# Investigating differences in the writing ability of Generation 1.5 and international second-language students

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Between 1970 and 2000 the number of people in the United States born overseas tripled, accounting for 10% of the total US population (NCTE, 2008). Accompanying rising immigration are increasing numbers of second-language (L2) learners in US schools. Many of these L2 learners aspire to enter higher education. As a result, different types of L2 learners enter US colleges: international L2 (IL2) learners who have completed high school in their home countries, and resident L2 learners who have completed all or part of their formal education in US schools. This latter population is often referred to as Generation 1.5 (G1.5) (Harklau, Losey, & Siegal, 1999; Roberge, Siegal, & Harklau, 2009), based on observations that they share traits with both first- and second-generation immigrants (Rumbaut & Ima, 1988). Currently, G1.5 students "pose a significant challenge to … conventional categories and practices governing composition instruction at the postsecondary level" (Harklau, et al., 1999, p. vii), leading those who assess and place students into writing courses to grapple with several questions: Does G1.5 learners' writing ability resemble that of IL2 learners? Will G1.5 learners benefit from taking writing courses designed for IL2 learners? If G1.5 learners' writing differs substantially from other L2 learners, how can they be identified through writing placement testing procedures? Do such differences warrant separate courses for G1.5 learners?

## Theoretical background

As high school graduates apply to and enter post-secondary education in the US, they are confronted with several large-scale writing assessments (Hamp-Lyons, 1991), the results of which will affect their future educational possibilities. For example, many colleges and universities require prospective students to submit scores from the SAT® or ACT® examinations, both of which currently include at least an optional essay component. After accepting students into undergraduate programs, most schools then require students to take writing placement exams to determine which courses they should take in their first year. In some programs, exit exams verifying students' writing proficiency before they continue in their studies are also required. The practical purposes for these testing situations differ, yet in each case a writing exam serves as a door-opener or gate-keeper, depending on the outcome (Bachman & Purpura, 2007). Given the potentially high-stakes nature of these testing situations, it is critical that the inferences drawn about students' writing ability from their performance on these tests be based on a sound understanding of the ability being assessed (Bachman & Palmer, 1996; Weigle, 2002). Furthermore, as the number of L2 students in US higher education grows, it is increasingly essential for test users to identify with greater precision these writers' strengths and weaknesses if their writing needs are to be addressed effectively. This is especially so for those who develop and use placement exams, since test takers should benefit from the decisions about which courses they are assigned to in order to improve their writing ability.

Acknowledgement of different types of L2 populations in US colleges and universities is not new. Slager (1956) described differences between the "foreign student and the immigrant" (p. 24), and the need to develop tests and course materials addressing each group's strengths and weaknesses more than a half century ago, yet it is only in recent years

that a substantial body of literature has emerged regarding noticeable differences across these two populations. Despite claims as to the differences between G1.5 and IL2 learners, almost no empirical evidence exists confirming or refuting distinctions between these groups in terms of their writing ability. The purpose of the proposed study is to address this need for empirically-grounded evidence by comparing the writing ability of IL2 and G1.5 learners. Such evidence could lead to the development of improved placement tools, which would allow test users to make accurate placement recommendations, and teachers to offer effective pedagogy addressing each group's needs.

Most empirical studies of G1.5 learners are qualitative in nature. Case studies by Frodesen and Starna (1999) concerning students' linguistic profiles, and by Bosher (1998) on students' writing processes and strategies, provide information about students' writing ability. Adopting Valdés' (1992) distinction of incipient versus functional bilinguals as a gauge for determining whether college-level L2 students should continue in ESL or mainstream courses, Frodesen and Starna (1999) proposed examining students' use of linguistic features as a means of distinguishing students at different stages in their acquisition of L2 proficiency. To this end, Frodesen and Starna examined detailed linguistic profiles of two students who had completed at least part of their high school education in the US before going on to college. One student's writing displayed problems similar to those of native speakers, along with few, yet systematic errors at the sentence level similar to those still made by advanced L2 learners. Given the systematicity of this student's linguistic errors, Frodensen and Starna concluded that he was a functional bilingual (Valdés, 1992) who would benefit from a mainstream English composition course. The other student's writing also displayed problems similar to the writing of native speakers, but included a wider variety of errors. Based on this range of errors, as well as the assumption that a mainstream composition instructor would probably not have addressed the student's language needs, Frodesen and Starna considered this second student to be more of an incipient bilingual (Valdés, 1992) who would benefit from taking ESL courses in college. Frodesen and Starna's (1999) study emphasized the potential for using L2 students' errors to develop linguistic profiles that could be used to make decisions concerning students' placement into college ESL or mainstream composition courses.

