2014

Writing Development of Spanish-English Bilingual Students With Language Learning Disabilities

Robin L. Danzak
Sacred Heart University, danzakr@sacredheart.edu

Elaine R. Silliman
University of South Florida

Follow this and additional works at: http://digitalcommons.sacredheart.edu/speech_fac
Part of the Bilingual, Multilingual, and Multicultural Education Commons, and the Speech and Hearing Science Commons

Recommended Citation
Chapter 12

Writing Development of Spanish-English Bilingual Students with Language Learning Disabilities:

New Directions in Constructing Individual Profiles

Robin L. Danzak and Elaine R. Silliman

This chapter addresses Spanish-speaking, English Language Learners (ELLs) in the United States who are sequential bilinguals; that is, oral and written English is acquired as a second language (L2) at school. Within this population, substantial variation exists with regard to individual students’ language and literacy learning experiences. The specific focus here is the writing patterns of ELLs with atypical language development, who often present with multiple complexities in authenticating their language learning profiles in both Spanish and English.

Writing is both a working memory and language process that depends on the synchronous coordination of the (Berman & Nir-Sagiv, 2007; Berninger, 2009; Berninger, Garcia, & Abbott, 2009): (a) formulation of words, sentences, and discourse; (b) transformation of phonological, orthographic, and morphological knowledge into text; and (c) efficient implementation of executive functions to plan, review, and revise expression. Writing also conveys social identity, which further influences how ELLs approach composing for academic purposes (Danzak, 2011a, 2011b; Ortmeier-Hooper, 2007). With rare exception (e.g., Paradis,
Emmerzael, & Duncan, 2010), the social identity of school-age bilinguals with language learning disabilities (LLD) has not been a focus for understanding individual differences.

In this chapter, we first present an overview of Spanish-speaking ELLs in U.S. public schools, including the challenges of identifying those with atypical language development. Next, we provide a brief overview of the few studies on the writing of ELLs with Language Learning disabilities (hereafter referred to as ELL-LLD). Finally, we offer two case studies as examples of how individual differences may be explored through a mixed methods profile analysis of ELL-LLD writing that examines the expression of both literate language and social identity.

**Spanish-Speaking ELLs in U.S. Public Schools: Overview**

**ELLs and programs.** In 2009, 21% of U.S. students spoke a language other than English at home (Aud et al., 2011), with Spanish speakers comprising 73% of these students (Batalova & McHugh, 2010). More than half of these children (56%) were born in the United States. Of those born outside the country, the majority (49%) was also of Hispanic origin, with children from Mexico comprising 32% (Aud, Fox, & KewalRamani, 2010).

Under the federal English Acquisition Act, students are tested for eligibility for ELL services when their school registration forms indicate that a language other than English is spoken at home. States vary in the assessments used to classify and measure the progress of ELLs; generally, a score below a given proficiency cut-off on English listening, speaking, reading, and writing will qualify the student for ELL services.

**Special education.** Another federal law, the Individuals with Disabilities Education Act (IDEA), applies to ELLs who may qualify for special education services when they do not respond as expected to English language and literacy instruction. IDEA requires that ELLs referred for services are tested both in English and in their first language (L1) to the greatest
extent possible. In 2008, approximately 1,000,000 Hispanic students received special-education services nationwide (U.S. Department of Education, Office of Special Education Programs, 2008). Most were likely classified as having a learning (reading) disability (Aud et al., 2011).

**The challenges of identifying ELLs with LLD.** Bilingual students struggling with oral and written language in the classroom may miss out on special education services—or obtain services after a significant delay—whereas teachers and service providers wait for their English language skills to develop (August, Shanahan, & Escamilla, 2009). A major issue is that eligibility criteria vary by state, and these criteria are not necessarily the same as diagnostic criteria that can reliably differentiate a disability from normal variation (Silliman & Berninger, 2011). A general clinical definition of atypical language learning is lower-than-expected language development relative to age in the absence of particular developmental causes (e.g., intellectual disability, hearing loss, etc.) (Rice, 2004). Wallach and Butler (1984) introduced the term LLD to emphasize the linkages between spoken language and literacy learning. Others (Bishop, 2009; Kohnert, Windsor, & Ebert, 2009) propose that we are confronted with explaining a learning problem, not just a linguistic problem, a supposition with which we agree. Indeed, population-based longitudinal studies of monolingual English-speaking students with LLD show that the disability persists for many at the end of their secondary education as reflected in continuing academic struggles (Conti-Ramsden, Durkin, Simkin, & Knox, 2009), which include writing (Dockrell, Lindsay, & Palikara, 2011).

