DOCUMENT RESUME

ABSTRACT

        Graduation competency test results of 27
Spanish-speaking high school students in grades 10-12 indicate that
overall oral English proficiency is moderately to strongly correlated
with test passage in all three areas tested: mathematics, reading,
and writing. These results agree with previous research. However,
despite the intuitive appeal of competency testing, its rationale
must be carefully evaluated to determine the importance of the test
results. Passage of competency tests is intended to demonstrate that
students possess skills needed in later life, but prediction of the
skills needed in life is problematic. Other conceptual and technical
questions about competency testing arise from the definition of test
content and method. While it is unrealistic to expect to find a
perfect fit between school language demands and those found in an
adult role, instruction in English as a second language (ESL) could
profit from materials drawn from other curriculum areas to help
students develop skills tested by competency tests, thus improving
articulation between second language instruction and other school
subjects in the process of preparing ESL students for the tests.
(Author/MSE)

HIGH SCHOOL COMPETENCY TESTS AND ESL STUDENTS: SOME LIMITED DATA, SOME LARGER QUESTIONS AND A FEW SUGGESTIONS

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This paper presents information on passage of graduation competency tests by a group of 27 Spanish-speaking high school students in grades 10 through 12. Results indicate that overall oral proficiency in English is moderately to strongly correlated with test passage in all three areas assessed: mathematics, reading, and writing. These results are not surprising; they agree with previous research. Despite its intuitive appeal, the rationale for competency testing must be carefully evaluated to determine the import of these test results. Passage of competency tests is intended to demonstrate that students possess skills needed in later life. However, prediction of skills needed in later life is problematic. This issue and other conceptual and technical questions related to competency testing are discussed to illustrate the problems arising from definition of test content and method. While no perfect fit between the language demands of school and those presumably derived from adult role may be possible, ESL instruction could still profit from using materials drawn from other curricular areas to help students develop skills required on competency tests. Several suggestions for doing so are offered. Thus the competency testing movement could help ESL teachers improve articulation between second language instruction and other school subjects in the process of preparing ESL students for the tests.

Introduction

While competency testing, or testing for skill levels
in areas thought to be essential has become widespread, there
is little data available to date regarding either the perfor-
mance of ESL students on competency tests or the ways teachers
might incorporate the skills demanded by competency tests into
the ESL instruction. Furthermore, there are some larger issues
related to competency testing for ESL students which should be
elucidated. In this paper, I will present data on the compet-
ency test results of one group of high school ESL students,
all Spanish speakers; raise some questions regarding the relat-
ionships of school language learning to the language skills
needed in later adult roles, relationships presumably tapped
by the competency tests; and make a few suggestions related to
the type of high school ESL instruction which might enhance
performance on such tests.

The Data

The data presented here were gathered as part of a re-
search project on the grammatical and communicative language
skills of Spanish-English bilingual students of various grade
levels (Politzer, 1982). Working with a subsample of thirty-
five high school students who participated,* I looked speci-
fically at the predictive validity of the oral English language
tests in terms of school performance measures. This question
has great practical relevance: administrators and teachers
working with ESL students need to know whether oral skills in
English are associated with achievement in school. An important
qualification must be stated, though: I do not want to imply
that possession of oral English language skills necessarily
causes certain achievement patterns. Technically it would be
difficult to defend the use of strictly oral language skills
to predict individual performance on measures like the compet-
ency tests, which consist of reading, writing, and math problems
tapping literacy skills. However, the patterns of association
between oral language skills and group trends in achievement
can provide descriptive information helpful for those concerned
with curricular and instructional issues for ESL students in
high school.

The measures of school achievement I used in assessing
the performance of the high school students was the number of

* My sincere thanks to the students, teachers, and administra-
tors of the San Jose Unified School District who allowed me
to collect these data and answered my questions regarding the
tests they used.

