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Differences Between Generation 1.5 and English as a Second Language Writers: A Corpus-Based Comparison of Past Participle Use in Academic Essays

■ While many have studied Generation 1.5 learners' sociocultural and language learning experience, few have examined their linguistic errors in detail. This study uses two mini-corpora to compare one linguistic feature, the use of past participles, in essays by English as a Second Language (ESL) and Generation 1.5 college-level learners of various language backgrounds. The study found that Generation 1.5 learners tended to make past participle errors involving the morphological form of the past participle while ESL learners tended to make errors using the correct form in an inappropriate linguistic context. These findings suggest that although Generation 1.5 learners are proficient, sometimes nativelike, speakers of English who often demonstrate a remarkable sense of fluency in their writing, they still make errors involving grammatical forms. These findings suggest that language instruction that focuses on form is still important for their writing development. This instruction should be based on better understanding of this population's needs and abilities.

Introduction

eneration 1.5 learners, falling somewhere between first-generation adults and second-generation children (Rumbaut & Ima, 1988), are a unique but diverse population of English language learners (Destandau & Wald, 2002). Described as "long-term U.S. residents and English learners fluent in spoken English" (Thonus, 2003, p. 17), many Generation 1.5 students are not merely long-term residents but lifelong residents. Making this population of learners particularly fascinating is how they share characteristics with both their ESL and native-speaker peers; this dual profile is likely the reason Generation 1.5 learners are often misclassified and reclassified throughout their educational careers.

As the U.S. immigrant population rises, more Generation 1.5 students enter colleges and universities. Because of this, English-language educators have emphasized the need to better understand Generation 1.5 learners and

how they differ from other college-level writers. Thonus (2003), for instance, outlines several traits highlighting the differences between Generation 1.5 and ESL writers: (a) Generation 1.5 learners often have low-level or no literacy skills in their home language; (b) they are often marked as remedial and sometimes discouraged from taking college-preparatory courses in high school, unlike EFL/ESL writers; (c) they typically learn English through natural interaction and thus aurally, warranting their description as "ear learners." EFL/ESL writers, on the other hand, tend to be "eve learners" or "analytical learners" and access rules when writing in English; (d) they are usually comfortable with U.S. academic settings and standards, having experienced much or all of their formative schooling in the US; (e) they often possess a level of familiarity with "rhetorical patterns and metalanguage of academic English" although their own command of such language may still need work (pp. 17-18). Because Generation 1.5 learners are often nativelike speakers, their language difficulties are generally limited to writing skillfulness, including grammatical and rhetorical accuracy, academic register, and vocabulary (Holten, 2002).

When Harklau, Losey, and Siegal's book Generation 1.5 Meets College Composition: Issues in the Teaching of Writing to U.S.-Educated Learners of English was published in 1999, there was a dearth of research investigating these learners' linguistic needs and deficiencies. Today, eight years later, there is a growing awareness and concern about this particular population; however, research focusing on the actual writing and linguistic needs of these learners is still lacking. Much of the literature on Generation 1.5 learners concerns their sociocultural and socioeconomic experiences. While understanding these concerns is necessary and investigation of these issues should continue, the linguistic aspects of these students' writing also need to be more thoroughly explored (see also Jannsen, 2005; Reid, 2006, for discussions of written linguistic errors). Although Generation 1.5 and ESL learners are not usually considered to be members of the same population, they are sometimes thought to have similar deficiencies; understanding the errors Generation 1.5 writers make, especially in comparison to ESL students, is therefore necessary to better understand their linguistic shortcomings as well as how their shortcomings differ from those of ESL learners, learners whom English language teachers are often better trained to serve.

The research questions this paper sets out to answer are (a) what are the differences between Generation 1.5 and ESL writers' grammatical patterns of past participle use? (b) Do these populations' differing language-learning experiences influence the number or type of past participle errors they make? (c) What implications do the findings have for how we understand Generation 1.5 learners' linguistic strengths and weaknesses and how to best serve their needs? To answer these research questions, this study examines the use of past participles in two mini-corpora of essays: an ESL corpus containing 73 essays written by advanced ESL students (the ESL corpus) and a corpus containing 58 essays written by students classified by their university as Generation 1.5 (the resident corpus). The study compares the total percentage of errors involving the use of past participles and the different error types found in the writing of each learner population. By focusing on errors, I am not implying that learners' errors define them as a population or as writers.

Nevertheless, errors are important for both teachers and students to understand and address. In addition, a better understanding of errors may help to more accurately place students in appropriate composition courses. Often Generation 1.5 students are designated ESL based on the frequency of "ESLlike" errors in their writing. Goen, Porter, Swanson, and Vandommelen (2002), for example, discovered that teachers of composition classified writing as ESL (and not basic writing) "when the sheer volume and variety of errors crossed a certain threshold" (p. 145), even when a writer was more appropriately classified as a basic writer. Generation 1.5 writers may make types of errors different from those of ESL writers and/or they may make the same errors less often; recognizing such patterns is important for proper placement. Although Generation 1.5 learners' written language errors are often nonnative and therefore perhaps accurately described as "ESL," their errors differ from those of ESL writers in important ways, the phenomenon which is the objective of this study. Past participles were chosen as the first linguistic feature to examine in these corpora because (a) both past participle form errors and contextual errors are errors that native speakers are unlikely to make in writing;² as such, the comparison of ESL and Generation 1.5 essays is a more useful one, and (b) the past participle is often phonetically reduced in spoken English, indicating that it may be problematic for Generation 1.5 learners in writing (Reid, 2006).

In this paper, each corpus is discussed independently, beginning with a description of the ESL corpus and its learners and following with a presentation of the overall use of past participles, which includes two kinds of errors—form errors and linguistic contextual (LC) errors. A breakdown of the LC error categories in the ESL corpus is then presented. The description of the learners and uses of the past participle in the corpus of Generation 1.5 learners, what will be referred to as the resident corpus, is then discussed. Useful corpora comparisons are offered followed by a discussion of the implications of the findings, highlighting the differences between the two corpora.