**ELL-LLD Writing Patterns**

A robust literature exists on the writing of monolingual, English-speaking children with LLD (see Puranik & Otaiba, this volume). In contrast, studies on literacy—especially those on writing instruction and outcomes for ELL-LLD—are rare (August & Siegel, 2006; Graham & Hebert,
2010). The few investigations in this area (Ruiz, 1995a, 1995b; Ruiz, Vargas, & Beltrán, 2002) were case studies conducted in the elementary grades. These qualitative studies did not examine linkages between oral and written language or systematically assess substantial quantities of written texts, but rather focused on instructional strategies. Ruiz’s (1995a, 1995b) work did emphasize the importance of understanding individual differences among ELL-LLD students, as well as how to maximize their diverse strengths through supportive instructional contexts.

Clearly, more extensive research on ELL-LLD writing is needed, particularly with older students. However, given the diversity of this population, another essential area of inquiry is how to best capture individual profiles of ELL-LLD writers. We propose that a mixed methods profile analysis has the potential power to capture strengths and challenges of ELL-LLD students.

Method

Designing a Mixed Methods Profile Analysis for ELL-LLD

In this section, we extend a previously conducted study of bilingual writing (Danzak, 2011b, 2011c) to explore two cases of ELL-LLD using a mixed-methods profile analysis. Mixed-methods designs integrate the methodologies of both qualitative and quantitative research, emphasizing a pragmatic (i.e., “what works”) approach and the incorporation of various types of data and analyses to best address the research questions at hand (Teddle & Tashakkori, 2009). The convergence of qualitative and quantitative methods results in outcomes that may be strengthened due to mutually supportive findings, or challenged, in the case of conflicting findings, across the qualitative and quantitative aspects of the study. In many research contexts, including the multifaceted, dynamic context of a bilingual classroom, mixed-methods designs provide complementary strengths and nonoverlapping weaknesses of the qualitative and quantitative methodologies (Johnson & Turner, 2003).
The Danzak (2011b, 2011c) study was an embedded mixed methods design (Creswell & Plano Clark, 2007) in which qualitative and quantitative data were collected simultaneously and analyzed sequentially, with an emphasis on the quantitative data. The bilingual writing of 20 ELLs in middle school was examined within the authentic context of bilingual autobiography. Quantitative outcomes on lexical, syntactic, and discourse measures of 148 texts (e.g., noun scale by Ravid, 2006, number of different words, mean length of T-unit, and a clausal complexity measure) were compared across languages (Spanish-English) and genres (expository-narrative). Qualitative analyses were applied to 60 texts and interviews of a subgroup of six focal participants to explore how language and literacy learning had shaped their identities as mono- or bilingual writers. The integration of qualitative and quantitative outcomes resulted in student profiles that offered educators and speech-language pathologists (SLPs) deeper insight into the focal participants’ language and literacy resources, strengths, and challenges.

What follows is a translation of the Danzak (2011b, 2011c) mixed methods approach into a clinical tool for exploring individual differences in composing ability through a profile analysis of two students: Manuel and Daniel. A mixed methods triangulation design (Creswell & Plano Clark, 2007) is applied here; that is, quantitative and qualitative data are collected and analyzed simultaneously, with equal weight, to develop the profiles. Qualitative data are utilized in describing the boys’ histories and identities, and quantitative linguistic measures are applied to Manuel and Daniel’s writing to deepen the profile analyses.

Qualitative Contributions: The Case Studies

Both students, Manuel and Daniel (pseudonyms), are bilingual, teenage boys from working class, Spanish-speaking families; however, their similarities end there. Manuel, age 14 years (grade 8), from Mexico, struggles with basic composing skills, demonstrating challenges in global text
organization, spelling, punctuation, vocabulary, and morphosyntax. Daniel, age 16 years (grade 10), from Puerto Rico, who has mild cerebral palsy, has overcome many language and literacy obstacles, but still faces challenges with academic writing.