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individual competency tests passed. This was the only achieve-
ment measure comparable across the thirty-five students in the
group. Of this number, twenty-seven students in grades ten
through twelve had sufficient test information available for
analysis. In addition to determining the total number of com-
petencies passed, I examined the relationship between oral
language skills and the passage of the fourteen individual
subtests used by the district. This information which forms
the basis for the suggestions made in the next section, appears
in Table I.

    The statistical procedure used here -- principal, compo-
nents analysis -- is a form of factor analysis which allows
the results of test performance to be separated into unique
non-overlapping components (see Anderson, 1958; and Harman,
1976; among others, for the theory of underlying this proce-
dure; a lucid explanation of its efficiency appears in Gould,
1981, pp. 245-250). Using this procedure, I was able to
separate the language test scores into three distinct compo-
nents: an overall component of ESL skill, a specifically
grammatical component related to production of correct struc-
tures, and a specifically communicative component related to
ability to convey information. Further technical details
can be found in the completed study (McGroarty, pp. 106-114;
160-174).

    The results in Table I indicate that the degree of over-
all oral English skill was moderately to strongly associated
with passage of nearly all the competency tests, including
four of the six math subtests. Overall ESL skills were also
moderately to strongly associated with passage of both writ-
ing competencies. In addition, there was a trend toward
association between the production of correct grammatical
forms on an oral ESL test and passage of three of the read-
ing subtests and both of the writing subtests.

    These results are not at all unexpected. Many large-
scale studies of school achievement (Jones, et al., 1980,
Ulibarri, Spencer, and Rivas, 1981) have found that general
English proficiency is associated with school progress in
the United States. Even with the limited data and rather
small sample used, the data show that overall ESL skill is
moderately related to passage of nearly all of the competency
tests; on some of the reading subtests and on the writing
subtests, the relationship is strong. There is also a trend
for those subtests strongly related to general ESL skill to
be further associated specifically with grammatical skill;
these subtests are apparently linked with both overall ESL
skill and ability to produce accurate grammatical structures
on an oral test.

    Research carried out at other grade levels in the larger
research project has suggested that comprehension of oral lan-
guage is also strongly associated with competency test passage

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TABLE I

Association of Principal Components of ESL Oral Skills With Passage of Individual Competency Tests for 27 Students

(Point biserial correlations)

Individual Competency Test	Overall Component of ESL Skills		Grammatical Component of ESL Skills	
	Correlation	Significance	Correlation	Significance
I. Math Competencies				
1. Basic Operations	.44	*		--
2. Measurement	.52	**	--	--
3. Consumer Problems	.48	*		--
4. Wage/Time Computation	.43	*		--
5. Money Management	.25	--	--	--
6. Graphs and Charts	.05	--	--	--
II. Reading Competencies				
1. Written Instructions	.33	#	.32	#
2. Reading Signs, Maps	.45	*	--	--
3. Detail, Order of Events	.40	*	--	--
4. Reading Forms	.67	**	.38	*
5. Reference Materials	.25	--	--	--
6. Extracting Information	.57	**	.37	#
III. Writing Competence				
1. Writing Sample	.58		.31	--
2. Filling Out Forms	.60		.35	#

-- non-significant

$p \leq .10$

* $p \leq .05$

** $p \leq .01$

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(Politzer, 1982; Politzer, et al, 1981; Politzer, et al, 1983).
Thus there is reason to believe that comprehension of spoken
English and ability to produce grammatical oral English, in
addition to overall ESL skills, affect successful completion of
competency tests; although the precise level and type of each
skill remain to be defined and investigated, all appear to be
associated with competency test passage.

Some Larger Questions

The difficulty of determining student needs for English
after high school is not the only problematic issue related to
competency testing for ESL students. It is one of the most im-
portant, though, for the skills included on the tests are pre-
sumably those needed in adult life.