Bosher (1998) explored the writing processes of three Southeast Asian students attending a US college. One of the study participants had graduated high school in her home country and two had graduated from a US high school. Both US high school graduates had been in the US for more than seven years. Results showed that the student who had completed high school overseas attended more to the content and organization of her writing than she did to other aspects. Conversely, one of the US high school graduates attended to language issues and generating text the most, and very little to the content, discourse, or intention in her writing. The other, more successful US high school graduate displayed a pattern more similar to the overseas graduate than to the other US student. At the same time, the two US high school graduates spoke much more fluently and with greater grammatical accuracy than the overseas graduate. The findings led Bosher (1998) to conclude that students placed in similar ESL levels may have very different strengths and weaknesses in academic reading and writing tasks.

A small but growing number of quantitative studies in this area of research exist. Bosher and Rowekamp (1998) examined a series of factors to see which were most relevant for immigrant students' success in US higher education. Noting that some immigrant students may be more like IL2 students in some respects, the researchers divided their 56 study

participants into two groups based on whether they completed high school in their home countries or the US. Data were collected on participants' length-of-residence (LoR) in the US, years of schooling in the US and in their home countries, and their scores for three different sections of the Michigan English Language Assessment Battery (MELAB): objective, listening, and composition sections. Participants who had completed high school in their home countries scored significantly higher on the objective section of the MELAB, while those who had completed high school in the US scored significantly higher on the listening section. There were no significant differences in the composition scores. The background factors and standardized test scores were then compared with participants' GPA for their first, second, and third years of college (the dependent variable), and a regression analysis was run with the significant factors: years of schooling in the home country, years of schooling in the US, LoR in the US, and objective score on the MELAB. Results showed years of schooling in the home country to have the highest positive correlation with first-year GPA, with objective score on the MELAB the next significant factor. These same factors correlated positively with second and third-year GPA, with objective MELAB score a better predictor than years of schooling for these future GPAs. Conversely, years of schooling and LoR in the US had significant negative correlations with first-, second-, and third-year college GPA. The researchers concluded that years of schooling in the home country and objective score on the MELAB are good predictors of academic success in US higher education. The results of this study suggest that G1.5 learners, with their extensive years of residency and schooling in the US, may actually be at a disadvantage in US colleges when compared to their IL2 peers, whose years of schooling in their home countries seem to have a positive influence on their academic success, even in an L2.

In a similar study, Muchinsky and Tangren (1999) collected data including students' scores on the Michigan Test of English Language Proficiency (MTELP), the Michigan Test of Aural Comprehension (MTAC), and a 30-minute holistically-scored composition, as well as passing rates upon completion of the program. Results showed that the thirteen students who had completed high school in the US scored significantly higher on the MTAC, or aural component, than the other sections of the exam, while the nine students who had completed high school in their home countries scored similarly on both the MTAC and the MTELP, and scored significantly better on the MTELP section than the US-educated cohort. The US-educated students appeared to score higher on the MTAC than the international students, but the difference was not significant. Upon completion of the ESL program, the students who had completed high school in their home countries still scored significantly better on the MTELP than the US high school graduates, and also better on the MTAC section, though not significantly so. In other words, the home country graduates maintained a lead over the US graduates in the MTELP portion of the test, and may even have surpassed them for the MTAC section. Muchinsky and Tangren believe these results provide evidence that US-educated students who perform well on the MTAC have inflated overall placement scores not representative of their actual academic proficiency. In their analysis of the composition component, Muchinsky and Tangren found that the essays by US-educated students were the longest, but the IL2 had the highest scores. These results support the claim that G1.5 students are more fluent language users, yet not necessarily well prepared in the language of academic writing.