The ESL Corpus

The ESL corpus consists of 73,160 words and contains 73 essays written by advanced English learners enrolled in a university-level ESL writing³ course between Fall 2002 and Winter 2004. This course is an academic writing course designed for undergraduate nonnative speakers of English and is the last ESL course required of all ESL students at their university. While grammatical issues are covered in the course and in student-teacher conferencing, the curriculum's focus is on strategies and techniques for writing academic essays and self-editing: idea organization, paragraph development, and the like. The students' ages range from 17 to 41, averaging 22.98 years.⁴ The length of time in the US varies from less than 1 week to 6 years with an average stay of 2.84 years. The self-reported language backgrounds for these students include Chinese,⁵ Japanese, Cantonese, Korean, French, Turkish, Swedish, Burmese, Armenian, Hindi, Spanish, Indonesian, Vietnamese, and Dutch. Most learners were of Asian language backgrounds, the majority of students being native Chinese speakers. (Appendix A contains a table of the selfreported information provided by these students.)

The ESL Data

Tagging and Sorting the Data

The corpus was POS-tagged using Brill's on-line tagger, which incorrectly tagged 108 instances as the past participle in the ESL corpus. These instances were discarded from the data set. Most of these incorrectly tagged forms were simple past tense as shown in (1), where the italicized word indicates the verb tagged incorrectly as a past participle:

(1) When Apollo *chased* Daphne for asking love, Daphne fled fast, but she could not escape from his hand.

In addition, 131 cases, tagged as either present or past tense, should have been tagged as past participles. These instances were manually tagged as participles and added to the ESL corpus data set. Because the essays were written by English learners, inappropriate verb forms were sometimes used and thus inappropriately tagged. Of the 131 cases, 46 were of this type and were noted to be incorrect with respect to verb form. The following cases illustrate this latter set:

- (2) It is because in real world companies, they will not care bout how many points of GPA or how many A the applicants have *make* at school.
- (3) A specific panel for the teenagers was *hold* by graduate students to bring lively experiences and advices.

Error Classification

Two main categories of errors were found in both corpora: *form errors* shown in extracts (4) and (5) and *errors in linguistic context* (LC errors) shown in extracts (6) and (7). These four extracts illustrating the error types were made by learners in the ESL corpus.

- (4) He has *give* people the examples of marriages and relationships for American cultures...
- (5) Eros had *shoot* Apollo by his love arrow which made love Daphne...
- (6) In the article by Miller, he *was valued* the main causes of divorce and failed relationships in America.
- (7) Especially in Japanese culture, a good lady *supposed* to be introverted...

Extract (4) incorrectly uses an infinitive form of the verb *to give* rather than its inflected form *given* in a perfect tense. Extract (5) is an identical error for the irregular verb *to shoot*, whose past participle inflection is *shot*. Form errors generally involved choosing the incorrect form of the past participle, as in these cases, by choosing the uninflected form. In the ESL corpus, form errors were made with both regular and irregular verbs (see below for discussion and comparison of form errors in the two corpora). Extracts (6) and (7) illustrate two of the eight different kinds of LC errors: an inappropriate use of the passive voice and an omission of the auxiliary *be* respectively. Of the eight types of LC errors, these two were among the most commonly made. LC errors were

cases in which writers may have written the correct past participle form but were using it in an inappropriate linguistic context, such as using passive rather active as in (6). Again, in (7) the past participle form is correct; however, the writer has omitted the auxiliary in forming a passive construction. The other six LC error types include (a) other auxiliary errors, as shown in extracts (25) and (26), (b) inappropriate uses of the active voice; see extracts (21) and (22), (c) unnecessary uses of the past participle, discussed in detail below, (d) miscellaneous errors, which usually involved inappropriate lexical formations, such as *spoken person* for *spokesperson* or *caught phrase* for *catch-phrase* or idiomatic expressions, (e) uses of an adjectival form instead of the past participle; for example, using *high-achieved students* rather than *high-achieving students*, and (f) deletion of *by* in the *by*-phrase of a passive construction, which occurred only once in both corpora; see extract (27).

Problematic Cases of LC Errors

Classifying learner errors has been noted to be difficult given that some types of errors may appropriately fit into more than one classification (see Wong, 1988). I will therefore provide a brief discussion of how the errors were classified by focusing on problematic cases. The following extract from the ESL corpus was one particularly difficult case to classify and a good illustration of the general problem of classification.

(8) All above give us the idea that the Chinese children (in China or America) *have involved* in math a lot more than children in the major American culture.

This error could be classified as an inappropriate use of the active voice when a passive construction would have been more appropriate; however, the error could also be categorized as an auxiliary error in which *have* was used instead of *be* in forming the passive voice or as an auxiliary *be* omission in forming a passive construction with a complex tense, although the complex tense, in this case, a present perfect passive, would have been an inappropriate tense to use. In cases such as this one, where there were several viable options of categorization, the error was classified systematically as the more indeterminate error, in this case, an inappropriate use of an active construction.

Some errors had to be discarded from the data set even when classification was possible. Extracts (9) and (10) are two such cases. In (9) and (10) the error could be considered an error in choosing an auxiliary (contingent upon the use of the past participle) or it could be a verb-pattern error in which the verb in the active voice is paired in error with a preposition *to* in the case of (9) and *with* in the case of (10).⁶ In sum, the source of these errors may have involved a different grammatical feature altogether.

- (9) However, her parents strongly *opposed* to her decision.
- (10) Armstrong's views on romantic relationships are quite valid because it's true that many Americans in general *have obsessed* with unrealistic expectations such as perfect compatibility, which can't be fulfilled in reality.

In cases such as these, the error was not included in the data set since two classifications were equally possible and because, for these examples, choosing an inappropriate preposition of a particular verb was a common error throughout the data set. The same practices were followed in the resident corpus.⁷

Overall Frequency Distribution Patterns

After accounting for these changes, 1,2098 uses of the past participle completed the ESL data set, of which 1,066 (88.2%) were used with their correct form and occurred in an appropriate linguistic context (see Table 1).