**Manuel**

A tall, quiet young man, Manuel was born in Mexico and moved to the United States at age 11, when he entered grade 6 and began to learn English. Information about Manuel, and his bilingual writing samples, were collected when he was 14 years old and attending grade 8 at a public middle school on the west coast of Florida (Danzak, 2011b, 2011c). Manuel produced 18 written texts in Spanish and English. As one of the focal participants, he was also interviewed and completed a questionnaire regarding his language and literacy history and usage.

Both in his writing and his interview, Manuel expressed that he was not happy living in the United States and that he found learning English difficult, in part because he did not identify with the U.S. culture: “No me puedo acostumbrar aquí” (“I can’t get used to it here”), he stated in his journal. He preferred to use Spanish for speaking and writing, and considered himself monolingual. However, Manuel had experience studying an indigenous language, Otomi, in school in Mexico, and had also been exposed to it through family members. Manuel claimed to understand Otomi but not speak it. Manuel also stated in his interview that, as a Spanish speaker in the United States, he had experienced language prejudice and that it made him feel “depressed.”

By the end of grade 8, Manuel had not been referred for special education eligibility. However, it was clear that he was struggling with writing at a basic level in both L1 and L2. His texts were extremely short in length, and contained many errors at the word, sentence, and text levels. His vocabulary consisted mainly of basic words frequent in the oral language register. On
a holistic writing measure (Quellmalz & Burry, 1983), Manuel’s texts were generally scored as “not at all competent” to “not very competent.” His minimal writing proficiency in English was also verified by the grade 8 state writing test, on which Manuel scored 2.5 out of 6.0 points.

Daniel

Daniel illustrates the potential that can be achieved for children with disabilities when community, family, and school serve as strong and positive supports for achievement, and early intervention is secured. Information about Daniel and his writing were obtained during a three-week writing workshop that he attended at a university speech, language, and hearing center. At the time of the workshop, Daniel was 16 years old and attending grade 10 at a Florida public high school dedicated to serving the academic and social needs of students who required special education. During the workshop, various writing samples were collected in English and Spanish, and informal interviews were conducted with Daniel and his mother.

Daniel was born in Puerto Rico at 24 weeks, was diagnosed early on with mild cerebral palsy, and moved to Florida with his family at age 4 years. Today, according to Daniel’s mother, his disability primarily affects his fine motor skills. His first language was Spanish and he was an early talker: “Speaking in full sentences by the time he was 11 months old. People couldn’t believe it,” according to his mother. Daniel has been educated only in English and has excelled in oral language learning. Spanish is regularly spoken at home and Daniel maintains fluent spoken language skills to communicate with his family and community. When asked if he spoke Spanish with friends, Daniel reported using a mixture of both languages, or “Spanglish.”

In spite of his strong oral language skills, Daniel experienced significant difficulty learning to read and write. During elementary school, he attended self-contained, special-education classrooms for students with learning disabilities. By grade 3, Daniel was still
demonstrating preschool-level literacy skills. With intensive intervention, he finally began to read and write, catching up to grade-level expectations by the end of grade 3. Daniel has scored at or above grade level on reading and writing assessments since then.

Currently, Daniel struggles with math, and he has difficulties with spatial relationships. For example, he has directionality problems such that, while shopping, his mother has to watch him carefully “because if he gets lost it will be very hard for him to find his way back.” In writing, Daniel is eager to express his large vocabulary; however, his sentences are often simple. Planning and organization represent his biggest challenge, as Daniel has difficulty attending to the task and developing a coherent text structure. These difficulties in the spatial and organizational realms suggest that Daniel’s challenges extend beyond fine motor problems.

Quantitative Contributions: The Writing Analyses

This portion of the profile analysis is based on two narrative texts each composed by Manuel and Daniel, one in English and one in Spanish. Topics drew on their personal experiences or beliefs (see Appendix). Because Manuel’s texts were short in length, two writing samples with related topics for each language were combined. Manuel’s combined English topics were “Letter to a New Student” and “My First Day of School in the U.S.,” and his combined Spanish topics were “My Future” and “Three Wishes.” Daniel’s English topic was “My Dream Vacation,” and his Spanish topic addressed “My Future.” Of note, neither boy routinely writes in Spanish at school as both currently attend English-only programs.

