theRPgroup

Research • Planning • Professional Development
for California Community Colleges

English as a Second Language Multiple Measure Development

Terrence Willett

June 1, 2017

www.rpgroup.org

Executive Summary

English as Second Language (ESL) sequences vary greatly among California Community Colleges, making it challenging to create a single set of test cut scores and multiple measures rules for all colleges that accurately place students into the most appropriate course level. The Multiple Measures Assessment Project (MMAP) team had to address the analytical challenges of variability in credit ESL sequences, which is described in detail in the brief including the source data set, inclusion criteria for the predictive model data sets, and the decision tree predictive analysis. Also addressed is the question of the influence of high school origin and college destination on community college ESL course success.

In creating validated multiple measures for ESL students that draw from their high school achievement data, this research study made rules for each of three categories of ESL sequences:

1. Top level of ESL is transfer-level
2. Top level of ESL is one level below transfer-level
3. Top level of ESL is two or more levels below transfer-level

The placement rules had similarities to those for English with cumulative high school grade point average (GPA) having stronger predictive utility than other high school achievement data such as course grades and test scores. While the findings in this brief have some utility, most incoming ESL students at community colleges do not have high school data available; therefore, test scores and other multiple measures, such as the number of years studying English or the highest level of prior formal education, will be of great value. Additionally, the vast majority of students who were identified as English as a Second Language speakers in high school (87%) did not take ESL in community college, but instead enrolled in English courses designed for native speakers. For those who do have high school data available, it appears that concerns about great variability in ESL students' academic outcomes due to high school origin or college destination do not appear supported within this data set.

Given that most of the students in this data set began their college language arts instruction in English for native speakers with reasonably high success rates, it may be useful to examine pedagogical frameworks for teaching English learners in the context of college English courses. Future research could include segmentation of students by background, such as time in an English-speaking country and level of formal education, and comparisons of traditional and accelerated course sequences.

Introduction

Overview of ESL in California Community Colleges

English as a Second Language (ESL) instruction has long been a key California Community College pathway, but, over the past decade, ESL sequences and enrollment have been changing. Over the past 10 years in which data were reported, ESL credit full-time equivalent students (FTES) have declined from just over 26,000 statewide, or 2.4% of all credit FTES in 2005-2006, to approximately 20,000 FTES, or just 1.8% of all credit FTES in 2014-2015[1]. However, the proportion of non-credit ESL FTES has grown, increasing from about 31% in 2005-2006 to approximately 39% in 2014-2015, with more than 26,000 FTES in that year. Moreover, while the majority of ESL FTES has consistently been non-credit, the non-credit "share" of all ESL FTES has increased from 52% in 2005-2006 to 57% in 2014-2015. This brief exclusively addresses credit ESL. However, colleges should be mindful of their non-credit ESL sequences as well as local adult education offerings and the role they play as potential pathways to credit ESL.

Using Multiple Measures for ESL Assessment

In order to improve the accuracy of students' placement into California Community College ESL courses and move them more efficiently toward completion, the statewide Common Assessment Initiative (CAI) is developing placement processes for student assessment in credit ESL that contain a multiple measures component. Development of multiple measure rules for ESL placement was a complex process requiring distinct rule sets for groups of colleges with distinct ESL curricular sequences as described later in this report. As part of this work, the Multiple Measures Assessment Project[2] (MMAP) has created a set of multiple measures to be used in assessment that are based upon high school transcripts. While these measures cannot be applied to all ESL students due to lack of data, they offer value for those who do have high school data available.

In This Report

This primary purpose of this research brief is to inform the CAI Steering Committee about challenges and strategies with respect to analyzing ESL course sequences in order to create new multiple measures to be used in course placement. The information provided will also be of interest to ESL faculty, language arts deans, assessment center directors, and researchers.

This brief describes the variation in credit ESL sequences and how the MMAP team addressed the analytical challenges of these variations. There is also discussion of the source data set, inclusion criteria for the predictive model data sets, and a short description of the decision tree

---

[1] From http://datamart.cccco.edu/Students/FTES_Summary.aspx using Taxonomy of Program (TOP) codes of 493084, 493085, 493086, and 493087 for ESL as consistent with the Student Success Scorecard.

