood children who the school initially served have long since grown up and moved on. The school now houses a variety of what may be called ‘specialty’ programs – ESL, Deaf and Hard of Hearing (DHH), Gifted and Talented (GATE) – to augment the neighborhood enrolment figures in the school’s catchment area. The vast majority of students arrive by bus. The school operates on a semester system – well suited to the work at hand.

An ESL program was introduced in September 1997 to serve approximately 85 students – almost exclusively the children of business class immigrants who had recently arrived from the Pacific Rim. The majority of these students arrived in their grade 10 year, aged 16 and spoke Cantonese as their first language. They were academically competent and “in a hurry” to get to university. In subsequent years, the ESL program began to experience intake of ESL learners from the junior high level (grades 7 – 9) who were still eligible for ESL funding and were identified by their teachers as needing ongoing support through high school. Many of these students were the younger siblings of older arriving ESL learners identified below, in Table 1.

A look in the school cafeteria or any hallway of the study site reveals a significant proportion of visible minority students – perhaps as many as 300 (25% of the school population). While some of these students are Canadian born Chinese (“CBC” kids as

the newly-arrived students called them), a significant number of these students are young arriving ESL learners, long since dropped from any official funding list, and, for all intents and purposes, no longer recognized as ESL students – often not even by themselves. They remain at academic risk nevertheless. Increasingly – as a consequence of monitoring grade 9 and grade 12 achievement measures for students of this learner profile -- we sought to identify those most in need of instructional support to succeed with the academic demands of high school English literature studies. By September 2000, we had identified 50 students of this profile. They were integrated with the older arriving students into the ESL program to receive upgrading (“skills booster”), academic transitional, sheltered/adjunct and tutorial support throughout high school.

Table 1 summarizes the learner profile of these cohorts of ESL learners. By June 2002, 51 ESL learners had graduated from our school. In the 5 years of our work, all of the ESL learners who attempted grade 12 English, passed.

Table 1: Profile of 4 cohorts of ESL learners (successful graduates): 1997-2002

Cohort	Immigrant Class	Age on Arrival	Risk Profile
A N=4	Business	Elementary	Little or no ESL support. Academic expectations but marginal performance throughout high school in English literature courses. Approximate reading equivalent 5 on entry into grade 10. Failure and dropout of program at university level.
B N=9	Business	Elementary	Little or no ESL support. Academic expectations. At risk for academic failure in high school. Approximate reading GE 5 on entry into grade 10. ESL support offered to this cohort for grades 10-12.
C N=20	Business	Junior High	Varying amounts and types of ESL support. Academic expectations. At risk for academic failure in high school. Approximate reading GE 5 on entry into grade 10. ESL support offered throughout grades 10-12.
D N=15	Business	Senior High	New arrivals to Canada. Academically competent, “in a hurry” to go to university. Approximate reading GE 5 on arrival. ESL program designed to support academic goals.

Note that all of the students demonstrated roughly a high intermediate level of English language proficiency upon intake into grade 10. That is, reading skills of approximately a grade equivalent of 5, vocabulary estimated at approximately 5,000 – 8,000 words (perhaps as high as 15,000 words for cohorts A and B – but still well below the 40,000 words of their academic grade 10 native English speaking counterparts), basic control of grammar and spelling. The most striking difference, of course, was that the younger arriving students “sounded good”. What is not visible from the profiles (above) is the “beneath the surface” underlying proficiency that the older students clearly had developed in L1 before their arrival, that the younger arriving students, as we were soon to discover, did not have. It is important to recall the shapes of the iceberg models at this

point, to understand our instructional challenges in dealing with such diversity, even among learners who we knew were academically competent and, on the surface at least, all starting from approximately the same place.

From: adapted from Roessingh, H. & Kover, P. (2003). Variability of ESL learners' acquisition of cognitive academic language proficiency: What can we learn from achievement measures? TESL Canada Journal, 21(1), 1 – 21.