One keystone of a literate register in writing is increased density of lexical and syntactic items. Density here refers to the elaboration of meanings within noun phrases and the use of sentence-level, syntactic devices for simultaneous expansion and embedding. Thus, two aspects
of density are highlighted in Manuel and Daniel’s narrative writing in English and Spanish: elaborated noun phrases (ENPs) and syntactic complexity.

**Lexical Density: ENPs**

ENPs increase sentence length (complexity) through pre- and/or postmodification of the head noun, and package attributive information (density) into sentences (Scott & Balthazar, 2010). For example, a simple descriptive noun phrase such as “the talented athlete” is not as complex or dense as a descriptive noun phrase with postmodification: “the talented athlete who scored the winning goal” (Eisenberg et al., 2008). Increased sentence informativeness through optional ENP embedding (Fang, Schleppegrell, & Moore, in press; Ravid & Berman, 2010): (a) appears to develop more rapidly during adolescence; (b) is characteristic of the specialized vocabularies of science and math; and (c) is a hallmark of more literate sentence formulation in writing. Therefore, noun-phrase complexity provides a window into advancing meaning-form relationships through dynamic interactions between the semantic and syntactic systems. When these interactions are not well coordinated, the outcomes may be a less developed lexicon and less complex syntax (Scott, 2010).

ENPs in Manuel and Daniel’s written texts were classified based on Eisenberg et al. (2008), who examined ENPs in the oral narratives of 40 children ages 5, 8, and 11 years. (For a more in-depth approach to ENP evaluation in written texts, see Ravid & Berman, 2010.) The frequency of the four ENP categories with examples from the Manuel and Daniel’s texts are displayed in [Table 12.1](#). A caveat in applying any ENP classification system is word-order differences across languages. Like English, Spanish determiners, demonstratives, and quantifiers generally occur in the prenoun position (los libros, este libro, algunos libros; the books, this book, some books); however, possessives may occur either pre- or postnoun (mis libros, los
In contrast to English, Spanish descriptive elements (adjectives), in most cases, occur postnun (el libro azul, un libro muy interesante; the blue book, a very interesting book). Such examples were classified as descriptive noun phrases, like their semantic equivalents in English, rather than postmodifications.

Considering the number of ENPs in each category and the various examples, it appears that Manuel’s writing included primarily simple designating noun phrases (NPs) (especially in Spanish) as well as some complex NPs with postmodification (more so in English). Daniel’s writing, on the other hand, demonstrated more variety (especially in Spanish), with more simple descriptive NPs and many, complex NPs with postmodification that also involved prenoun modification. Based on these patterns, and across both languages, Manuel seemed to lag in lexical density whereas, for Daniel, it appeared to be a strength.

**Syntactic Density: Clausal Complexity**

To explore the syntactic density of Manuel and Daniel’s writing, two traditional measures were applied first: mean length of T-unit (MLTU) and a clause density ratio (CDR). Results are shown in Table 12.2. The combination of MLTU and CDR provides a quantification of sentence complexity that, in some cases, may differentiate the writing of typically developing English monolinguals from those with LLD (Scott & Balthazar, 2010); however, as these authors note, caution should be taken as these metrics do not reflect the sophistication of individual clauses.

As shown in Table 12.2, in both languages, Manuel demonstrated a greater MLTU and CDR than did Daniel. This pattern occurred in Spanish despite Daniel’s compositions consisting of more than double the total number of T-units. Thus, it appears that, overall, Manuel wrote
longer sentences (as measured by MLTU) that included more subordinate clauses (as assessed by CDR), whereas Daniel preferred formulating shorter sentences with fewer embedded instances.