[2] http://rpgroup.org/Our-Projects/All-Projects/ctl/ArticleView/mid/1686/articleId/118/Multiple-Measures-Assessment-Project-MMAP

predictive analysis. Also addressed is the question of the influence of high school origin and college destination on community college ESL course success. Furthermore, the authors acknowledge the importance of, but do not address within this brief, additional research regarding ESL, including questions about optimal ESL sequence lengths for various student typologies, ESL versus English placement for students, and curricular responses to the diversity of student backgrounds.

Sequence Variation

English and math sequences at individual California Community Colleges are of varying length, but all lead toward a common transfer-level gateway course of some sort. Math sequences are complicated by the existence of multiple pathways with different transfer-level gatekeepers, such as statistics for general education pathways or pre-calculus for science, technology, engineering, and math (STEM) pathways. English course sequences tend to be more consistent, with most leading to a type of transfer-level college composition class accepted by the majority of universities.

In contrast, ESL sequences at California Community Colleges are highly varied and feature different terminal levels (Hodara 2015, Bunch et al. 2011, and the California Community Colleges Curriculum Inventory[3]). There does not appear to be consensus among community colleges about neither the optimal sequence length nor the ideal terminal level for ESL. Sequences may end in a transfer-level ESL course equivalent to college composition, or they may end at a course one or more levels below transfer-level. Students in these sequences may also transition into English sequences according to the prerequisites at their college and the requirements of their education path, such as transfer preparation, certificate completion, and/or job preparation. Some of these sequence variations are likely in response to differences in student populations, local faculty decisions, and historical contexts.

Data Set

The first critical step for constructing the data set was to define an ESL student. The MMAP data set contains students identified as ESL students in high school via the California Partnership for Achieving Student Success[4] (Cal-PASS Plus) database who could be matched with a record of taking at least one ESL or English course at a California Community College. Individuals were flagged as high school ESL students if they had enrolled in at least one English Language Development (ELD) course coded as 2110 in the California Basic Educational Data System (CBEDS) or were identified as English Language Learners (ELL).

The predictive analytic process used by the MMAP team focused on students with complete high school transcripts. Because of these requirements, the data set did *not* ultimately include most ESL community college students, as the majority of these students did not have California high school transcripts available. This may in part be due to a higher proportion of community college

[3] http://curriculum.cccco.edu/ReportsPublic/CoursesReport/Report TOP codes 493084, 493085, 493086, 493087

[4] https://www.calpassplus.org/

ESL students coming from outside of California and/or their having more limited formal education backgrounds. Based on high school data availability and enrollment in community college ESL courses, ESL students can be categorized into four groups:

1. High school ELL designation or ELD course history AND taking community college ESL (included in MMAP ESL analysis)
2. High school ELL designation or ELD course history but NOT taking community college ESL, instead taking courses in the English for native speakers sequence (included in MMAP English analysis)
3. Non-native speakers with no high school information available AND taking community college ESL (not included in MMAP analyses)
4. Non-native speakers with no high school information available but NOT taking community college ESL (not included in MMAP analyses)

This means that colleges will have to ensure other non-test multiple measures are employed for groups #3 and #4 above, such as the amount of prior formal education the student has completed. Nonetheless, the analysis of those with complete high school transcripts, which has been found effective for the disciplines of English and math, still yielded sufficient data points for analysis and was used with respect to ESL in order to maintain consistency for the first round of analyses.

Additionally, a further sub-setting for ESL was enacted to account for the different ESL sequences at community colleges and to create the analytical data sets. After analysis of these sequences, three major categories were identified based upon the level of the last course in the ESL sequence, as shown in Table 1 (with the abbreviation referencing the number of levels below transfer).

Table 1. ESL Sequence Abbreviation, Description, and CB21 Coding

Abbreviation	Description	CB21 coding
Top0	Top level is transfer-level	(CB21=Y, CB05≠C)
Top1	Top level is one level below transfer-level	(CB21=A)
Top2+	Top level is two or more levels below transfer-level	(CB21=B, C, D, E, F, or G)

Sequences with a top level of transfer-level were most common followed by sequences ending in courses one level below transfer-level, then two or more levels below transfer-level (see Table 2). Similar to English and math MMAP data files, of those ESL students with any high school data available, about one-fifth to one-quarter of ESL students had complete high school transcripts. Colleges with a top level of two or more levels below transfer-level were combined in order to attain sufficient record counts for analysis, with most of those colleges having two levels below transfer-level as their highest ESL course.