Table 1
ESL Summary of Overall Findings (Raw Calculations and Percentages)

Correct uses of the participle		Incorrect uses		
Verbal	918	Incorrect linguistic context	97 (67.83%)	
Adjectival uses	148	Incorrect participle form	46 (32.17%)	
Total	1,066 (88.17%)	Total	143 (11.83%)	

Of these correct uses, 148 functioned as adjectives:

- (11) After talking about the school-life at UCLA, we change our subject to the competition between UCLA and other well-*known* University, like USC.
- (12) My relatives at my father side are all teaching professionals and welleducated people.

The remaining 918 correct uses appeared in passive constructions or complex verb forms:

- (13) Therefore, he did not violate one of the two wrong assumptions *stated* by Sternberg.
- (14) Once in a company, they will be *judged* on their own actions and behavior, not anymore on their background.

Of the incorrect cases, 97 (67.8% of the total number of errors) occurred with the correct participle *form* but were inappropriately used in the linguistic context, as shown in extracts (15) and (16):

- (15) If somebody does not believe in God, they called the supernatural authority as a "fate," which *emphasized* in Buddhism.
- (16) Ordinarily students who *admitted* to those universities by accident or perhaps by cheating, they somehow have to find a way to graduate.

In (15) and (16) the participle is appropriate and in its correct form; however, the auxiliary *be* is missing from these passive relative clause constructions.

Only 46 uses (32.2% of the total number of errors and 3.8% of the entire corpus) contained an incorrect form; see also extracts (2) through (5) above:

- (17) Although you have *make* a high GPA in your university, it is not as convincing as graduate from a well-known university, even with a lower GPA.
- (18) Have these [referring to Ivy League universities] league schools exclusively *evaluate* her admission based upon her excellent grades only?

These initial findings reveal that the participle *form* does not pose a significant problem for the ESL learners in this particular sample; not even 5% of the total uses involved an incorrect participial form. In fact, most of the errors were contextual errors—errors using past participles in an inappropriate linguistic context (LC errors)—and were most often due to uncertainties with the active/passive voice distinction.

Breakdown of LC Errors

As noted above, the majority of ESL errors were LC errors. A closer look at these errors (see Table 2) reveals that most of the errors (33.0%) contained the use of a passive construction when active voice would have been appropriate:

- (19) Evaluation system has been existed from elementary school.
- (20) What drew my attention was the fact that this group *is consisted* of two 14-year-old girls who are considered to be the youngest singers in the recent years.

Table 2
Summary of "Linguistic Context" (LC) Errors in ESL Corpus

	I	Number of errors	% of total errors
1	Inappropriate use of passive	32	32.99
2	Omission of auxiliary be	18	18.56
3	Other auxiliary error	18	18.56
4	Inappropriate use of active	10	10.31
5	Unnecessary use of participial form	9	9.28
6	Miscellaneous	7	7.22
7	Use of adjectival form instead of partic	iple 2	2.06
8	No <i>by</i> in passive <i>by</i> -phrase	1	1.03
	Total	97	100.01%

The opposite error—using an active construction when the passive voice would have been more appropriate⁹—also occurs, although far less frequently, occurring 10 times in this mini-corpus (making up 10.3% of the LC errors):

- (21) Allhoff claims that students now *concern* so much about getting into a prestigious university and losing sight of the purpose of their education.
- (22) I decide to go to Tsing Hua to develop myself in this field even though I have the chance to *submit* into the number one National Taiwan University.

Eighteen (18.6%) extracts erred in omitting the auxiliary verb *be* when forming the passive voice:

- (23) She never thought that they hit by a rejection arrow.
- (24) These are the most common sentences which *heard* in class after teacher gives back the exams and grades.

There were also 18 (18.6%) other LC errors that, like (19) and (20), involved the choice of the auxiliary, most often when using a complex tense and/or intransitive construction. Extracts (25) and (26) exemplify the sort of errors found in this category:

- (25) By the time people get to college, their moral issues should already *been dealt* with in the earlier years.
- (26) Therefore, as concepts prevail more, they *become* more easily *to be* distorted.

While (25) and (26) both demonstrate confusion in choosing the appropriate auxiliary, the other auxiliary error category is not a homogenous one. For instance, extract (25) is missing the auxiliary *have* in forming the present perfect tense in a passive construction, while (26) incorrectly inserts the infinitive *to be.* ¹¹ The confusion seems to stem from an uncertainty about using auxiliaries and forming complex tenses.

One error omitted the preposition *by* in the *by*-phrase when forming the passive voice:

(27) In reality this myth is *obsessed* everyone.¹²

Choosing the appropriate auxiliary generally seems to be difficult, not only for perfect tenses and passives, but for active constructions as well. The following extracts, although not included in the past participle data set, further demonstrate the difficulty of selecting auxiliaries and determining passive/active forms.

- (28) In conclusion, students could *be* easily *fall* in love with "boredom" in the classroom.
- (29) For this reason, sometimes one should *be wait* for "the one" for a long time...

Again, the problem here concerns, it seems, which verbs can appropriately be put into passive voice or how to appropriately form the passive/active voice, and not the actual participial form of the verb. These particular writers did not attempt to regularize the main verb by adding a typical past participle morpheme suffix to it. They did, however, add the auxiliary *be* (following a modal) in an active construction, the exact opposite error of the majority of the errors seen in this sample in which writers omitted the auxiliary *be* when forming a passive.

ESL Corpus Discussion

Most (88.2%) of the sentences constructed with past participles were formed correctly and occurred in appropriate linguistic contexts. Thus, while other types of errors may have occurred in these sentences, the problem of when to use a past participle or how to form it was not a major difficulty for these ESL writers. In addition, while past participle form errors did occur, errors appropriately using the past participle in its linguistic context occurred more than twice as often as form errors, particularly with respect to how to construct passive constructions and complex tenses. Although the passive/active voice distinction is typically covered and reviewed in less-advanced classes, this distinction is also useful for advanced learners to review and examine more thoroughly, especially in contextualized academic writing. As the purpose of this study is to compare the use of past participles in ESL and Generation 1.5 writing, the resident corpus will now be examined before relevant differences between the two corpora are outlined.

Resident Corpus

An examination of the Generation 1.5 population in comparison to more typical international students (as those represented by the ESL mini-corpus) is important in understanding the different learning experiences and needs of both populations and whether the needs of both groups can be dealt with in ESL classrooms using the same materials.