Recent research on job-related language skills shows the
complexity of the issues involved. Jacob (1982) presents a use-
ful review of the writing required in various occupations. Most
studies revealed that the writing done by non-professional,
non-managerial workers principally involves filling out forms,
while writing done by those in professional or managerial jobs
involves the production of connected text which varies accord-
ing to audience and purpose (1982: 37). Mikulecky (1982),
further surveyed the writing demands made in various positions
and concluded that there are rapid changes occurring in work-
related language skills, for "Literacy demands are being re-
defined both upwards and downwards at the same time" (p. 59).
In addition, the research indicated "that transfer is minimal
from general literacy training to specific job literacy tasks"
(ibid.). Job-related literacy demands may thus be very spe-
cific, making it unwise to test an entire high school population
for certain skills and not others; such literacy demands may
also be changing rapidly, making it impossible to test a high
school student in 1983 for the precise skills needed on a job
even a few years later. This suggests that only general liter-
acy skills have any place on competency tests.

Moreover, there are some literacy skills never taught in
school which are apparently important on a job. In a study of
literacy demands made on clerical workers, Crandall (1981)
found that, because they dealt with complex legal or scientific
documents, these workers had developed many strategies related
to simplifying and reducing the literacy demands of their work.
For them, effective performance depended on strategies of deal-
ing with written material which are never taught in school.
Thus, competency tests given at the high-school level would not
include these skills, clearly vital ones for clerical personnel
employed in a bureaucracy.

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Thus it is clear that determination of the linguistic skills to be included on any competency test is complicated. Even beyond the determination of linguistic tasks there are other troublesome issues related to competency testing. These issues, of course, affect all students, not just those for whom English is a second language. In brief, commentators have noted that competency testing raises many conceptual and technical problems because of the methods used to decide what proficiencies to select for testing and what levels of performance to label as acceptable. Levin (1978) notes that"actual competencies vary from person to person" and "many of them are likely to be derived from experience in particular adult roles rather than educational institutions" (p. 312). He concludes that the standards used in competency testing are essentially arbitrary since the capability to predict the skills required by future adult roles does not yet exist (p. 314). Even if skills can be identified, assessment of acceptable levels of performance presents formidable technical challenges. After reviewing six different methods of determining the criterion score on criterion-referenced tests such as competency tests, Glass (1978) notes that standards based on group performance trends cannot be accurately supplied to individuals. Shepard (1980) concurs and offers further insights into other technical questions which arise in competency testing.

These larger questions related to competency testing concern all teachers and administrators who must work with tests. Still another issue should be mentioned here: the origin of the movement to require passage of competency tests as a condition for promotion or graduation. Observers have noted that, "The basic demand for minimum competency testing today comes almost exclusively from legislators, school boards, corporate employers, and local taxpayers" (Resnick, 1980:17), not from educators. Yet competency tests -- here in California, most often locally developed tests -- are now a part of education in two-thirds of the fifty states (Resnick, 1980:8), and the competency testing movement continues to grow (Thurston and House, 1981).

What, then, can ESL teachers faced with minimum competency requirements do? It is plain that we do not always know what language skills will be required by students once they leave school. We do know, however, that overall skill in speaking, understanding, and reading English is associated with competency test passage and achievement in school in most subject areas, even in mathematics. The evidence presented here bears this out. Hence I would suggest that ESL teachers work on both oral and the literacy-related aspects of other subjects to assist students faced with competency tests.

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Implications for ESL Instruction in High School

While the results of this study do not support detailed pedagogical prescriptions, they do suggest some general directions for ESL instruction. Most of these general directions point to the need for close cooperation between ESL teachers and subject matter specialists.

Before discussing the main competency test areas of math, reading, and writing in English, though, I should point out that each of these areas could be tested in the native language as well. In areas where there are large communities using another written language such as Spanish, Chinese, or Korean, competency tests in these languages might be offered in place of or in addition to those given in English. If competency tests were available in both the native language and in English, students who passed both could be recognized and rewarded for their biliteracy (Spolsky, 1981, 1982), or possession of literacy skills in two languages. This system would thus furnish an initial stage in using the skills of language minority students to build the diverse language capability now needed on a national level (President's Commission on Foreign Language and International Studies, 1979:7).

In terms of English language competency tests, some general suggestions can also be made. I will offer some ideas on ESL teaching activities and techniques related to math, reading, and writing to show what teachers might do.