The MMAP team also examined non-credit courses in the analysis, but only 1.6% of the total ESL file contained students with any history of non-credit courses. Given that most ESL FTES are from non-credit courses, this implies there is limited throughput from non-credit to credit ESL by recent high school students in this dataset. As such, non-credit ESL was not included in this analysis but is overall of considerable importance in ESL instruction.

Table 2. ESL Data File Description

Description	High Schools	Colleges	Students
Total ESL file	1,492	107	185,033
Total ESL file with complete high school transcripts	1,066	103	50,851
Percent of total ESL file with complete high school transcripts	--	--	27%
Top level of transfer-level ESL	931	41	21,239
Top level of transfer-level ESL and complete high school transcripts	485	41	4,901
Percent of top level of transfer-level with complete high school transcripts	--	--	23%
Top level of 1 level below transfer-level	727	30	10,248
Top level of 1 level below transfer-level and complete high school transcripts	289	30	2,768
Percent of top level of 1 level below transfer-level with complete high school transcripts	--	--	27%
Top level of 2+ levels below transfer-level	627	30	5,420
Top level of 2+ levels below transfer-level and complete high school transcripts	253	27	1,026
Percent of top level of 2+ levels below transfer-level with complete high school transcripts	--	--	19%

The vast majority (87%) of ESL identified high school students did not in fact take ESL courses in community college, but instead enrolled in English for native speakers. This may in part be due to community college assessment processes not generally incorporating information about high school English proficiency categories (REL West, 2011). Of those ESL identified students enrolling in English, about one in six enrolled in transfer level, one in three in one level below transfer-level, and about half enrolled in English two or more levels below transfer-level (Table 3). About two-thirds of recent high school students earned a grade of C or better in the first language arts class they attempted at community college, regardless of that course's level or whether the class was English or ESL. The only exception to this trend was found in transfer-level ESL, in which about three-quarters of students earned a C or better. These baseline success rates informed the success criteria for the MMAP predictive models. Additionally, less than 1% of students in the analysis data set had any non-credit ESL enrollments. This suggests that those courses are not a major pathway into credit ESL sequences for high school students transitioning to college, although non-credit ESL may play larger role for other ESL students.

Table 3. Success Rates for Recent ESL Identified High School Students' First Attempt at a Community College Language Arts Course by Course Type

Level by Course Type	Success Rate	Count	Percent of Level within Course Type
English, Transfer-Level	66%	7,552	17%
English, One Level Below Transfer	65%	13,629	31%
English, Two Levels Below Transfer	64%	14,222	33%
English, Three Levels Below Transfer	65%	6,639	15%
English, Four Levels Below Transfer	67%	1,450	3%
ESL, Transfer-Level	76%	664	10%
ESL, One Level Below Transfer	67%	1,425	21%
ESL, Two Levels Below Transfer	68%	1,656	25%
ESL, Three Levels Below Transfer	69%	1,746	26%
ESL, Four Levels Below Transfer	71%	774	12%
ESL, Five Levels Below Transfer	65%	434	6%

Note: Due to missing data, table does not sum to 50,851 as seen in Table 2.

Decision Tree Predictive Analysis

Once the analytical data sets were identified, the MMAP team applied a recursive decision tree analysis to predict community college ESL course outcomes and also created validated multiple measures as described in the ESL MMAP rules document.[5] These rules were constructed to maintain current success rates and the code used to create the decision trees allowed for peer review and local validation. Decision trees were selected in Phase I of MMAP that explored a wide variety of other possible predictive models, including logistic regression, neural networks, and support vector machines.

The primary virtues of decision trees included output that was interpretable by non-statisticians; additionally, they are easy to program into placement systems while also being able to handle a variety of data types with no distributional assumptions and automatically accounting for nonlinearities and interaction effects. Predictor variables included cumulative high school grade point average (GPA), grade in last high school English or ESL course, type of English or ESL course (i.e. advanced placement, expository, or remedial), high school English proficiency category[6] (English learner, reclassified fluent English proficient [RFEP], initially fluent English proficient [IFEP], or English native speaker), scores on the California Standards Test (CST) that have been replaced with the new Smarter Balanced assessments, outcome of the Early Assessment Program[7] (EAP) test, concurrent high school enrollments in college, and count of prior non-credit courses.