**Manuel.** In the English texts, an example of Manuel’s attempt at syntactic density is: “I like (a) to say to one student of mi contry (b) in this contry is not the sime (c) because is alot of stuff so much diferent rigth here in the U.S.” (main verb is bolded). This sentence, which mirrors talking, contains two nominal clauses in the object position (a, b) and, within (b), an adverbial-causal clause (c), consistent with a more advanced clause combining strategy that allows multiple depths of subordination (Scott, 2010). Manuel also attempted a complex ENP here, using both prenoun (alot of) and postmodification (so much different . . . ). However, at both the syntactic and lexical levels, his strategy use is offset by obvious difficulties with English word order and verb morphology, such as the omission of auxiliary verbs and obligatory subject pronouns (which are optional in Spanish). Misspellings are also apparent and primarily involve the orthographic component, for example, letter-sound misapplications (e.g., mi for my, wos for was) and absence of word boundaries (e.g., use to, can be), which can indicate parsing issues.

In the Spanish texts, Manuel’s writing showed fewer morphosyntactic errors, more grammatical appropriateness, and increased variation in verb morphology in sentences that also contained multiple embedding levels. An example is: “y (a) situbiera un deseo mas desearia (b) que todos los inmigrantes tubieran papele (c) paraque no sufran (d) crusando el desierto”—“and (a) if I had one more wish I would wish (b) that all immigrants would have papers (c) so that they would not suffer (d) crossing the desert.” At a semantic level, this complex construction includes “generic, impersonal reference to classes of people and objects” (Berman & Nir-Sagiv, 2007, p. 81), i.e., immigrants, papers, which is more characteristic of expository writing. At a syntactic level, it contains a conditional adverbial clause (a) and a nominal object clause (b) with deeper
embedding: (1) an adverbial clause of purpose (c), described in Spanish grammar as an “oración final” (Gili Gaya, 1972), which necessarily contains a verb in the subjunctive mood; and (2) within this, an adverbial temporal headed by a gerund (d). Unlike the English example, Manuel’s morphosyntax here is grammatically appropriate combined with glimpses of the semantic ability to construct a more literate register. There are numerous misspellings, however, comparable to the orthographic patterns of the English texts.

**Daniel.** In English, Daniel demonstrated appropriate knowledge of morphosyntax co-occurring with less embedding depth than Manuel. As this example demonstrates, Daniel’s complexity strategies relied on ENPs that also were characteristic of the more general and objective lexical references found in expository writing: “but I know (a) that they have made many remarkable discoveries in medical science.” There is one nominal object clause (a) with Daniel’s lexical strengths manifested by a complex ENP that included both prenouns (many remarkable) and postmodifications (in medical science). Of interest, Daniel demonstrated some command of derivational morphology throughout his writing, for example, remarkable, discoveries, technologically. His misspellings generally reflected orthographic uncertainty about letter doubling, a challenge that Daniel attributed in his interview to learning Spanish before English (letter doubling is infrequent in Spanish spelling).

Daniel’s Spanish texts illustrated a similar complexity strategy. Most sentences contained only one subordinate clause; however, an example of a two-level embedding did occur: “Yo se (a) que yo voy a ser el mejor medico (b) que pueda ser”—“I know (a) that I am going to be the best doctor (b) that I can be.” Here, a nominal clause is present in the object position (a) and, embedded within it, a relative clause (b). Both clauses demonstrate correct verb morphology, including the use of the subjunctive mood in the second clause. Additionally, this sentence shows
Daniel’s ability to transfer lexical complexity via ENPs with both pre- (el mejor) and postmodifications (que pueda ser).

Discussion and Conclusions

Manuel and Daniel: What We Have Learned?

In this chapter, we have presented a mixed methods profile analysis of two cases of struggling bilingual writers, Manuel and Daniel. These students’ strengths and challenges in writing in both Spanish and English texts were illuminated by: (a) qualitative exploration of interviews, case histories, and linguistic density strategies; and (b) quantitative examination of lexical density (through ENPs) and syntactic density (through MLTU and CDR). The goal was to demonstrate how this sort of profile analysis might provide a deeper understanding of individual differences in writing to enhance clinical and instructional interventions for ELLs with LLD.

Manuel. At a superficial level, Manuel appeared to lack linguistic density in both languages. Upon deeper analysis, he demonstrated glimmerings of expository-style reference and sophisticated syntactic use through multiple, embedded clauses in Spanish, which he attempted to transfer to his L2 writing. However, due to his inexperience and lack of confidence with English and, perhaps, nonsystematic instructional targeting of his multilevel needs, these efforts were characterized by errors in word order, morphosyntax, and spelling. Manuel is an excellent example of an academically struggling ELL who may appear, on the surface, to manifest characteristics of LLD in English (e.g., morphosyntactic errors), but shows the potential to rise to the occasion when assessed in L1. As a consequence, any speculation that Manuel manifests LLD must be tempered until more information is obtained.