As the data show, overall English proficiency is related to passage of most of the math tests. This is probably because many of the math sub-tests involve word problems. To prepare ESL students for math competency tests in English, ESL teachers could ask math teachers for samples of word problems which would provide practice for the students. Students could also write their own word problems either individually or in small groups and then exchange problems with others in the class.

Sheraga (1980) presents other useful techniques for advanced ESL students in high school; many of these involve the study of job requirements or consumer survival skills. Both of these areas include many matters requiring mathematical computation and problem solving; matters like figuring out a salary, raises, or taxes on income at a job or determining the amount of a security deposit or monthly payments on a lease.(1980:43-45) require both linguistic and computational skills, and ESL teachers can take advantage of this interrelationship to provide instruction relevant to competency tests.

The development of English reading skills is a vital aspect of ESL instruction at the high school level. The data presented here demonstrate that overall oral ability in English

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is associated with passage of almost all of the reading com-
petency tests. This finding suggests that ESL instructors
might work with other subject matter specialists to develop
the skills in understanding, speaking, and reading English
that will be needed in other classes and are also related to
competency test passage. Social studies and science instruct-
ors could be asked to provide reading passages which could be
used for comprehension practice in ESL. The passages could be
taped by the teacher, an aide, or an English-speaking peer tu-
tor; students could then follow the reading and answer compre-
hension questions. English-speaking peer tutors could pre-
teach or review content area lessons with ESL students. This
technique was found to be effective in a recent experimental
study by Sapiens (1982). Survival-oriented English reading
skills can also be promoted by comprehension questions related
to documents like the California Driver's Manual which are im-
portant to most high school students.

English writing skills could be developed by means of
similar cooperation with subject area instructors. The writing
skills tapped by the competency tests used here, those of writ-
ing a short business letter and filling out forms, are well
suited to the activities Sheraga (1980) has outlined for ESL
classes; they would also be related to some of the business,
social studies, or home economics classes offered at the high
school level.

Another type of English writing activity which could be
adapted to many other subject areas is that of summarizing a
lesson or chapter from a textbook. To build skills in the area
of summarizing, ESL teachers might devote a unit to this skill
and teach students first how to recognize a good summary accord-
ing to the main points selected and accuracy of organization.
(Reading skills clearly play a role here, too.) After the class
had drawn up a checklist of criteria for a good summary, students
could be asked to write one of their own. Again, this could be
done by individuals or by groups. Summaries could then be com-
pared to the class checklist for evaluation on the basis of
content. Correction for grammatical or mechanical errors could
be deferred so that the focus remains on the accuracy of the
summary (Calliou, 1982). This procedure has been used success-
fully in writing done by ESL students in a high school social
studies class (Searfoss, et al., 1981).

Besides learning to recognize and construct good summaries,
skills which address the larger conceptual aspects of reading
and writing, students could work on their sentence-level skills
by means of activities like sentence combining. Amastae (1981)
offers evidence that this technique proved useful in a remedial
class for college freshmen. To be sure, most of these students
were fully proficient in oral English and thus not directly
comparable to ESL students. However, as Amastae notes, the

technique of sentence combining offers practice in the contextualized syntactic patterns needed to convey a message effectively (1982:115). Furthermore, it can be adapted to students at various proficiency levels. Pusey (1979) used it with a group of comparable twelfth grade students and found it produced significant improvement in writing skills in one academic year. In both the college and the high school groups studied, student reading ability was also enhanced by sentence combining practice. It is thus plausible to expect that it would also help ESL students improve reading skills as they developed greater control of English sentence patterns.

Mikulecky (1982:66-69) makes several other useful suggestions for helping teachers incorporate functional literacy activities into the high school cirriculum. He notes that short pieces of writing involving "a specific audience, context, and purpose" (1982:67) help students to develop a realistic sense of written communication.