[5] http://rpgroup.org/Portals/0/Documents/Projects/MultipleMeasures/DecisionRulesandAnalysisCode/ESL-Decision-Trees-3_31_2016.pdf
[6] http://www.cde.ca.gov/ta/tg/el/documents/celdtglossary.pdf
[7] http://www.cde.ca.gov/ci/gs/hs/eapindex.asp

As with the English and math rules, cumulative high school GPA proved the most powerful predictor and dominated the rule sets. An example rule for colleges with their top level one level below transfer-level is that success in that top-level course (CB21=A) was likely (65%) for those with a high school 12th grade cumulative GPA of 2.6 or better. There was one rule that utilized grade in last English course and another that pointed to scores on the CST, but cumulative GPA alone turned out to be the generally best predictor for all levels of ESL.

Other Multiple Measures for ESL

As noted earlier, a large number of incoming community college ESL students do not have high school data available. Other options for using multiple measures in assessing these ESL students include survey questions that provide students the opportunity to self-report prior academic experience as well as non-cognitive abilities, such as the degree to which college is prioritized by both the students and their families (see Appendices A and B for examples). Additionally, a number of pilot colleges are exploring other multiple measures, such as students' prior formal education and non-cognitive variables that may be useful for ESL students, and will be reporting their experiences and findings later this year. For example, one MMAP pilot college recently found that years studying English was their most significant predictor of success (Sacramento City College Planning, Research, and Institutional Effectiveness Office, 2017).

The ESL population will likely remain the most complex in terms of student background variability and most challenging with respect to obtaining consistent data on prior academic experiences as compared to the majority of English and math students. More information about non-cognitive variables (NCV) and scales are available on the MMAP pilot college resource page.[8]

Success Variability by High School and College

When constructing predictive models from statewide data, it is possible to address the extent to which a student's achievement depends upon where they went to high school and/or where they go to college. One approach to exploring this question is to quantify the variation in college course success, as it relates to a student's high school of origin and college destination.

Using a hierarchical linear model (HLM) framework, Table 4 below shows intra-class correlations (ICC) between grade points in students' first ESL class in college and students' high school origin and college destination. Of the 18 ICC's calculated, seven were found to be significant, with four of those due to college-level variation and three due to high school-level variation. Students attending colleges with a top ESL level of transfer-level and who were taking courses two levels below transfer-level had significant variation in community college course success, attributable to both high school origin and college destination. However, most of the ICC values were fairly small, with the exception of those for students taking an ESL course four levels below transfer-level at colleges with a top ESL level of two levels below transfer-level; in

[8] http://rpgroup.org/Our-Projects/All-Projects/Multiple-Measures/PilotCollegeResources

these cases, a stronger but still weak ICC due to high school origin was observed. The magnitude of college-level ICC coefficients was similar to those found by Geiser and Santelices (2007).

Table 4. Intra-Class Correlations (ICC) Between Grade Points in First Community College ESL Course and High School Origin and College Destination by Highest Level of ESL Offered

Highest Level of ESL at Community College	Level of First ESL Course	High School Count	College Count	Student Count	Source of Variance	Intra-class Correlation Coefficient	p-value
Transfer-Level	Transfer-level	252	31	773	High School	0.03	0.18
					College	**0.05****	0.00
	1 level below transfer	211	25	1,751	High School	**0.03****	0.01
					College	0.01	0.10
	2 levels below transfer	210	32	838	High School	**0.05***	0.05
					College	**0.03****	0.00
One Level Below Transfer-Level	1 level below transfer	117	23	872	High School	0.01	0.27
					College	0.00	0.47
	2 levels below transfer	143	24	795	High School	0.00	0.60
					College	0.01	0.25
	3 levels below transfer	130	25	649	High School	0.04	0.11
					College	**0.05****	0.00
Two Levels Below Transfer-Level	2 levels below transfer	253	18	324	High School	0.05	0.18
					College	**0.07****	0.00
	3 levels below transfer	156	22	402	High School	0.07	0.09
					College	0.02	0.10
	4 levels below transfer	60	19	129	High School	**0.27****	0.01
					College	0.09	0.06