However, the imbalance that Manuel displayed between low content elaboration and higher levels of syntactic complexity in both languages is consistent with recent findings on
variations in the quality of English oral narratives (Colozzo, Gillam, Wood, Schnell, & Johnston, 2011) that occur when processing demands affect the coherence of story generation. Obviously, Manuel’s level of meta-awareness requires more support, as well as increased motivation and confidence on his part, to develop his academic English skills, in particular, in the conceptual-lexical domain. Additionally, the content of Manuel’s writing revealed a sensitive young man who was experiencing significant struggles with both language learning and his identity as a Spanish-speaking immigrant (for details, see Danzak, 2011b). For Manuel to embrace academic English language learning, he must have opportunities to participate in supportive contexts where he is a valued as a successful member of the academic language community.

**Daniel.** Daniel’s profile varied greatly from Manuel’s, both qualitatively and quantitatively. He was successful in transferring his lexical strengths via complex ENP use from English, his language of schooling, to Spanish, a language that he often speaks but rarely writes. Hence, Daniel’s portrait is consistent with the second profile of narrative generation that Colozzo et al. (2011) identified—strong content elaboration and lower levels of syntactic complexity. Based on MLTU and CDR outcomes, Daniel should be responsive to instruction in sentence combining (Silliman & Scott, 2009), using materials from various academic subject areas (Scott & Balthazar, 2010), to further develop his meta-awareness about syntactic density. Spelling instruction, especially learning orthographic patterns for letter doubling, would also build Daniel’s writing confidence in English.

In contrast to Manuel, Daniel considers himself bilingual, and self-identifies as a successful participant in the English-speaking, literate community. Daniel’s confidence in his potential for academic achievement is evident in his “My Future” text, in which he expresses his desire to become an outstanding physician who will “revolutionize” medical practices. His
motivation is evident in that his favorite class is science. When writing, however, Daniel described himself as “lazy”: easily distracted and bored when composing. These factors may be outcomes of attentional and inhibitory issues that disrupt his planning abilities.

Since text composition skills extend beyond the language domain, both Daniel and Manuel would benefit from cognitive strategy instruction to build their knowledge about how to orchestrate narrative and expository composition more effectively. The processing load of expository writing on executive functions appears higher for sequential bilinguals than for monolinguals due to less familiarity with the L2 (Graves & Rueda, 2009). Processing demands can also increase when there is less awareness of and facility with the multiple levels of the academic language register (Wilkinson & Silliman, 2008). In either case, heavier processing demands can result in less flexible deployment of attentional resources during composition; hence, it is also essential for students like Manuel and Daniel to be explicitly taught about text organization and structure as well as genre-specific, cognitive strategies for writing.

Benefits of Mixed Methods Profile Analysis

A mixed methods profile analysis can capture variation in students’ writing experiences, resources, and challenges, providing deep understandings of linguistic strengths and needs. It is also consistent with the growing recognition that individual differences can only emerge from assessment of multiple domains, including the cognitive, linguistic, and social domains (Colozzo et al., 2011; Silliman & Berninger, 2011). For example, with regard to linguistic density, Manuel and Daniel demonstrated that there were different ways to construct complexity in writing. Manuel’s strength lies in sentence combining, whereas Daniel excels with complex ENPs. Both boys showed evidence of cross-language transfer (each in their area of strength), from their more-dominant language to their less-dominant one. Overall, this snapshot of a mixed-methods
profile analysis suggests that assessing writing in both languages, examining text features at various levels, and exploring qualitative data—including text content—can offer educators and SLPs a more complete picture, including the strengths, of a struggling ELL writer.

To support these teens’ emerging identities, it is important that instruction/intervention take place in a way that is culturally relevant and personally meaningful to the students. Indeed, writing, like literacy and learning in general, is not only a cognitive and linguistic task, but also a socio-cultural practice that occurs for a given audience and purpose in a given context. As an integration of language and identity, students’ written texts serve as maps that depict the hills and valleys of their lives. To support the academic language and literacy development of ELL-LLD, we must be willing to explore their maps and co-create them as students journey into new roles as competent and confident participants in the literate community.

