## Chapter 1: Understanding Multilingual Learners

### 1.1 Multilingual Learners in the United States and Colorado

## Demographics and Languages

The 2020 and 2021 U.S. Census data indicates changes in the U.S. and Colorado Multilingual Learners (MLs) and Hispanic populations. Based on the most recent version of the U.S. Census, the number of foreign-born people in the U.S. has increased substantially from 40 million in 2010 to 45 million in 2021 ${ }^{1}$. The figures below are indicators of the changing demographics of the U.S. population with highlights of Colorado's changes, and the new challenges and opportunities for school districts. In line with the changes in U.S. population, Colorado has seen an increase, including an increasing number of MLs in the state. In Colorado, $81.2 \%$ of the MLs are Hispanic. However, this does not mean that all Hispanic students are multilingual learners and that all multilingual learners are Hispanic. Data below is based on 2020 and 2021 estimates from the Census Bureau ${ }^{2}$, as well as other sources:

- $13.6 \%$ of the U.S. population in 2021 was foreign-born
- In Colorado, $9.8 \%$ of the 2021 population was foreign-born
- In 2019, 15.4\% of the foreign-born children were of school age (5 to 17 years old). In 2016, $83 \%$ of them were enrolled in school ${ }^{3}$
- In 2021, $50.1 \%$ of the U.S. foreign-born population was from Latin America
- In 2021, 18.8\% of the U.S. population was Hispanic or Latino. Between 2010 and 2020, the U.S. Hispanic population increased by $23.0 \%$, which is approximately three times the growth of the overall population-the overall U.S. population grew by $7.4 \%$ in that same time period ${ }^{1}$
- In 2020, 22.3\% of Colorado's population was Hispanic. From 2010 to 2020, Colorado's Hispanic population increased by $21.6 \%$; Colorado's total population increased by $14.8 \%$ in that same time period ${ }^{4}$
- In 2019, the largest ethnic group in Denver was Hispanic with $47 \%$ of children of Hispanic origin of any race ${ }^{5}$
- In $2019,60.9 \%$ of the population who spoke a language other than English at home was Spanish speakers
- In $2017,33 \%$ of Hispanics were born outside of the U.S., increasing the chance that their primary languages were not English ${ }^{6}$. In 2016, Hispanics had a lower median age than the population as a whole: $32 \%$ were younger than $18{ }^{7}$
- Between fall 2009 and fall 2020, the percentage of public school students who were Hispanics increased from $22 \%$ to $28 \%{ }^{8}$
- In October 2020, 34.1\% of Colorado students in kindergarten through twelfth grade were Hispanic/Latino

This increase in the number of ML students in our schools has profound implications for how schools structure and deliver educational instruction.

Achievement differences between ML and non-ML students begin as early as kindergarten and continue through high school. The ML high school completion rate has not changed substantially in the past several years, and the dropout rate remains unacceptably high.

Over 270 different languages were spoken by multilingual learners. The following chart provides a breakdown of some of the major languages represented in Colorado as of October 2021.

Given these facts, resources should be concentrated to address the challenges and benefits of an increasingly diverse student population. Efforts to organize instruction based on these understandings will benefit all students, including native English speakers.

Top Twenty Home Languages Spoken by Colorado MLs (Grades K-12)
Number and percent of multilingual learners, by language background

| Rank | Language | Number (N) MLs (NEP, LEP, FEP M1/M2) | Percent (\%) MLs <br> (NEP, LEP, FEP M1/M2) |
| :---: | :---: | :---: | :---: |
| 1 | Spanish | 89,693 | 81.9 |
| 2 | Arabic | 2,070 | 1.9 |
| 3 | Vietnamese | 1,551 | 1.4 |
| 4 | Amharic | 1,310 | 1.2 |
| 5 | Russian | 1,183 | 1.1 |
| 6 | Chinese, Mandarin | 1,064 | 1.0 |
| 7 | Somali | 916 | 0.8 |
| 8 | Nepali | 817 | 0.7 |
| 9 | French | 578 | 0.5 |
| 10 | Korean | 478 | 0.4 |
| 11 | Tigrigna | 444 | 0.4 |
| 12 | Burmese | 414 | 0.4 |
| 13 | Telugu | 361 | 0.3 |
| 14 | Swahili | 338 | 0.3 |
| 15 | Oromo, West-Central | 334 | 0.3 |
| 16 | Hindi | 302 | 0.3 |
| 17 | Dari, Zoroastrian | 297 | 0.3 |
| 18 | Chuukese | 284 | 0.3 |
| 19 | Portuguese | 261 | 0.2 |
| 20 | Farsi, Eastern | 246 | 0.2 |