** significant at 0.05 level*
*** significant at 0.01 level*

The findings shown above in Table 4 suggest that college outcomes as measured by course grades do not always have a significant relationship to either a student's high school origin or college destination. Moreover, when a relationship is present, it is usually not a strong one. Nevertheless, efforts to align practices and promote consistency of instruction and grading among high schools and college are likely still of value, especially given that there were a number of weak but still significant correlations identified in this analysis.

However, claims of high variability in preparation or college performance due to high school origin or college destination do not appear supported within this data set. In other words, students' achievement in community college did not appear to be explained to a great degree by where they went to high school nor where they attended college. Give these findings, developing different high school transcript-based placement rules for each high school of origin or college of destination did not appear warranted.

Future Research and Limitations

The wide variety of sequence structures in ESL offers an opportunity for educators to identify optimal sequences that maximize throughput to a higher-level English language curriculum appropriate to students' educational goals. With the advent of the Adult Education Block Grant (AEBG) requiring collaboration between adult schools and community colleges, ESL students should begin experiencing more pathway options, as instructors align and connect their curricula.

Given that most of the students in this data set began their college language arts instruction in English for native speakers with reasonably high success rates, it may be useful to examine pedagogical frameworks for teaching English language learners in the context of college English courses. Enhancements could include providing English and other language intensive instructors additional professional development in ESL pedagogy, encouraging more ongoing collaboration among ESL and other faculty to assist students, and utilizing diagnostic properties of assessment processes to inform students of curricular options and student service support resources. Some resources for credit, non-credit, and adult education ESL pedagogy include *California Pathways: The Second Language Student in Public High Schools, Colleges, And Universities*[9] by the Academic Senate for California Community Colleges and *ESL-- Model Standards for Adult Education Programs*[10] by CASAS.

One key limitation in this report rests with the fact that researchers were not able to link the majority of California Community College ESL students to high school data in the Cal-PASS Plus data set. The students in the Cal-PASS Plus data set have attended a California high school, and thus they have likely had more exposure to English than a community college ESL student who recently arrived from another country. Further exploration of ESL sequences in community colleges would benefit from segmentation of students by background, such as time in an English-speaking country and level of formal education (Gil & Bardack, 2010). This kind of investigation may reveal that more tailored sequences or support services help increase goal completion.

Another approach to developing optimal ESL sequences focuses on decreasing the number of course levels students must traverse in order to complete the sequence, which is referred to as "acceleration." The California Acceleration Project[11] began by condensing community college English and math sequences, an endeavor that showed increases in students' completion of transfer-level courses (Hayward & Willett, 2014). More recently, this project has expanded to include the implementation of acceleration principles in community college ESL sequences. The

[9] http://www.asccc.org/sites/default/files/publications/CaliforniaPathways_0.pdf
[10] https://www.casas.org/docs/pagecontents/ca_esl_model_standards_1992_-2-.pdf?Status=Master
[11] http://accelerationproject.org/

decision-tree analysis made no attempt to distinguish between accelerated versus traditional sequences. However, future analyses could compare student outcomes between these sequence types.

Right now, we are experiencing a great number of initiatives, reforms, targeted funding, and updated student success indicators at our colleges. This includes the Common Assessment Initiative (CAI), integration of the Basic Skills Initiative, Student Success and Support Program (SSSP), and Equity plans, the alignment of Adult Education and non-credit and credit basic skills curricula, acceleration and co-requisite reforms, new Student Success Scorecard metrics and Institutional Effectiveness goals emphasizing throughput to transfer level course completion, and Guided Pathways and College Promise initiatives. With all these impending changes, there will be many opportunities for educators to meet and discuss the impacts of these efforts, to revisit past practices with newly available data and research, and together determine the best path forward. This is an excellent time to ask difficult questions and challenge ourselves to improve our students' futures. ESL pathways are especially complex and should be a discussion thread throughout the planning and implementation of each of these changes in policy and practice.