The Generation 1.5 students in the resident corpus have lived in the US between 7 and 18 years, the average length of residence being 13.3 years. Two students were born in the US, and 9 had moved to the US at 1 year of age. As mentioned above, Generation 1.5 students tend to learn grammar through spoken discourse. This language-learning style may make learning participial verb endings problematic, because they are often difficult to hear for regular verbs and/or when phonologically continuous with a following consonant.¹³

The resident corpus consists of 59,348 words and contains 58 essays written by students classified as Generation 1.5 by their university. Most of these students were enrolled in a course designed specifically for Generation 1.5 students. These students, after taking the university's pre-enrollment, universitywide writing exam and the Subject A exam, were considered to have difficulties with grammatical and rhetorical accuracy in academic writing. Once several criteria are met—having lived in the US for 7 or more years, having reported being bilingual or speaking a language other than English in the home, having scored below 520 on the verbal section of the SAT, and having demonstrated language errors on the writing section of their university's ESL placement exam—these students are then allowed to enroll in this course.

More than half (56.3%) of these students enrolled in the course for Generation 1.5 learners; the remaining students enrolled in the ESL writing course. All those students enrolled in ESL writing who were included in the resident corpus had lived in the US 7 years or longer, all had completed high school in the US, and many had completed a large part of their primary schooling in the US as well. The ages of the students ranged from 18 to 30 years with 19.4 years being the average age of the students.

dents. The students enrolled in ESL writing self-reported their demographic information; the demographic information of students enrolled in the Generation 1.5 writing course was collected from their instructor and therefore teacher-reported. The information self-reported by the Generation 1.5 learners in the ESL writing course included some interesting reports demonstrating their strong ties to the US: 2 students noted English as their native language with no other native language listed, and 2 reported the US as their native country. The language backgrounds of the resident learners were both teacher- and student-reported and included Chinese, Cantonese, Vietnamese, Korean, Hmong, English, Khmer, Spanish, Farsi, and three were not reported or uncertain. As in the ESL corpus, the majority of students were of Asian language backgrounds, again most being of Chinese heritage. Three noticeable differences, however, are that there are considerably fewer learners of Chinese heritage in the resident corpus than in the ESL corpus, more Vietnamese learners, and no Japanese learners. Appendix B includes the known information for these students.

Resident Corpus Data

Tagging and Sorting the Data

The resident corpus was also tagged using Brill's on-line tagger and problems similar to those encountered with the ESL corpus arose. Eighty-three cases were discarded from the resident corpus after having been inappropriately tagged as participles. Most of these cases were of verbs in the past tense similar to those in the ESL corpus; see extracts (1) and (2).

One hundred five instances were manually tagged and added to the resident corpus, usually because of an error in forming the past participle:

- (30) Each society has its own set of criteria for what is *consider* as normal behavior.
- (31) The media has profoundly *change* society both good and bad.

Overall Distributional Patterns

After these corrections, $1,104^{17}$ uses of the past participle were included in the data set. Of these instances, 970 (87.9%) occurred with the correct form and in an appropriate linguistic context (see Table 3).

Table 3
Summary of Overall Findings for Resident Corpus
(Raw Calculations and Percentages)

Correct uses of the participle		Incorrect uses		
Verbal uses	824	Incorrect linguistic context	49 (36.58%)	
Adjectival uses	146	Incorrect participle form	85 (63.43%)	
Total	970 (87.86%)	Total	134 (12.14%)	

Most of the past participles were therefore used correctly: 146 as adjectives and 824 as verbs. The incorrect uses totaled just over 12% and, as in the ESL corpus, were separated into errors involving the form of the past participle and errors in the contextualized usage (LC errors) of the past participle. The

form errors totaled 63.4%, while the LC errors totaled 36.6% of the total number of errors. The resident errors therefore were of the opposite distributional pattern than the pattern found in the ESL corpus.

Of the 134 incorrect cases, 49 (36.6%) occurred with the correct form but in an incorrect linguistic context:

- (32) Undeniably it is the exposure and exploration of the adult responsibilities to these children at an early age that allows these children to better *adapted* for the real world.
- (33) Having very few friends that she can *relied* on I can see her agony of being held back emotionally and socially in the adult world.

Extract (32) is an instance of a past participle used without the verb *be* while (33) is an unnecessary use of the past participle following a modal.

In contrast, 85 (63.4%) errors were errors in constructing the actual participial form, where usually the verb occurred in its bare uninflected form, as in (34) and (35), or much less frequently, in present tense (six form errors occurred conjugated for present tense after an already conjugated auxiliary):

- (34) Their love searching is over and all their problems would be *solve*.
- (35) Some of my cousins *were* actually *force* by their parents to have some activities because of me, because they believed that it would get them into a high-reputation university such as UCLA.

Breakdown of LC Errors

A more detailed examination of the 49 LC errors shows the following distributions (see Table 4).

Table 4
Summary of "Linguistic Context" (LC) Errors in Resident Corpus

	Λ	Number of errors	% of total errors
1	Unnecessary use of participle	17	34.69
2	Inappropriate use of passive	9	18.37
3	Omission of be	7	14.29
4	Wrong auxiliary	6	12.24
5	Miscellaneous	5	10.20
6	Inappropriate use of active	5	10.20
7	Use of adjectival form instead of partic	iple 0	0
8	No <i>by</i> -phrase in passive	0	0
	Total	49	99.99%

The majority of the LC errors (34.7%) can be classified as unnecessary uses of a participial form:

(36) Take the case of one my high school female friend who was under the impression of her parent's view because they did not *allowed* her to stay after school to participate in any afterschool activities. (37) Students should *acquired* education for their success in the future, not to attend prestigious school.

Nine (18.4%) cases were inappropriate uses of a passive construction:

- (38) I realized that I was really liked extracurricular activities...
- (39) Our parents, who are first generation to America, *are* firmly *believed* in their culture, the culture of where they came from.

Five cases (10.2%) contained the opposite error: using a verb in active voice where passive voice (with a past participle form) would have been more appropriate:

- (40) Parents can influence and shape an identity which through the years *mold* to be that child's identity.
- (41) How can we accompany them to the deserved path where they don't have to *concern* with alcohols, drugs, abortion or killing themselves at the age of 14?