All of these suggestions point to the need for further practical research aimed at validating these proposals with different groups of ESL students in high school. Until such research is done, these very general guidelines may help ESL teachers who want to help students make normal progress and pass required competency tests. The suggestions set out here aim simply to link content areas to ESL instruction in ways that will allow students more reinforcement of the English used in other curricular areas and, in the process of doing so, help them develop the second language skills called for in competency testing.

The use of such techniques will not reconcile the differences, highlighted in the previous section, between school language skills and the types of English language skills needed in later life. Although high school students will very probably need English once they leave high school, it is hard to predict the precise configuration of skills that will be required by any individual student. Moreover, these techniques would not necessarily promote high-level cognitive academic language proficiency (Swain, 1981; Cummins, 1981); this kind of proficiency, though still in need of further precise definition and empirical study, seems to be demonstrated principally in dealing with the reading, writing, and interpretation of extended pieces of discourse that appear almost solely in school settings. As Heath points out, "Understanding and responding to the myriad of applications, reporting forms, and accounting procedures which daily affect the lives of nearly every family in the United States bears little resemblance to the decoding of external prose passages or the production of expository writing, the two literacy achievements most associated with school success" (1982:115).

Conclusion

The pressure for 'minimum competency' attainment can provide ESL teachers and students with additional motivation to do two things they can easily do within the confines of their classrooms: work on the four skill modes to a level that will allow normal progress in other subjects, and in concert with other subject matter specialists, further develop some of the more specialized literacy skills that schools provide.

Obviously more research is important in many of these areas. However, because ESL teachers cannot wait for more research, they can try to present second language skills in ways that will help the students to take advantage of the entire school curriculum. ESL teachers at all levels can work to improve articulation between ESL and other subjects (Allen, 1981) to help students attain the overall second language and literacy-related skills that will certainly serve them in school and probably help them in later jobs. Thus, although the theoretical conceptions underlying minimum competency testing are problematic, the movement can serve to focus ESL students' and teachers' attention on skills that will help students take full advantage of their high school curricula. Exploiting the overlap between general language skills and those demanded in different subject areas and on competency tests could thus make high school ESL instruction more varied, efficient, and interesting.

REFERENCES

Allen, Virginia French. 1981. TESOL and articulation between teacher training and public education: what more do the public schools want? In J. C. Fisher, M. A. Clarke, and J. Schacter (Eds.), On TESOL '80:15-17. Washington, D. C.: Teachers of English to Speakers of Other Languages.

Amastae, Jon. 1981. The writing needs of Hispanic students. In Larry Gentry (Ed.), The writing needs of linguistically different students, 99-127. Los Alamitos, CA: SWRL Educational Research and Development.

Anderson, T. W. 1958. An introduction to multivariate statistical analysis. New York: John Wiley and Sons.

Calliou, Sharilyn. 1982. An evaluation system which promotes student writing. English Journal 71: 90-91.

11

Crandall, Jo Ann. 1981. A sociolinguistic investigation of
    the literacy demands of clerical workers. Unpublished
    Ph.D. dissertation, Georgetown University. Cited in
    Jacob, 1982.

Cummins, James. 1981. The role of primary language develop-
    ment in promoting educational success for language
    minority students. In Schooling and language minority
    students: a theoretical framework, 3-49. Los Angeles
    CA: Evaluation, Dissemination, and Assessment Center,
    California State University, Los Angeles.

Glass, Gene V. 1978. Standards and criteria. Journal of
    Educational Measurement 15: 237-261.

Gould, Stephen J. 1981. The mismeasure of man. New York:
    W. W. Norton and Company.

Harman, H. H. 1976 (1967, 1960). Modern factor analysis.
    3rd. ed. Chicago and London: University of Chicago
    Press.

Heath, Shirley Brice. 1982. Protean shapes in literacy
    events. In Deborah Tannen (Ed.), Spoken and written
    language, 91-117. Norwood, N.J.: Ablex Publishing
    Corporation.

Jacob, Evelyn. 1982. Research on practical writing in
    business and industry. In Larry Gentry (Ed.), Research
    and instruction in practical writing, 37-50. Los
    Alamitos, CA: SWRL Educational Research and Development.