Noting assumptions that international students tend to have greater explicit knowledge of grammar than immigrant students, Bitchener and Knoch (2008) designed a study to address the lack of empirical evidence supporting such claims. Their study, which included 144 ESL students of whom 75 were international students and 69 were classified as migrant

students, primarily investigated the effectiveness of different types of written corrective feedback in immediate and delayed post-tests, but also examined results across the two groups of learners included in the study. Bitchener and Knoch divided participants into three treatment groups depending on the type of written corrective feedback supplied, and one control group receiving no corrective feedback. Results showed the control group's accuracy with the grammatical structure examined to be statistically significantly lower than that of the three treatment groups. Relevant to the current study, there was no effect for student background, contradicting claims that international students are more likely to benefit from explicit grammatical instruction than are migrant students (cf. Reid, 2006).

Finally, di Gennaro (forthcoming) analyzed writing placement exams from both groups of learners for six features: grammatical control, cohesive control, rhetorical control, sociolinguistic control, content control, and length. Applying a Rasch measurement model, two separate statistical analyses were conducted: one examining differences between the two groups when modeled as a single group, and a second comparing the two groups when modeled separately. Findings from the whole-group analysis revealed a significant difference across the two types of learners only with regard to rhetorical control, while the separate-group analysis found the two groups' writing performance differed in length as well as the difficulty rankings of content control. Contrary to claims with regard to the grammatical ability of the two populations included in this study (cf. Reid, 2006), in neither analysis did G1.5 and IL2 students' writing differ with regard to grammatical or cohesive control as defined in this study. This lack of significance can possibly be explained by the fact that the scoring rubric was unable to detect subtle differences between the two groups. Another interesting finding was the great variation in scores across the different components for the G1.5 learners, where the IL2 learners' scores were more uniform across components, despite a greater range in overall scores for the IL2 learners than for the G1.5 students. In others words, the rating scales appeared stable for the IL2 group, but lacked stability for the G1.5 group. This suggests that the types of scoring systems commonly used to evaluate L2 learners may favor IL2 students over G1.5 learners. A more detailed, qualitative analysis, to accompany these quantitative findings, could provide greater insight as to more substantial differences in the writing performance of these two groups and perhaps support previous claims.

In short, while some previous studies may support claims as to the existence of distinct types of L2 writers in higher education, currently lacking in the research is a more precise description of each group's writing ability. Despite limited empirical evidence, practitioners who work closely with G1.5 and IL2 learners often argue that specific differences between IL2 and G1.5 students exist in terms of their writing ability. If assertions about these differences are to be taken into consideration and used to effectively influence writing placement recommendations and pedagogy, it is necessary to examine findings based on empirical evidence. Specifically, more extensive analyses of observable differences in learners' writing ability are needed. The current study will address this much-needed research by analyzing writing samples of IL2 and G1.5 students in an attempt to provide empirically-grounded evidence of how these two groups of students may differ in terms of their writing ability. Furthermore, by complementing coarse quantitative analyses with more fine-grained qualitative analyses in a mixed methods approach (Creswell & Plano Clark, 2007), the current study promises to offer a more complete picture of the two groups' writing performance than that which can be obtained in previous studies.

## Research methodology

*Research Design*

The proposed study will use a mixed methods approach, drawing from and combining both quantitative and qualitative analyses (Creswell & Plano Clark, 2007). As such, the study will be divided into three stages. The first stage will include quantitative analyses, including descriptive statistics of dispersion and central tendency, to verify that the data are appropriate for further statistical analyses. This stage will also include analyses of participants' writing scores, based on a rubric, in several areas of writing ability. Specifically, this stage will focus on the interaction between learners' status as Generation 1.5 or International second-language participants and specific components of writing ability, that is, if learners tend to exhibit noticeably different strengths and weaknesses as a function of their membership in one of these two groups. These analyses will be conducted using a many-faceted Rasch measurement model, which calibrates participants' scores after factoring in rater severity and item difficulty, placing them on an equal-interval scale (Bond & Fox, 2001), and which is particularly suited for writing performance data (McNamara, 1996).