### 1.2 Stages of Language Development

Understanding the languages and cultures of MLs is the first step to understanding how to design, implement, monitor and evaluate programs to help them progress toward English proficiency, as well as attain challenging content and academic achievement standards. The ability to listen, speak, read and write is basic to academic success in any language. Whether children have been educated in their home country or the U.S., whether instruction is in English or another language, once students enter Colorado's education system, regardless of the instructional program implemented or the language used in the classroom, our goal is to provide them the opportunity to attain English proficiency and achieve academic success. For many MLs, contact with English begins at school, which is where our task begins.

Understanding the distinction between first language development and second language acquisition is necessary to set the foundation for learner-centered instructional strategies for MLs. Five principles apply to both first and second language acquisition:

- Language is learned by using language
- The focus in language learning is meaning and function (not form)
- Successful language learning is non-stressful, meaningful, concretely based and comprehensible
- Language is self-directed, not segmented or sequenced
- Conditions necessary for language acquisition essentially are the same for all children

These principles support practices, recommended in this document, that facilitate language learning. Just as children learn to read by reading, and to write by writing, they learn language by using language. The rate of language development will vary; under optimal conditions, it takes MLs 4-10 years to develop academic English fully - to be able to listen, speak, read, and write in a way that is indistinguishable from a native English speaker.

## First Language Development

Brown (1973), Chomsky (1986), Piaget (1970) and Vygotsky (1978) provide the theoretical framework for how language develops. They posit an internal process whereby humans create words and sentences. Language rules are generated as individuals move through developmental stages of language, each at their own rate. Chomsky suggests that as we create, comprehend, and transform sentences, we intuitively work on two levels: the deep structure and the surface structure of language. Surface structure is the way words or sounds are put together; deep structure is the meaning that the words or sounds are meant to communicate.

The following diagram represents Cummins' Dual Iceberg Theory and two language systems. The iceberg is an appropriate metaphor because, as with the cognitive structure of language, the majority lies below the surface. MLs' oral and written expression is represented by the portion above the surface and their underlying academic understanding is represented by the portion below the surface.

When students are strong in both language environments, their cognitive understanding supports communication skills in both languages. More importantly, what is learned in one language can be expressed through the other; information does not have to be relearned. Learners must be provided the appropriate language to express what they already know in one language through the other.


Cummins' (1979) Hypothesis on interdependence of languages (1979-1981) - "Iceberg Theory"

Despite varying perspectives on the exact linkage between language and thinking, most would agree that with few exceptions children acquire the basic grammatical rules of their native tongue by age four or five without direct instruction. The first language is developed as children hear it spoken. By imitating good models, they master language without any special instruction. While some believe that teaching about language makes children more conscious of their language, it is widely accepted that because children independently master intricate systems of grammatical rules, their independent and intuitive efforts should be respected and not undermined through attempts to teach abstract rules of grammar. Four essential interactions are critical to language learning and development: exposure to language, practice in a non-threatening environment, re-enforcement, and imitation. The differences between learning and acquiring a language (Krashen, 1981) are especially important for second language development, as illustrated below.

Learning vs. Acquisition Approaches to Language

| Learning | Acquisition |
| :---: | :---: |
| Focus on the forms to be mastered. | Focus on need to communicate linguistic functions. |
| Success based on demonstrated mastery of language forms. | Success based on getting things done with language. |
| Forms are learned for later functional applications. | Forms develop out of communicative needs being met in realistic contexts. |
| Lessons organized around grammatically-based objectives. | Lessons organized around need, desires and interests of students. |
| Error correction is a critical feature to promote the mastery of linguistic forms and structures. | Student success in getting things done and communicating ideas is the focus of reinforcement. Errors are accepted as developmental. |
| Learning is a conscious process of memorizing rules, forms and structures, usually as a result of deliberate teaching. | Acquisition is an unconscious process of internalizing concepts and developing functional skills as a result of exposure and comprehensible input. |
| Rules and generalizations are taught inductively and deductively. | Rules and generalizations are not taught unless specifically requested by students. |
| Lessons are characterized by teacher-developed drills and exercises. | Lessons are characterized by student-centered situational activities. |
| Students develop the four language skills (listening, speaking, reading, and writing) by following teacher-directed calendar. | Students develop the four languageskills (listening, speaking, reading, and writing) by participating in functional communicative activities which allow the skills to emerge naturally. |
| Early emphasis on production skills may produce unnecessary anxiety in students. | Lessons are characterized by low student anxiety, as production and eventual mastery are allowed to occur on the students' own schedule after sufficient input. |