References


Dockrell, J. E., Lindsay, G., & Palikara, O. (2011). Explaining the academic achievement at school leaving for pupils with a history of language impairment: Previous academic achievement and literacy skills. *Child Language Teaching and Therapy, 27*, 223–237.


science-supported instruction into evidence-based practices: Understanding and applying the implementation process (pp. 107–145). New York, NY: Oxford University Press.


Appendix

Manuel and Daniel’s Writing Samples, Segmented into T-Units*.

*Numbers represent T-units, a main clause and any subordinate clauses connected to it (Hunt, 1970). Due to linguistic differences, T-units may be segmented differently from Hunt’s traditional description when comparing English and Spanish texts (See Danzak, 2011c, for explanation and illustration).
Manuel

A. English Combined Texts: Letter to A New Student, My First Day of School in the U.S.

1. I like to say to one student of mi contry in this contry is not the sime because is alot of stuff so much diferent rigth here in the U.S.A
2. and I like to tell hem mayby hi can’t get useto like me
3. still can’t get useto very good. even though I have two years righ here in the U.S.A.
4. maybe you miss so much your familie from mexico because they canbe far.
5. Im stil miss my familie from mexico. Because evry day I thynk them.
6. me when I come to the U.S.A and come to the school the first day wos so much nervous because I don’t now anybody
7. and then thy take me to the ofice because they presen me one student to Guide for whome where I go
8. and then He shome the clases
9. so he is now my frend
10. He is a good frend with me
11. and then I think that I’m nerbes
12. is not good for me becaust suner or later I was goin to be leess nervous.

B. Spanish Combined Texts: My Future, Three Wishes

1. yo para mi futuro quiero ir a mexico para trabajar en mexico.
2. también planeo ayudar a mi pueblo para que se a mejor que los demas porque ami
nunca megusta quedarme atras.

3. Poner una escuela consultar contodos los que viven en el pueblo o poner mas
casas.

4. si yo tubiera una barita magica quisiera que volviera anaser y quitar toda la
pobresa y alludar alos pobres.

5. Tambien quisiera aser qureser a mexico porque nunca quisiera que mi pais se
quede atras

6. por eso quiero aser creser a mexico.

7. y situibiera un deseo mas desearia que todos los inmigrantes tubieran papele
paraque no sufran crusando el desierto.

8. si tubiera un deseo para regalar selo regalaria a mi mama por que puede desiar
muchas cosas como en su limpiesa de la casa para que no se canse mucho

C. English Translation

Me for my future I want to go to mexico to work in mexico. also I plan to help my town so that it
can be better than the rest because I never like to be left behind Put up a school work with
everyone who lives in the town or put up more houses

if I had a magic wand I would want to be born again and remove all the poverty to help
the poor I would also want to make mexico grow because I would never want my country to be
left behind that is why I want to make mexico grow. and if I had one more wish I would wish
that all immigrants had papers so that they would not suffer crossing the desert if I had one wish
to give away I would give it to my mom because she might wish for many things like cleaning
her house so she doesn’t get too tired.
Daniel

A. English Text: *My Dream Vacation*

1. I would go to China.
2. I would take my mom, my dad, my Grampa, and [sister].
3. One reason I would like to go to china is to look at the many technological advances the country has made.
4. I would like to learn about their ancient forms of selfdefense.
5. I do not know too much about china
6. but I know that they have made many remarkable discoveries in medical science.
7. If I go to China I would have achieved a lifelong dream.
8. When I see pictures of China I imagine the brightly colored buildings.
9. I imagine dicecting the history behind the country.
10. I could not leave China without seeing the Great Wall of China.
11. China’s history and technological advancements is the main reason for why I would go to China.

B. Spanish Text: *My Future*

1. Mi sueño siempre acido ser medico.
2. Los profesionales de medicina a cambiado mi vida.
3. Yo tengo la personalidad perfecta para ser medico.
4. Yo quiero ser medico pa acerles un favor a la gente que me ayudaron.
5. Yo tengo un deseo fuerte para sanar a la gente cuando estan en un estado debil.
6. Mi pacion para los estudios medicos empezo en el octavo grado.
7. Yo me emerce en los estudios medicos despues que me enferme cuatro años atrás y casce me mori.