Seven (14.3%) uses of a past participle occurred in a passive construction without the auxiliary *be*:

- (42) The financial success emphasis that *imposed* on women forces women to want to have a strong focus on the road to success.
- (43) Joe Camel was a cartoon picture, which *modeled* after James Bond and Don Johnson of the "Miami Vice", ironically was use in order to develop a connection to a child.

Six (12.2%) cases used the wrong auxiliary with a past participle, most often when constructing a complex tense:

- (44) However, ever since the time when WWII ended the music industry and television *become* an influential mass media that bring images and advertisements, which can affect many people dramatically.
- (45) In contrast, I *seen* a little girl scouts would literally would jump up and down with glows in their eyes as she were told of an activity that she deem enjoyable with her friends.

These two examples are missing the auxiliary *have* in a complex tense. Extract (45) may be an issue of dialectal/register carryover into academic discourse, a trait noted to be common in the writing of both Generation 1.5 and basic writers.

ESL and Resident Corpora Data Comparisons

Comparison of Overall Distributional Patterns

When comparing the overall frequency patterns of the ESL and resident corpora, the percentage of correct uses is, surprisingly, almost identical: 88.2% for the ESL corpus and 87.9% for the resident corpus. Likewise, the total per-

centage of errors is thus also similar: 11.8% for the ESL corpus and 12.1% for the resident corpus, the Generation 1.5 students making slightly more errors than the ESL students, although not to a significant degree. Although the Generation 1.5 learners had been living considerably longer in the US (more than 10 years longer than the average ESL student), this is not reflected in the overall number of past participle errors found in these mini-corpora and suggests that Generation 1.5 writers require language instruction (that may be missing from basic writing courses), regardless of the amount of time spent in the US or their near-native abilities in oral discourse.

Differences in the Overall Percentage of Errors: The Effects of Learning Experience

The most notable difference between these corpora concerns two categories of errors composing the total error percentage. While the majority of errors in the ESL corpus are LC errors, most of the errors in the resident corpus arise from using incorrect participial forms (see Table 5).

Table 5
ESL and Resident Corpora Comparisons of Overall Findings

Correct uses of the participle		Incorrect uses of the participle			
	ESL counts	Resident counts		ESL counts	Resident counts
Verbal uses	918	824	Incorrect linguistic context (LC errors)	97 (67.83%)	49 (36.57%)
Adjectival uses	148	146	Incorrect participle form	46 (32.17%)	85 (63.43%)
Total	1,066 (88.17%)	970 (87.86%)	Total errors	143 (100%)	134 (100%)

Note. Distribution is significant. Chi-square (2, N=2313)=27.12, p < 0.001

This difference is striking as it is in nearly opposite distribution; the LC errors account for almost 68% of the errors in the ESL corpus while the form errors account for approximately 63% of the errors in the resident corpus. The difference can be accounted for when the language-learning experiences of these two populations are considered. ESL students are usually exposed to less contextualized language and have more exposure to isolated grammatical forms; this experience is reflected in their higher number of contextualized errors. On the other hand, these learners are often required to learn grammatical rules and patterns by rote and through visual representation, perhaps making the morphological marking for past participles more salient than it is in speech. In contrast, Generation 1.5 learners, having much more experience with contextualized English and using it to accomplish real-world tasks, make fewer contextual errors. However, the fact that these students acquire English grammar mainly through spoken interaction is reflected in the fact that they commit more past participial form errors (this will be explained further below).

For the majority of ESL learners who made form errors, each learner made only one or two. There were 4 ESL writers, however, who made more than one or two form errors (see Table 6).

Table 6
Students With the Most Participial Form Errors in the ESL Corpus

	Native language	Age	LOR	% of time you speak English	Incorrect participle form
#23	Chinese	21	4 yrs	80-100	4
#25	Chinese	;	5 yrs	0-20	7
#24	Chinese	21	5.5 yrs	80-100	4
#70	Chinese	22	6 yrs	20-40	4

These 4 students were all native speakers of a Chinese dialect, and they had been living in the US between 4 and 6 years, making them in many ways similar to the students in the resident corpus and making them difficult to classify as either ESL or Generation 1.5. Of the 73 essays examined, these 4 essays alone contained 37.0% of the total number of participial form errors in the ESL corpus.

The number of form errors made by these 4 students may be due to their language-learning experiences as somewhat long-term aural/oral learners of English, or it may be due to their native-language background given that Chinese is uninflected (see Wong, 1988, for a discussion of the problems of language transfer in Chinese learners' errors in English). In all likelihood, both of these factors probably play a role and further investigation is required. The important point to note here is that, although form errors did exist in the ESL corpus, most students who made them did so infrequently (one to two errors per student), which cannot be said of the Generation 1.5 learners in this data set.

A Comparison of Form Errors: The "Grammar" in What We Hear

As noted earlier, six form errors in the resident corpus were conjugated with an /s/, presumably a third-person singular morpheme. Of the remaining 79 errors, only two involved an irregular verb; however, both instances contained the same verb and were written by the same author ("it has *became*"); two instances (2.4% of the form errors) occurred with verb stems ending in a /t/ or /d/ phoneme and thus requiring /əd/, a phonetically salient past participle, for inflection; see (46) and (47). (To compare, 28.3% of the ESL form errors involved a past participle easily heard in natural spoken discourse.) The remaining 75 (88.2%) form errors in the resident corpus involved verbs containing a past participle morpheme pronounced as a simple /t/ or /d/ phoneme, as in (48) and (49).

- (46) Only alternative place to resolve the situations should be where children could be *trust* the most, at home....
- (47) However, the intention of the books are to give people some knowledge of what college is all about and the information *provide* are reliable...
- (48) ... she is only *concern* with the title of valedictorian.

(49) If the schools the students are *suppose* to learn at is not up to their standards, students will begin to neglect their studies because...