Source: California Department of Ed.—Office of Bilingual Education (2005)

In working with MLs to facilitate their academic success, a number of prominent researchers (Cummins, 1981; Peregoy, 1991) support the view that strengthening the first language offers the best entry into second language acquisition, by providing a cognitive and academic foundation for proficiency in the second language.

## Acquiring a Second Language

Children best acquire a second language in much the same way that they acquired their first language, by learning to communicate and make sense of their world. This process is made more challenging in academic settings because second language learners need the new language to interact socially, as well as learn subject matter and achieve academically.

According to Krashen (1982), a new language is acquired subconsciously as it is used for various purposes. People acquire language when they receive oral or written messages they understand. These messages provide comprehensible input that eventually leads to output in the form of speaking and writing. If a student needs to know how to ask for milk in the cafeteria, $\mathrm{s} /$ he acquires the vocabulary needed to accomplish this task. By using language for real purposes, it is acquired naturally and purposefully. Language can be acquired through reading and writing, as well as through listening and speaking.

Students acquire second languages through exploration of verbal expression that increases as confidence and knowledge are gained through trial and error. MLs learn English more quickly when teachers use pictures, gestures, manipulatives and other means to make English comprehensible, while at the same time reducing the stress associated with the expectation that students immediately produce the new language.

Krashen (1982) defined the following stages for second language learners but acknowledged that language acquisition is an ongoing process; stages may overlap, and growth may occur at different rates. The first three stages typically progress quickly, while students may spend years in the intermediate and advanced stages.

- Silent/Receptive - The student does not respond verbally in L2, although there is receptive processing. The student should be included actively in all class activities but not forced to speak. Teachers should give students in this stage sufficient time and clues to encourage participation. Students are likely to respond best through nonverbal interaction with peers, being included in general activities and games, and interacting with manipulatives, pictures, audiovisual and hands-on materials. As students' progress through this stage, they will provide one-word verbal responses by repeating and imitating words and phrases.
- Early Production-Students begin to respond verbally using one or two words and develop the ability to extract meaning from things spoken to them. They continue to develop listening skills and build a large recognition vocabulary. As they progress through this stage, two or three words may be grouped together in short phrases to express an idea.
- Speech Emergence - MLs begin to respond in simple sentences if they are comfortable with the school situation and engaged in activities during which they receive large amounts of comprehensible input. All attempts to communicate (i.e., gestures, following directions) should be received warmly and encouraged. It is especially important that neither the instructor nor the students make fun of or discourage students' attempts at speech.
- Intermediate Fluency - Students gradually transition to more elaborate speech so that stock phrases with continued good comprehensible input generate sentences. The best strategies are to give them more comprehensible input, help them develop and extend recognition vocabulary and provide chances to produce language in comfortable situations.
- Advanced Fluency-Students engage in non-cued conversation and produce connected narrative. This is an appropriate time for grammar instruction focused on idiomatic expressions and reading comprehension skills. Activities should be designed to develop higher levels of thinking and vocabulary and cognitive skills, especially in reading and writing.

Cummins (1980) originally suggested a framework that distinguishes between language used for basic social interaction and that used for academic purposes. Basic Interpersonal Communication Skills (BICS) refers to language skills needed for social conversation purposes. Cognitive Academic Language Proficiency (CALP) refers to formal language skills used for academic learning.

Though not all face-to-face interaction is at the basic communication level, students generally acquire a strong enough foundation to participate in spontaneous conversation rather quickly (Cummins, 1981). Thomas and Collier (A National Study of School Effectiveness for Language Minority Students' Long-Term Academic Achievement, 1995) estimated that it could take as long as 14 years for older students who begin second language acquisition without literacy skills or consistent prior formal schooling in their first language.

Cummins later refined his framework to better capture the complex and multidimensional social and academic aspects of language learning (below). He proposed that all communication tasks can be viewed along two intersecting dimensions - cognitive demand and contextual embeddedness. Instruction should be planned to move among the quadrants, increasing the cognitive demand with familiar/embedded language and teaching new language in relation to familiar content.