8. Yo nescesitava serujia intensa para salvarme la vida.

9. Yo estava muy agradecido a la señora que me alludo.

10. Yo voy a dedicar el ruestro de mi vida a ser un sanador.

11. Yo tengo una meta importante.

12. Yo quiero estudiar medicina en [nombre de la universidad].

13. Yo se que yo voy a ser el mejor medico que pueda ser.

14. Yo no voy a permitar que nada y nadie me pare.

15. Yo me estado preparando para hacer me sueño de ser medico una realidad.

16. Yo voy a dedicar mi vida a hacer excelente como medico.

17. Yo voy a revolucionar la manera en la quidan a los pacientes en los ospitales.

18. Voy hacer excelente en lo que hago como medico.

C. English Translation

My dream has always been to be a doctor. Medical professionals changed my life. I have the perfect personality to be a doctor. I want to be a doctor to do a favor for the people who helped me. I have a strong desire to heal people when they are in a weak state.

Mi passion for medical studies started in the eighth grade. I was immersed in medical studies after I got sick four years ago and I almost died. I needed intense surgery to save my life. I was very grateful to the woman who helped me. I want to dedicate the rest of my life to being a healer.

I have an important goal. I want to study medicine at [name of university]. I know that I am going to be the best doctor that I can be. I am not going to let anything and anyone stop me. I
been preparing myself to make my dream of being a doctor a reality. I am going to dedicate my life to being excellent as a doctor. I am going to revolutionize the way in the patients are cared for in hospitals. I am going to do excellent in what I do as a doctor.

Table 12.1
Manuel and Daniel: Examples of Elaborated Noun Phrases (ENPs) by Topic (Based on Eisenberg et al., 2008) (Numbers in Parenthesis Indicate Frequency of the ENP Type; Original Spellings Are Preserved)
Table 12.2

Comparison of Manuel and Daniel’s Bilingual Writing as Measured by Total Words, Total T-units, Mean Length T-unit (MLTU) and a Clause Density Ratio (CDR)\(^a\)

<table>
<thead>
<tr>
<th>Text Language</th>
<th>Syntactic Measure</th>
<th>Manuel</th>
<th>Daniel</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>Total Words</td>
<td>173</td>
<td>129</td>
</tr>
<tr>
<td></td>
<td>Total T-Units</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>MLTU</td>
<td>14.4</td>
<td>11.7</td>
</tr>
<tr>
<td></td>
<td>CDR</td>
<td>2.25</td>
<td>1.73</td>
</tr>
<tr>
<td>Spanish</td>
<td>Total Words</td>
<td>136</td>
<td>199</td>
</tr>
<tr>
<td></td>
<td>Total T-Units</td>
<td>8</td>
<td>18</td>
</tr>
</tbody>
</table>

\(^a\)PRE1 = Simple designating noun phrase (NP): 1 prenoun element + head noun; pre-noun element = determiner, demonstrative, possessive, or quantifier; PRE2 = Simple descriptive NP: Determiner + one descriptive element (prenoun) + head noun; descriptive element = adjective or modifier; PRE3 = Complex descriptive NP: Determiner + 2 or more descriptive elements (prenoun) + head noun; POST = Complex NP with postmodification: Prepositional phrase or clause after the head noun.

\(^b\)For the purposes of this analysis, PRE2 and PRE3 include simple, postnoun descriptors in the Spanish texts (los estudios médicos –medical studies = PRE2). POST refers only to use of phrases and clauses in noun postmodification in both languages (un deseo para regalar –a wish to give away; la señora que me ayudaron –the woman who helped me; both = POST).
**T-unit** = a main clause and any subordinate clauses connected to it (Hunt, 1970). **MLTU** = total number of words divided by number of T-units, is a measure of sentence length or text productivity. **CDR** = total number of independent and subordinate clauses divided by number of T-units, is a ratio of subordinated to nonsubordinated clauses.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MLTU</td>
<td>17.0</td>
<td>11.1</td>
</tr>
<tr>
<td>CDR</td>
<td>3.0</td>
<td>1.17</td>
</tr>
</tbody>
</table>