In the ESL corpus, less than half (41.3%) of the form errors contained past participles pronounced as /t/ or /d/, reflecting the fact that their choice of past participle form is less likely to be dependent on the participle's pronunciation. Again, Generation 1.5 students, being aural/oral learners, rarely err with verbs requiring a whole syllable to represent the past participle morpheme as they are much easier to hear in natural discourse, unlike /t/ and /d/, which are often difficult to hear in context. For instance, in (48) and (49) the past participle phoneme, the /d/ of concerned and the /t/ of supposed, bleeds into the preposition with and infinitival to that these verbs require. Moreover, because these verbs are consistently found in this grammatical pattern, the past participle phonemes are probably rarely heard clearly in context, making these grammatical patterns particularly difficult for "ear learners" to acquire. 18 Thirty-five of the 85 (41.2%) form errors made in the resident corpus were verbs ending in a phoneme with a place of articulation similar to that of the preposition (or infinitival to) that followed the verb. Such verb-preposition combinations included compared to, forced to, used to, concerned with, supposed to, passed down, and determined to, all of which contain a past participle morpheme that is difficult to hear in natural discourse. In contrast, form errors involving a phonetically reduced past participle in which the participial phoneme is absorbed by its phonetic context constituted only 18.9% of form errors made in the ESL corpus, again demonstrating that the pronunciation of the past participle is not as strong a factor influencing ESL students' use of the correct form as it is for Generation 1.5 learners.

This comparison reflects Generation 1.5 learners' strong intuitions about grammar and shows how these intuitions are often based on what they hear in spoken discourse. Their understanding of English grammatical patterns is powerfully situated within their oral/aural experiences, rather than based in formal grammatical analysis.

A Comparison of LC Errors

Other differences between the two corpora require a closer look at the types of LC errors (see Table 7). While the majority of errors (33.0%) in the ESL corpus involve an inappropriate use of a passive construction, this error is much less frequent in the resident corpus (18.4%). This is also true of errors involving omissions of the auxiliary be (18.6% of the ESL errors vs. 14.3% of the resident errors) and other auxiliary errors (18.6% of the ESL errors vs. 12.2% of the resident corpus). While these three types of errors are found more frequently in the ESL corpus, they follow the same general trend in both corpora. That is, inappropriate use of passives is the most common error in the ESL corpus with 32 errors and the second most common error in the resident corpus with 9 errors, while omissions of auxiliary be and other auxiliary errors are the second most common error categories in the ESL corpus with 18 errors for both error types and the third and fourth most common errors, with 7 and 6 errors respectively, in the resident corpus. The similar

Table 7
Comparing LC Errors in the ESL and Resident Corpora

		Number of ESL errors	% of total errors in ESL corpus	Number of res. corpus errors	% of total errors in res. corpus
1	Inappropriate use of passive	32	32.99	9	18.37
2	Omission of auxiliary be	18	18.56	7	14.29
3	Other auxiliary error	18	18.56	6	12.24
4	Inappropriate use of active	10	10.31	5	10.20
5	Unnecessary use of participial form	9	9.28	17	34.69
6	Miscellaneous	7	7.22	5	10.20
7	Use of adjectival form instead of participle	2	2.06	0	0
8	No by in by-phrase of passive	1	1.03	0	0
	Total	97	100.01%	49	99.99%

Note. Distribution is significant. Chi-square (7, N = 155) = 19.36, p < 0.01

trend in diminishing error frequency may suggest that some difficulties are inherent in the grammar and reflect a natural order of difficulty. The more difficult patterns therefore may affect learners regardless of how a language is learned, whether more naturalistically/orally as in the case of Generation 1.5 learners or more formally in classrooms as in the case of ESL learners. Naturalistic language-learning experiences, however, may overcome these inherent difficulties, which is demonstrated by the fact that Generation 1.5 learners make far fewer errors in all three of these LC categories.

One LC error clearly deviates from this trend; unnecessary uses of the past participle are the most frequent error in the resident corpus, making up 34.7% of the total errors. In contrast, this class of errors was the fifth-largest category in the ESL corpus (9.3% of the errors). A look at the unnecessary uses of past participles reveals a, perhaps surprising, pattern. In the resident corpus, most instances of the unnecessary uses contain a past participle after a negated verb:

- (50) Grades *don't signified* how much a student has learned from the class or if the student even enjoys learning at all.
- (51) There are often times when students received an "A" in the class, but they *didn't* necessary *deserved* it.

or following a modal verb; see also (33):

- (52) Although she achieved what she desired for her academic record, she *could* not *achieved* her infinite desiring heart.
- (53) Students *should acquired* education for their success in the future, not to attend prestigious school.

In the ESL corpus none of the unnecessary uses of the participle followed a negated verb or a modal:

- (54) The blood type analysis first *arisen* from German eugenics in early 20th century.
- (55) A sense of freedom makes him *realized* that he is an independent adult and needs to make his own decisions.
- (56) A lot of people died by this terrible illness that is hardly recovered.
- (57) No matter what happen, even one of the couple is sick or *failed*, the other half is still there to support.

Extract (54) uses a past participle form for simple past tense; (55) contains the construction made X verb where the verb should be uninflected; (56) and (57) both contain past participle forms as adjectives, which are inappropriate adjectival forms in these particular contexts. While the form errors produced by the Generation 1.5 learners seem to have a more straightforward explanation relating to their learning experiences, their unnecessary uses of the past participle are not so easily explained given that instances such as (52) and (53) cannot be due to the way in which English is spoken in real contexts and thus due to how English is heard (or misheard) in natural interaction. These errors may stem from an overcompensation strategy by these writers; they seem to understand that past participle forms are used following other verb forms but there is uncertainty about which ones, as illustrated in these examples. These errors may also reflect Generation 1.5 learners' lack of experience with visually examining grammar for recurrent patterns. These errors may have occurred because these students attempted to apply a rule from an observable pattern rather than rely on their intuitions about the way the sentence would sound if spoken. These errors likely reflect their struggle in applying new tools to improving grammatical accuracy (i.e., adopting an analytical approach to grammar).

Discussion

This paper highlights the similarities and differences in past participle usage between Generation 1.5 and ESL writers in order to more thoroughly understand the linguistic abilities and needs of Generation 1.5 learners. The results of this study show that although these Generation 1.5 learners have lived in the US much longer than their ESL peers and have received their primary and/or much of their secondary schooling in the US, their percentage of correct and erred tokens is almost identical to that of the ESL group. This finding emphasizes the need to continue to include language instruction both for advanced ESL students as well as Generation 1.5 students alongside writing instruction.