Cummins, J (1984) Bilingualism \& Special Education: Issues in Assessment and Pedagogy. San Diego: College Hill Press, p 139.
$\left.\begin{array}{|c|c|}\hline & \begin{array}{c}\text { Cognitively } \\ \text { Undemanding } \\ \text { Context } \\ \text { Embedded }\end{array} \\ \hline \text { Undemanding } \\ \text { Context } \\ \text { Reduced }\end{array}\right\}$

### 1.3 Socio-Cultural Issues and Student Learning


#### Abstract

Most educators, like most other U.S. citizens, are socialized within homogeneous communities and have few opportunities to interact with people from other racial, ethnic, language, and social-class groups. The formal curriculum in schools, colleges and universities provides educators with scant and inconsistent opportunities to acquire the knowledge and skills needed to work effectively in culturally diverse educational settings.


Diversity within Unity: Essential Principles for Teaching and Learning in a Multicultural Society James Banks, et al, 2001
Learning English in an academic environment is not the only challenge facing MLs. They also must learn to function in a new classroom, school, community, state and country. Things native English speakers take for granted about living and going to school in the U.S. are viewed very differently by immigrants and MLs.

The country of origin and the cultural experience students bring with them impacts the way they see the world. MLs have different experiences with school systems and processes, how and what they eat for lunch, expectations about student- teacher-peer interactions, etc. They need guidance and explicit instruction to better understand their new school culture and environment.

Issues that directly impact MLs and their educators include the country of origin, language, access to education, basic enrollment information and classroom considerations. Even under the best circumstances most newcomers will experience a form of culture shock as they adapt to the subtle and gross differences in their new environment. Some variables to consider are:

- Country of Origin - The country from which a student comes might be at war, economically poor, underdeveloped or very different in climate and geography from the U.S. A student concerned for the safety of family members and friends in a country at war is not likely to find peers in U.S. schools that can understand this hardship. Students who come from such circumstances should be provided a transitional period to relieve the trauma and stress related to their original situation and subsequent move to the U.S. Children from poor countries might not understand the wastefulness seen in U.S. society. MLs from underdeveloped countries might not expect the availability of items we take for granted such as running water, indoor bathrooms and basic cleanliness. The climate and geography a student previously experienced must be understood and taken into account (e.g., altitude, change of seasons, snow and ice). These changes are substantial and adapting may be stressful or take time.
- Language - Does the student come from a country that has a written language? How similar is their alphabet to English (e.g., letters as in English or characters as in Chinese or Korean)? Do they read from left to right or right to left? A Spanish-speaking student from Uruguay might not have the same accent and specific vocabulary as one from Mexico, similar to two U.S. students from New York City and New Orleans.

It is critical that schools and districts ascertain the languages spoken by their students and identify resources, both human and material, to establish lines of communication with families. It may seem a daunting task, but materials are readily available in dozens of languages at various clearinghouses and internet sites. You are not alone; schools across the U.S. and Canada are facing and meeting these same challenges. Once communication with families is established, either through an interpreter/cultural mediator or other means such as phone contact (especially for rural communities with less access to resources or resource people), a basic overview of the school process can and should be communicated.

- Access to a Free Education-Free and universal education is not available in all countries. Parents should be informed that their child's right to access the educational system is not dependent upon factors such as their ability to understand English, the family's immigration or economic status or their national origin.
Discrimination based on these factors may have been a reality in the country from which the family emigrated.
- Basic Enrollment and Attendance Information-Enrollment procedures and attendance policies vary around the world. Enrollment information must be made available to MLs' parents/guardians in languages they understand whenever possible. If information is not accessible, a reliable translator or cultural mediator should be made available. Stronger family/school partnerships are fostered when families are provided information in their native languages, creating opportunities for connecting, communicating, coaching, and collaborating between parents, teachers, administrators and other school staff. Schools should not ask for social security cards as this is not required by law. Many come to the U.S. for economic reasons and are not aware of their child's right to a free or reduced cost lunch. School lunch applications should be completed by the interpreter/cultural mediator and the parent in a way that reduces stress associated with the family's economic situation.

Compulsory education is not the norm outside the U.S. Therefore, when parents sign the school disciplinary plan, they should be made aware of the expectations and laws governing school attendance. Parents also need to know that prejudice and discrimination are not acceptable practices in the U.S. They can discuss this with their child to avoid conflict with other students. Likewise, educators and staff members should be aware that immigrant students also have customs and practices that might be unusual or different from those they have experienced.

