



Identifying and Incorporating Multiple Measures for Placement into RSCCD English Courses Summer, 1999

Matriculation regulations state that assessment for course placement must be comprised of more than one measure in determining student skills.

In a continuing effort to determine the most predictive combination of assessment measures to use for placement into RSCCD English courses, the items included on the RSCCD Needs Assessment form completed for native-English speakers in the assessment/advisement process were studied (new students, Fall 1998), in combination with the Descriptive Test of Language Skills (DTLS)(used for placement into English courses). Those multiple measures on the form are as follows:

- grade point average in high school
- years of English studied in high school or college
- grade in last English class completed
- RSCCD general education classes taken
- RSCCD general education grade point average
- importance of college to student
- length of time out of school
- last math class completed
- grade in last math class completed
- length of time since last math class
- hours per week student plans to attend classes
- hours per week student plans to work.

First, Pearson correlations were calculated between the test score and the additional measure, and between the final course grade and the additional measure . Table 1 lists those items (“Additional Measures”) for each course which were found to be significantly predictive of course success.

Table 1: Correlation of Needs Assessment Measures with English Course Success

| Fall 1998 English Course | Additional Measure(s) | Correlated with Course Success | | |
|--------------------------|------------------------------------|--------------------------------|---------------------|---------|
| | | Count | Pearson Corr. Coef. | Signif. |
| English 050 | Length of time out of school | 119 | -.202* | .027 |
| | Last Math Class Completed | 120 | -.217* | .017 |
| English 060 | Placement Test Score (DTLS) | 434 | -.124** | .010 |
| | Years of English in High School | 434 | -.092 | .056 |
| English 061 | Placement Test Score (DTLS) | 401 | -.203** | .000 |
| English 101 | Placement Test Score (DTLS) | 323 | -.168** | .002 |
| | Units in RSCCD General Ed. Classes | 221 | .198** | .003 |
| | GPA in RSCCD General Ed. Classes | 68 | .307* | .011 |
| | Last Math Class Taken | 319 | -.136* | .015 |

* significant at the .05 level

** significant at the .01 level

Note that for English 050, the DTLS was not significantly predictive, and for English 061, **only** the DTLS was found to be predictive.

Based upon the Pearson correlations shown in Table 1, logistic regressions were used to predict the probability of receiving a successful grade (successful=A,B,C,Cr; non-successful=D, F, NCr). Those data (Tables 2, 3, 4, and 5) are shown below. The tables also compare actual course success rates to predicted course success rates.

Table 2: Model Classification Table (English O50/n=86)

| Actual Outcome | Predicted Outcome | |
|--|-----------------------|--------------------------|
| | Successful (A,B,C,Cr) | Non-Successful (D,F,NCr) |
| Successful | 22 | 22 |
| Non-Successful | 16 | 26 |
| Overall probability of successful prediction=56% | | |

C The bolded cells of the table show the number of students for whom both their predicted and actual course success were the same. For example, for English O50, the logistical regression analysis predicted that 38 (22+16) students would be successful and 48 (22+26) would be unsuccessful. In actuality, 44 students (22+22) were successful and 42 (16+26) were unsuccessful.

Table 3: Model Classification Table (English O60/n=332)

| Actual Outcome | Predicted Outcome | |
|--|-----------------------|--------------------------|
| | Successful (A,B,C,Cr) | Non-Successful (D,F,NCr) |
| Successful | 248 | 2 |
| Non-Successful | 79 | 3 |
| overall probability of successful prediction=76% | | |

Table 4: Model Classification Table (English O61/n=325)

| Actual Outcome | Predicted Outcome | |
|--|--------------------------|------------------------------|
| | Successful (A,B,C,Cr) | Non-Successful (D,F,N,Cr) |
| Successful | 269 | 0 |
| Non-Successful | 56 | 0 |
| overall probability of successful prediction=83% | | |

Table 5: Model Classification Table (English 101/n=47)

| Actual Outcome | Predicted Outcome | |
|--|--------------------------|------------------------------|
| | Successful (A,B,C,Cr) | Non-Successful (D,F,N,Cr) |
| Successful | 38 | 0 |
| Non-Successful | 8 | 1 |
| overall probability of successful prediction=83% | | |

Using the measures listed in Table 1 on page 2 provides high (over 76%) predictive ability for all course except English O50, for which 56% of the cases were predicted accurately.

Data for the group of students for whom test scores were not sufficiently high to meet the cut score for the course into which they enrolled, but for whom counselors considered additional measures for placement into that course, were then examined. At the English 060 level, findings support the use of "years of prior English study" as a measure to use in conjunction with the placement test; 74% of those students (who had a significant number of years of prior English study) successfully completed the course. Looked at in this way, several other measures (used in 65-70% of these types of placements) appear to be good predictors of course success (Table 6). However, low sample size dictates further study.

Table 6: Students Who Tested Below Cut Score

| Course Enrolled In | Additional Measure Used by Counselor for Fall 1998 placement | Course Success | | |
|--------------------|--|----------------|-----------------------|--------------------------|
| | | Count | Successful (A,B,C,Cr) | Non-Successful (D,F,NCr) |
| English 060 | Years of English study | 72 | 74% | 26% |
| English 061 | Years of English study | 48 | 73% | 27% |
| | Grade in last English class | 44 | 73% | 27% |
| | Importance of college to student | 8 | 88% | 12% |
| English 101 | Years of English study | 21 | 71% | 29% |
| | Grade in last English class | 20 | 85% | 15% |

Due to the transition to a new assessment instrument (TELD) for English as a Second Language course placement for Fall 1999, the use of additional measures for the placement of students into ESL courses will be studied at a later time.