Where these two mini-corpora differ is in terms of the frequency of error types. The ESL corpus contains more LC errors, particularly with respect to the use and construction of the passive voice, but fewer participial form errors; the resident corpus showed the opposite trend in nearly identical distribution: more form errors and fewer LC errors. This suggests that while language instruction should be incorporated into Generation 1.5 classrooms,

such instruction should not merely be ESL instruction at an advanced level. Rather, the linguistic abilities and needs of these learners are quite distinct, as the distributional frequency of errors shows. In addition, the form errors that Generation 1.5 learners make (regularly conjugated verbs in which the past participle morphology is phonetically minimal) strongly reflects their experience learning English in spoken discourse where such morphological endings are easily undetected. Their LC errors, however, seem to be due to taking an analytical perspective toward grammar, something Generation 1.5 students often find unnatural. Because their errors are likely to stem from both intuitions based in oral language and from the misapplication of grammar rules they have inferred, instructors should consider providing students with the tools to employ both strategies. In short, pedagogy should develop activities that teach these learners to exploit their perceptual strengths to overcome their analytical weaknesses as well as provide training to develop their analytical awareness of grammar.

The differences in error distribution highlight the necessity of thoroughly understanding the unique experiences and characteristics that Generation 1.5 students may share as well as understanding how these experiences are reflected in their linguistic abilities. In this study, the ways in which Generation 1.5 students acquire English is clearly related to the type of errors they make, at least with respect to past participles. Understanding both the learning experiences and the type/frequency of errors as well as how their experience and errors are closely linked is important to better serve this population of learners. Given their typically strong intuitions about grammar and their knowledge of contextualized usages, ESL approaches to language instruction in which grammatical rules are the focus may not be appropriate. Rather, discourse-based approaches that allow students to discover the functions of forms may be more suitable (Holten, 2002). However, this puts teachers in a difficult position: Generation 1.5 students seem to be more capable and comfortable learning English when they can focus on the function of form in context, and yet, at least with respect to past participles, their errors tend to involve grammatical details and forms that seem to demand more traditional grammar exercises. Resolving this inconsistency may be an added challenge to writing instructors of Generation 1.5 learners. While certain aspects of writing lend themselves more easily to discourse-based approaches, it may be difficult to incorporate specific linguistic forms in similar methods. Holten (2002), however, provides suggestions for grammar lessons, including articles and noun forms, that still appeal to Generation 1.5 students' strengths; a focus on meaning and not solely on form seems to be key. This learning paradox also demonstrates the need for collaboration among all writing instructors, including not only ESL teachers but also basic writing and English composition instructors who may (unknowingly) also serve Generation 1.5 learners. Such collaboration is likely to lead to innovative materials design and a growing awareness of approaches to writing instruction from outside our ESL training.

While the results of this study are useful in raising awareness and documenting the linguistic strengths and weaknesses of Generation 1.5 students, they are limited in their generalizability. This study deals with an English-learner population at a large research institution and therefore may not repre-

sent the typical Generation 1.5 learner discussed in the literature. The students represented in this mini-corpus are also predominantly of Asian language backgrounds, suggesting that the results may be less relevant to Generation 1.5 learners of other language backgrounds. In addition, the term Generation 1.5 has recently grown to include an even greater diversity of learners (McCollom, 2006), who may not share the characteristics presented in the introduction of this paper. The greater diversity of learners designated Generation 1.5 therefore demands separate investigation connecting the experiences of these diverse learners with their own linguistic abilities and needs.

Conclusions

This paper examines one aspect of English grammatical accuracy, past participles, in written compositions of Generation 1.5 students by comparing their uses of the past participle to those of ESL students. By more thoroughly understanding the linguistic competencies of Generation 1.5 learners in comparison to other learners, one may come to better understand exactly how they are unique and how best to serve their language needs. In addition, a comparison of ESL students with Generation 1.5 students allows one to better understand how the experiences characteristic of Generation 1.5 students influence their linguistic abilities and proficiency in academic writing, resulting in a more accurate understanding of their strengths and weaknesses. Recognizing that these learners' abilities and needs are unique, colleges and universities may come to realize that this population of learners requires dedicated and specialized resources as their needs are often not met through either ESL or basic writing courses.

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Endnotes

- ¹ Clearly Generation 1.5 learners cannot be placed appropriately based solely on the number of errors they make; an understanding of their language-learning experiences and cultural background is also necessary. However, given that there are practical considerations in obtaining this cultural information before placement and the fact that not all instructors may do so after placement, recognizing the written errors may help the placement process using only the tools that are already in place at most universities.
- ² This has yet to be systematically studied. Basic or developmental nativespeaker writers may also make past participle errors, for instance, dropped participles and the use of incorrect participles (Holten, personal communication).
- ³The university's course description of ESL writing reads as follows: Composition skills for ESL students, with focus on writing process, gram-