Findings from the quantitative stage will provide initial results concerning differences across the two groups of learners in this study, and also make it possible to select data for analysis in the qualitative stage. The qualitative stage is designed to identify differences in writing samples that are too subtle to be detected by the scoring rubric. To address different areas of writing ability, this stage will include two parts: one focused on grammatical knowledge and one on pragmatic knowledge. Previous research claims that the two populations included in this study make different types of grammatical errors in their writing (Frodesen & Starna, 1999; Reid, 2006), yet during a pilot study (di Gennaro, forthcoming), the scale used to measure grammatical ability did not detect any statistically significant differences between groups for scores in this category. Thus, approximately 10 writing samples, 5 from each group of students receiving the same overall scores in the quantitative stage, will be selected for a more fine-grained analysis in the qualitative stage of the study. These selected writing samples will be coded for the types of errors learners made in their writing to see if claims regarding patterns of differences across the two groups exist.

Complementing the error analysis of learners' writing, the qualitative stage will also include an analysis of pragmatic knowledge in selected writing samples. Pragmatic knowledge is notoriously difficult to define and measure; however, several researchers have formulated frameworks and described methods for examining this area in writing more carefully through the concept of metadiscourse (see Crismore, Markkanen, & Steffensen, 1993; Hyland, 1998; Hyland & Tse, 2004; Vande Kopple, 1985). The qualitative analysis of pragmatic knowledge in the current study will follow this research tradition by coding selected writing samples for the presence and types of metadiscourse features.

Finally, in the data merging stage, results from both the quantitative and qualitative stages will be synthesized and interpreted together, leading to a richer analysis than would be possible from just quantitative or qualitative analyses alone (Creswell & Plano Clark, 2007).

*Participants*

Participants will be approximately 150 students: 75 IL2 learners and 75 G1.5 learners.

*Raters*

Three raters with backgrounds in TESOL and/or Applied Linguistics and experience in rating placement exams will read the essays included in this study. Raters will be native speakers of English or highly proficient non-native speakers who have several years'

experience teaching advanced writing.

*Instruments*

Each participant will be asked to complete a brief biodata form to provide information regarding their first language, length of residence in the US, and where they completed high school. This information will be used to classify students as G1.5 or IL2. Examinees will all respond to the same essay prompt to eliminate variability in scores as a function of the writing prompt. The prompt follows the format of an argumentative essay, a genre of writing often used in timed writing tasks because it allows the writer to state and defend an opinion relying on his or her current knowledge and experience rather than outside sources. An analytic scoring rubric will be used to assign scores for each participant's writing performance. The rubric will include five components, each divided into a six-point scale ranging from no control (0) to excellent control (5). The components are grammatical control, cohesive control, rhetorical control sociolinguistic control, and content control.

*Analyses*

The FACETS program (Linacre, 2005) will be used to conduct a multi-faceted Rasch analysis. Several researchers have employed FACETS to analyze writing ability (cf. Kondo-Brown, 2002; Sudweeks, Reeve, & Bradshaw, 2005; Weigle, 1998). In the current study, this program will be used to investigate interactions between the rubric components and learner background (IL2 or G1.5), revealing if one group performs significantly better in any category of writing. Results will also identify learners from each group who performed similarly once rater-severity and component difficulty are factored into their scores. Five essays with similar scores from each group will be analyzed qualitatively. In the qualitative stage, essays will be coded for the types of errors made (Frodesen & Starna, 1999) and for the presence of metadiscourse features (Hyland & Tse, 2004). The resulting codings will then be compared to see if any patterns emerge.