Classroom considerations - A new ML initially should have a "buddy" to serve as a peer support partner, ideally from a similar language or cultural background. Once the new student grows accustomed to the school environment, the buddy should have the choice to continue to help as an interpreter or not. Interpreting requires much of a student, particularly cognitively; not all students possess that ability. Be aware that this practice has the potential to create conflict and tension for the new student or the "buddy" if the students' countries of origin, experiences or personal preferences are not a good match. Just because two students come from Asian countries doesn't not mean they speak the same language or have similar ethnic or socio-economic backgrounds. It may be helpful, especially for older students, to allow them to shadow other students for several days, to get a feel for the school, before giving them final schedule and requiring them to participate in class activities. For tools and resources for creating an inclusive environment for and avoiding the unnecessary segregation of multilingual learners visit OELA English Learner Tool Kit, Chapter 5 at www2.ed.gov/about/offices/list/oela/english-learnertoolkit/index.html.

A student's adjustment is more difficult if they do not want to be in the U.S./Colorado. Older students could be more affected by a move to the U.S. than a younger student, because of the pressure to fit into the new environment. Welcoming, responding, and supporting each student individually is the best way to create a positive environment.

## The Immigrant Experience

Elizabeth Coetho (1994) describes the various issues that may cause a great deal of stress to immigrant and refugee students. These include:

1) Choice—Did the family and the student have a choice in leaving their native country?
2) Preparation and Support—Were they prepared emotionally and financially to establish their new life in the United States?
3) Family Separation-Did all members of the family arrive as a unit?
4) Minority Status- What are the implications of going from a majority status to a minority status?
5) Loss of Status-Are the parents able to sustain their skill and professional level of work?
6) Culture Conflict between Home and School-Do the students have to negotiate and, in some instances, abandon their cultural values?
7) The Refugee Experience-How do the experiences of survival affect the refugee student?
8) The Culture of the School-Is there a process to help the immigrant/refugee student learn about and understandthe culture of the school?

## Website Resources

${ }^{1}$ Based on the American Community Survey's 1-year estimates in 2010 and 2021. Sources: (1) U.S. Census, American Community Survey, 2010 ACS 1Year Estimates Data Profiles
(data.census.gov/cedsci/table?q=foreign\ born\&tid=ACSDP1Y2010.DP02);
(2) U.S. Census, American Community Survey, 2021 ACS 1-Year Estimates Data Profiles
(data.census.gov/table?q=foreign+born\&tid=ACSDP1Y2021.DP02)
$2{ }^{2}$ U.S. Census, American Community Survey, 2021 ACS 1-Year Estimates Data Profiles
(htdata.census.gov/table?q=foreign+born\&tid=ACSDP1Y2021.DP02); U.S. Census, 2020 Census Demographic Data Map Viewer, (mtgisportal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=2566121 a73de463995ed2b2fd7ff6eb7)
${ }^{3}$ Institute for Family Studies, How Do the Children of Immigrant Parents Perform in School (ifstudies.org/blog/how-do-the-children-of-immigrant-parents-perform-in-school)
${ }^{4}$ U.S. Census, Historical Population Change Data (1910-2020), (census.gov/data/tables/time-series/dec/popchange-data-text.html); U.S. Census Bureau, "Race and Ethnicity in the United States: 2010 Census and 2020 Census", published August 12, 2021, (www.census.gov/library/visualizations/interactive/race-and-ethnicity-in-the-united-state-2010-and-2020-census.html)
${ }^{5}$ Denver Office of Children's Affairs, The Status of Denver's Children 2019: A Community Resource page 16
(www.denvergov.org/content/dam/denvergov/Portals/713/documents/d ata-resources/StatusOfDenversChildren_ADA_2019.pdf)
${ }^{6}$ Pew Research, Facts on Latinos in the U.S.
(www.pewresearch.org/hispanic/fact-sheet/latinos-in-the-u-s-fact-sheet/)
${ }^{7}$ Pew Research, The Nation's Latino Population is Defined by Its Youth
(www.pewresearch.org/hispanic/2016/04/20/the-nations-latino-population-is- defined-by-its-youth/)
${ }^{8}$ National Center for Education Statistics, Racial/Ethnic Enrollment in Public Schools (nces.ed.gov/programs/coe/indicator/cge)