- matical structures key to clear and effective style, mechanics of writing, and practice with major forms of academic writing. Additional emphasis on academic reading skills.
- ⁴One student did not report an age.
- ⁵ Because 15 students self-reported their native language as "Chinese," one cannot be sure if "Chinese" was used to indicate Mandarin or another Chinese dialect.
- ⁶ About or over would be the more appropriate choice of preposition in this case.
- ⁷ After this discussion, the "other auxiliary error" category may seem to be a catchall category for any case that could not be clearly classified as a passive or active error; indeed, some of the problematic cases were difficult because of this or a similar problem. However, the majority of the *other auxiliary* errors were not of this type, but were rather errors similar to extracts (21) and (22).
- ⁸ Additionally, 33 correct forms of the past participle were removed because they occurred in direct quotations from other sources.
- ⁹ While these extracts do not use a past participle, they do not precisely because they are constructed in the active voice.
- ¹⁰ This was the most common error type of this category, which is perhaps unsurprising given that many languages use both *be* and *have* in "perfective constructions with intransitives indicating 'transition' or 'change' (cf. *they are arrived* versus *they have arrived*)" (Kytö, 1997, p. 17).
- ¹¹ This extract could arguably be classified as a passive/active error; however, given that the *by*-phrase is present, it seems that the writer intended to construct a passive form and the difficulty came in how to do so.
- ¹² This extract also contains a verb-pattern error in which the verb *obsess* takes a preposition that is missing. Also, while this particular sentence would probably be more natural in the active voice for an academic register, its passive counterpart is possible and grammatically correct (...this myth is obsessed about by everyone). Cases that merely involved inappropriateness in register were not included as part of the LC errors.
- ¹³ Many Generation 1.5 students are mistaken for native speakers because their speech is often indistinguishable from their native-speaker peers. This also indicates that participial inflections are difficult to hear. Whether participial form errors are made by Generation 1.5 students in speech has not been examined; however, the fact that they do make them in writing suggests that they are making them orally as well.
- ¹⁴ The university's course description of this course is as follows: Second course in university-level discourse, with analysis and critique of university-level texts. Emphasis on strategies for developing coherent and well-argued pieces of academic writing and for achieving effective and clear style in academic prose.
- ¹⁵ Depending on their schedule and counselor recommendation, they can also choose to enroll in the ESL writing course briefly described above.
- ¹⁶ Two students did not report their ages.
- ¹⁷This is the total after 74 participles occurring in direct quotations from other sources were discarded.

- ¹⁸ Indeed, it is not at all clear that native speakers of English even articulate the past participle /t/ phoneme in spoken discourse when followed by the infinitive *to*.
- 19 * indicates the student did not report his/her age.
- ^{20 *} represents teacher uncertainty.

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Appendix A ESL Corpus Demographic Information

	Language background	Age	LOR	% English spoken
1	Chinese	29	< week	0-20
2	Turkish	17	< week	60-80
3	Turkish	17	< week	60-80
4	Korean	25	< week	20-40
5	French	22	1 week	60-80
6	Japanese	29	11 days	0-20
7	Japanese	22	2 weeks	20-40
8	Cantonese	21	2 weeks	20-40
9	Japanese	20	1 month	80-100
10	Korean	21	1 month	20-40
11	Cantonese	22	2 months	40-60
12	French	18	3 months	40-60
13	Japanese	21	3 months	20-40
14	French	18	3 months	40-60
15	Swedish	25	4 months	80-100
16	Dutch	25	5 months	0-20
17	Hindi	41	9 months	20-40
18	Korean	20	1 year	40-60
19	Chinese	27	1 year	20-40
20	Chinese	20	2 years	40-60
21	Chinese	21	2 years	20-40
22	Japanese	21	2.5 years	60-80
23	Cantonese	23	3 years	20-40
24	Cantonese	23	3 years	40-60
25	Japanese	23	3 years	20-40
26	Chinese	20	3 years	40-60
27	Cantonese	21	3 years	40-60
28	Korean	27	4 years	40-60
29	Chinese	21	4 years	40-60
30	Indonesian	21	4 years	40-60
31	Vietnamese	34	4 years	60-80
32	Japanese	24	4 years	60-80
33	Korean	19	4 years	80-100
34	Chinese	19	4 years	60-80
35	Chinese	24	4 years	20-40
36	Burmese	25	4.5 years	20-40
37	Chinese	23	4.5 years	40-60
38	Chinese	19	5 years	40-60
39	Chinese	25	5 years	0-20
40	Cantonese	23	5 years	60-80
41	Chinese	20	5 years	0-20
42	Chinese	24	5 years	20-40
43	Korean	23	5 years	0-20
44	Chinese	? *19	5 years	0-20

45	Chinese	21	5.5 years	80-100
46	Swedish	25	5.5 years	40-80
47	Armenian	23	6 years	60-80
48	Japanese	29	6 years	80-100
49	Spanish	22	6 years	60-80
50	Cantonese	23	6 years	40-60

Appendix B Resident Corpus Demographic Information

	Language/country	Age	LOR	% spoken English	Class
1	Cantonese/USA	19	18 years	80-100	ESL writing
2	English/USA		·		
	—other languages:				
	Mandarin/Tawainese	19	18 years	40-60	ESL writing
3	Hmong	18	18 years	n/a	G1.5 writing
4	Chinese	18	18 years	n/a	G1.5 writing
5	Vietnamese	18	18 years	n/a	G1.5 writing
6	Spanish	18	18 years	n/a	G1.5 writing
7	?? ²⁰ Chinese	18	17 years	n/a	G1.5 writing
8	??Chinese/Vietnamese	18	17 years	n/a	G1.5 writing
9	Chinese	18	17 years	n/a	G1.5 writing
10	Hmong	18	17 years	n/a	G1.5 writing
11	Vietnamese	18	17 years	n/a	G1.5 writing
12	Chinese	18	17 years	n/a	G1.5 writing
13	English/Philippines				
	—other languages:				
	none listed	20	15 years	80-100	ESL writing
14	Korean	22	13 years	20-40	ESL writing
15	Vietnamese	18	13 years	n/a	G1.5 writing
16	Khmer/Cambodia	19	13 years	60-80	ESL writing
17	Korean	28	13 years	20-40	ESL writing
18	Vietnamese	19	12 years	60-80	ESL writing
19	Mandarin/				
	Shangainese	19	12 years	60-80	ESL writing
20	Farsi	23	11 years	60-80	ESL writing
21	Vietnamese	18	11 years	n/a	G1.5 writing
22	Chinese	19	10 years	80-100	ESL writing
23	??Hmong	18	10 years	n/a	G1.5 writing
24	Chinese	18	10 years	n/a	G1.5 writing
25	Chinese	18	10 years	n/a	G1.5 writing
26	Korean	30	8 years	0-20	ESL writing
27	Vietnamese	18	8 years	60-80	ESL writing
28	Vietnamese	18	8 years	n/a	G1.5 writing
29	Cantonese	19	7 years	60-80	ESL writing
30	Korean	20	7 years	40-60	ESL writing
31	Vietnamese	; *	10 years	n/a	G1.5 writing
32	Chinese	?	? '	n/a	G1.5 writing
					e