Jones, Earl, Eliodoro Robles, Adolfo Muñoz, and Sarah
    Berkowitz. 1980. Evaluation of California's Educational
    services to limited and non-English speaking students,
    Vol. I. Final report to Office of the California
    Legislative Analyst. San Francisco, CA: Development
    Associates, Inc.

Levin, Henry M. 1978. Educational performance standards:
    image or substance? Journal of Educational Measurement
    15: 309-319.

McGroarty, Mary. 1982. English language tests, school
    language use, and achievement in Spanish-speaking high
    school students. Unpublished Ph.D. dissertation,
    Stanford University.

Mikulecky, Larry. 1982. Functional writing in the workplace.
    In Larry Gentry (Ed.), Research and instruction in
    practical writing, 51-71. Los Alamitos, CA: SWRL
    Educational Research and Development.

十 12

Politzer, Robert L. 1982. Linguistic and communicative com-
petence, language dominance, selected pupil charac-
teristics and their relation to achievement of bilin-
gual pupils. Final report of project NIE G-79-0130.
Stanford, CA: Stanford University.

Politzer, Robert L., Elana Shohamy and Mary McGroarty. 1981.
The development and validation of oral language pro-
ficiency tests of linguistic and communicative compe-
tence for students in Spanish-English bilingual educa-
tion programs. Paper presented at Colloquium on Vali-
dation of Oral Language Tests, Ann Arbor, Michigan,
March, 1981.

Politzer, Robert L., Mary McGroarty, and Elana Shohamy.
1983. Further considerations in the development and
validation of a communicative competence test. Paper
presented at National Association for Bilingual Edu-
cation Conference, Washington, D. C., February, 1983.

President's Commission on Foreign Language and International
Studies, 1979. Strength through wisdom: a critique of
U. S. capability. Washington, D. C.: U. S. Government
Printing Office.

Pusey, Mary Ann. 1979. Sentence combining: a pilot project.
Unpublished term paper, Pan American University. Cited
in Amastae, 1981.

Resnick, Daniel P. 1980. Minimum competency testing historic-
ally considered. In David C. Berliner (Ed.), Review of
research in education, Vol. 8:3-29. American Educational
Research Association.

Sapiens, Alexander. 1982. Instructional language strategies
in bilingual Chicano peer tutoring and their effect on
congnitive and affective learning outcomes. Unpublished
Ph.D. dissertation, Stanford University.

Searfoss, L.W., C. Smith, and T. Bean. 1981. An integrated
language strategy for second language learners. TESOL
Quarterly 15: 383-391.

Shepard, Lorrie. 1980. Technical issues in minimum competency
testing. In David C. Berliner (Ed.), Review of research
in education, Vol. 8: 30-84. American Educational
Research Association.

Sheraga, Mona. 1980. ESL with advanced high school students.
TESOL Quarterly 14: 41-52.

13

Spolsky, Bernard. 1981. Bilingualism and biliteracy. <u>Canadian</u>
<u>Modern Language Review/ La revue canadienne des langues</u>
<u>vivantes</u> <u>37</u>: 475-485.

Spolsky, Bernard. 1982. Sociolinguistics of literacy, biling-
ual education, and Tesol. <u>TESOL</u> <u>Quarterly</u> <u>16</u>: 141-151.

Swain, Merrill. 1981. Time and timing in bilingual education.
<u>Language</u> <u>Learning</u> <u>31</u>: 1-15.

Thurston, D. and E. House. 1981. The NIE adversary hearing on
minimum competency testing. <u>Phi</u> <u>Delta</u> <u>Kappan</u> <u>63</u>: 87-89.

Ulibarri, D. M., M. L. Spencer and G. A. Rivas. 1981. Language
proficiency and academic achievement: a study of lan-
guage proficiency tests and their relationship to
school ratings as predictors of achievement. <u>NABE</u>
<u>Journal</u> <u>5</u>: 47-80.