Research and Planning Group for California Community Colleges

The Research and Planning Group for California Community Colleges (RP Group) strengthens the ability of California community colleges to discover and undertake high-quality research, planning, and assessments that improve evidence-based decision-making, institutional effectiveness, and success for *all* students.

Project Team

This report was prepared by the Multiple Measures Assessment Project (MMAP) Research Team. The primary contact is Terrence Willett, who can be reached at twillett@rpgroup.org.

www.rpgroup.org

References

Bunch, G. C., Endris, A., Panayotova, D., Romero, M., & Llosa, L. (2011). Mapping the terrain: Language testing and placement for US-educated language minority students in California's community colleges. William and Flora Hewlett Foundation. Retrieved from http://escholarship.org/uc/item/31m3q6tb

Geiser, S., & Santelices, M.V. (2007). Validity of high-school grades in predicting student success beyond the freshman year: High-school record vs. standardized tests as indicators of four-year college outcomes. Research & Occasional Paper Series CSHE.6.07). Berkeley, CA: University of California, Center for Studies in Higher Education.

Gil, L, & Bardack, S. (2010). Common Assumptions and Evidence Regarding English Language Learners in the United States. Washington, DC: American Institutes for Research, English Language Learner Center. Retrieved from ERIC database. (ED511353)

Hayward, C., & Willett. T. (2014). Curricular Redesign and Gatekeeper Completion: A Multi-College Evaluation of the California Acceleration Project. Sacramento, CA: Research and Planning Group for California Community Colleges. Retrieved from: http://rpgroup.org/All-Projects/ctl/ArticleView/mid/1686/articleId/72/California-Acceleration-Project-CAP-Evaluation

Hodara, M. (2015). The Effects of English as a Second Language Courses on Language Minority Community College Students. Educational Evaluation and Policy Analysis. 37.2, pp. 243–270.

REL West at WestEd. (2011). 1.2.110 Types of Multiple Measures Used in California Community College Mathematics, English, and English as a Second Language Course Placement: Summary Report of Survey Results. San Francisco, CA: WestEd.

Sacramento City College Planning, Research, and Institutional Effectiveness Office. (2017). Multiple Measures Assessment Project (MMAP) for ESL at Sacramento City College. Sacramento, CA.

Appendix A: Common Assessment Initiative English Language Arts Pre-Testlet Questions

1. Which statement best describes your high school status?
    a. I am a high school graduate.
    b. I have received a GED.
    c. I am still in high school.
    d. I have not graduated from high school and I have not received a GED.
    e. Other:
2. How long ago did you graduate from high school or receive a GED?
    a. Less than 1 year
    b. 1 to 2 years
    c. 2 to 5 years
    d. 6 to 10 years
    e. More than 10 years
    f. I am still in high school.
    g. I have not graduated from high school and I have not received a GED.
3. What was your approximate High School Grade Point Average (GPA)?
    a. 3.5-4.0 (I received mostly B+'s and A's)
    b. 3.0-3.49 (I received mostly B's and B+'s)
    c. 2.5-2.99 (I received mostly B-'s)
    d. 2.0-2.49 (I received mostly C's and C+'s
    e. 1.5-1.99 (I received mostly C-'s)
    f. less than 1.5 (I received mostly D's or below)
    g. I do not know.
    h. This does not apply to me, as I did not attend school in the United States.
    i. Other:
4. Did you attend high school in another country?
    a. Yes
    b. No
    c. Other:
5. If you attended high school in another country, how many years did you attend?
    a. 1 year
    b. 2 years
    c. 3 years
    d. 4 years
    e. I did not attend high school in another country.
    f. Other:
6. If you attended high school in another country, did you graduate?
    a. Yes
    b. No
    c. I did not attend high school in another country.
7. Is English the first language you learned?
    a. Yes

    b. No
8. Can you speak another language?
    a. Yes
    b. No
9. If yes, what language(s) do you speak?
10. What language do you speak most often with your friends?
11. What language do you speak most often with your family?
12. What language do you read/write best?
13. What language do you speak/understand best?
14. How many years of English did you take in your country or in the United States?
    a. None
    b. 1 year
    c. 2 years
    d. 3 years
    e. 4 years
15. Did you receive a C or higher in any AP English courses? If so, please check all that apply:
    a. AP English Language and Composition
    b. AP English Literature and Composition
16. What status did you receive on the EAP (Early Assessment Program) English test?
    a. Ready
    b. Conditional (not currently an option for English but it is for math)
    c. Not Ready/Incomplete
    d. Don't Know
    e. Didn't Take the EAP
    f. Other:
17. Are you currently enrolled in an English or ESL class?
    a. Yes
    b. No
    c. Other:
18. If yes, what course are you enrolled in?
    a. Choose from list
19. How prepared were you for the English or ESL course you last attended or are currently attending?
    a. Over prepared
    b. Very prepared
    c. Prepared
    d. Somewhat prepared
    e. Unprepared
20. How often do you continue to study if the subject or class is difficult?
    a. Always
    b. Often
    c. Sometimes
    d. Never
21. Rate your agreement with the following statements using the scale Strongly agree, Somewhat agree, Somewhat disagree, Strongly disagree:

a. Doing well in school is important to me.
b. I study every day.
c. I have a quiet place to study.
d. My family expects me to do well in school.

Appendix B: Example Multiple Measures English as a Second Language Questions Currently Used by Community Colleges

Santa Rosa Junior College

1. How many years of education have you completed in your life? (No formal schooling, 1-3 years, 4-6 years, 10-12 years, 13 or more years)
2. How many years have you studied English in your life? (None, 3 years or less, 4-6 years, 7-9 years, 10 or more years)

Santa Ana College

1. What is your educational level in your home country?
2. How many hours per week will you be spending on responsibilities besides school (child care, family duties, senior care)?
3. How long has it been since you attended school?
4. What is the highest diploma/degree you have received?
5. What is your educational goal?
6. How many years have you been speaking English?
7. How many hours a day do you use English outside the classroom?
8. What is the highest diploma/degree you have received?
9. How many books have you read in the past year?

Sacramento City College

1. How often do you speak English at home? (never, sometimes, usually, always)
2. How often do you speak English at work? (never, sometimes, usually, always)
3. What is your highest level of education? (never attended school, lower than high school, high school in the U.S.A, college or university in the U.S.A, high school in another country, college or university in another country)
4. How many languages do you know very well? (one, two, three, more than three)
5. How long have you lived in the U.S.A. (less than one year, 1-2 years, 3-5 years, 6-10 years, more than ten years)
6. How many years did you study English (less than one year, 1-2 years, 3-5 years, 6-10 years, more than ten years)

Cuyamaca College

1. What age did you start learning English?
2. How often do you speak in English? (With Friends, With Family, At School) (Never, Not very often, Sometimes, Often, All the time)

3. Did you receive a college or university degree from outside the United States? (Yes, No, Don't Know)
4. How often do you dream in English? (All the time, Often, Sometimes, Not very often, Never)
5. Do you work in an English-speaking environment? (Yes, No)
6. How many hour do you work a week?
7. What language is your mobile phone set to? (English, A different language, I don't have a mobile phone)
8. How many hours a week do you spend on the following activities in English? (Watching TV in English, Reading in English, Listening to the radio in English, Using the internet in English)
9. How many languages do you speak?
10. Please rate your English proficiency level:
    a. Proficient-You can use English with ease and fluency similar to your native or mother tongue.
    b. Advanced-You use English fluently and can have lengthy discussions on abstract or cultural topics.
    c. Upper Intermediate-You can use English effectively and talk about a range of topics.
    d. Intermediate-You speak English with some confidence in everyday social and travel contexts.
    e. Pre-Intermediate-You have a basic ability to communicate in practical everyday situations.
    f. Elementary-You understand English if the speaker speaks slowly and clearly and you ask to rephrase or repeat.
    g. Beginner-You can speak and understand English in a very limited way.
    h. I don’t know.
11. Did you use a translation sheet for this survey? (Yes - For the majority of the survey, Yes - For some of the survey, No - I did not use a translation sheet)
12. If you took the TOEFL, IELTS, or another ESL exam, what is your most recent score?
13. Please indicate the number of years you attended school:
    a. Attended school in the United States
    b. Attended school in another country
    c. Attended university or college in another country
    d. Received ESL/English instruction in the United States
    e. Received ESL/English instruction in another country