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The following study is reported in response at the request of Burt Kimmelman (Chair of the Department of Humanities to Fadi P. Deek (Dean CSLA). Specifically, Burt requested that the dean approve a study, undertaken by Institutional Research, to look at the final grades as well as any available portfolio scores of students placed in Hum 101 for the fall 2008 semester. John Coakley had asked all HUM 101 fall 2008 instructors to submit the names of any students they felt had been misplaced in HUM 101. Thirty-seven names were submitted. A study could be done of these thirty-seven students, to determine, among other points, 1) how many of these students had low HUM 101 placements and 2) how these students did academically in HUM 101 and, also, HUM 102.”

In that I designed the spring 2009 assessment—from calculating the 95% confidence interval to establishing data entry procedures to archiving the data for accountability purposes—I have taken an evening to complete the requested analysis. My following analysis addresses the questions posed by Burt.

Placements of the Thirty Seven Students: Criterion Measures, Fall 2008

Below are the descriptive statistics for the 37 students identified by the program directors as “misplaced” in Hum 101:

**Table 1. Descriptive Statistics for Misplaced Students, Fall 2008**

	N	Minimum	Maximum	Mean	Std. Deviation
SATR	37	370.00	590.00	477.2973	50.91652
SATW	37	300.00	560.00	458.6486	60.65211
AccupReading	37	51.00	103.00	76.6486	10.45949
AcupSS	37	65.00	117.00	88.1081	10.92343
AcupEssay	37	5.00	9.00	7.3514	.88870
CrsGrade	36	.00	4.00	1.9028	.87684
Fa08GPA	37	.46	3.47	2.0873	.72707

As a basis of comparison, I have provided below the scores of 86,382 NJ students on the SAT Reasoning Test.

Table 2. College Board State Profile of New Jersey, 2008

**SAT Reasoning Test™ Data**

Data in this report are for high school graduates in the year 2008. Information is summarized for seniors who took the SAT Reasoning Test™ at any time during their high school years through March 2008. If a student took the test more than once, the most recent score is used.

Table 1: Overall Mean Scores

SAT Reasoning Test	Test-Takers Number	Critical Reading		Mathematics		Writing *		Writing Sub-Scores			
		Mean	SD	Mean	SD	Mean	SD	Multiple Choice		Essay	
								Mean	SD	Mean	SD
Total	86,382	495	113	513	119	496	114	49.2	11.4	7.4	1.7

As the College Board advises regarding interpretation of score differences, “For two scores to reflect real differences in ability, the two scores must be different by at least 1.5 times the Standard Error of Difference (SED) (60 points). So if one student has a 450 verbal and another a 500 verbal, these two students likely have the same ability. Rejecting a student on the basis of such a small difference in test scores would be inappropriate and unfair.”

Hence, for the scores of these 37 “misplaced students” to be seen as significantly lower from the average scores of 86,382 NJ test takers, there would have to be a difference of 60 points. There is, however, only a 19 point difference between our 37 students and those across New Jersey on the Critical Reading section. There is a 38 point difference between the two groups on the Writing section—a greater difference but still under the 60 points required to be seen as significantly lower.

Regarding Accuplacer, we agreed that for a student to be placed in Hum 101, the Reading score would have to be above 71 and below 104. The average score of 76 falls within that range. We also agreed that for a student to be placed in Hum 101, the Sentence Sense score would have to be above 81 and below 112. The score of 88 falls within that range. Finally, we agreed that for a student to be placed in Hum 102, the Essay score would have to be above 7 and below 9. The score of 7.35 falls within that range. (For these score decisions, see Validating Accuplacer: A Status Report,” March 26, 2008).

Regarding writing course grade, we see that the grade of 1.9 nearly reaches the grade of C (2.0). This average passing grade is to be expected when we realize that 27 of the 37 “misplaced” students earned a grade of C or above.

Regarding the fall GPA, we see that the 2.0 cumulative also reflects the writing course grade of C.

**Conclusion:** While the instructors identified 37 students as “misplaced,” none of the standard criterion measures suggest that is the case. Indeed, on the SAT Reasoning Test, these 37 students performed at levels equal to all NJ 2008 test takers. As well, the students earned Accuplacer scores that were, on average, within the placement score ranges for placement in Hum 101. Their writing course grades and cumulative GPAs for the semester were at a passing level, one that allowed them to proceed through the curriculum without the unnecessary remediation.

Performance of the “Misplaced” Students in Hum 102: Portfolio Scores, Spring 2009

Portfolio scores are generally understood to capture most accurately the variable of writing. Hence, I begin my longitudinal analysis with that measure.

Out of the 37 identified students, 18 enrolled in Hum 102. Of these, 12 were captured in the sampling plan. These 12 students constitute 1.3 percent of the admitted first year students (n = 919) and 10 percent of the students in the sample (n = 110). Their portfolio scores are provided below:

**Table 3. Portfolio Descriptive Statistics of Twelve Misplaced Students, Spring 2009**

	N	Range	Minimum	Maximum	Mean	Std. Deviation
TOTAL Holistic Writing	12	7	3	10	6.42	2.065
TOTAL Critical Thinking	12	7	4	11	6.92	1.975
TOTAL Revising and Editing	11	8	3	11	6.09	2.548
TOTAL Content and Organization	12	7	3	10	6.67	2.060
TOTAL Sentence Construction and Mechanics	12	6	4	10	7.17	1.642

The ability of these students to achieve scores of 7 or above—our traditional measure of competency—was achieved only on Sentence Construction and Mechanics. Scores below 7 were recorded on each of the other variables.

Below are the scores of the 98 students in the sample who were not targeted as “misplaced.” Each of these students took Hum 101 in the fall of 2008 and proceeded to take Hum 102 in the spring of 2009:

**Table 4. Portfolio Descriptive Statistics of 98 Hum 101 Students Enrolled in Hum 102, Spring 2009**

	N	Range	Minimum	Maximum	Mean	Std. Deviation
TOTAL Holistic Writing	95	9	2	11	7.88	1.768
TOTAL Critical Thinking	97	9	2	11	7.87	1.706
TOTAL Revising and Editing	98	8	2	10	6.93	2.097
TOTAL Content and Organization	97	11	0	11	7.91	1.665
TOTAL Sentence Construction and Mechanics	98	8	3	11	7.91	1.479

For these 98 students, only the scores on the Revising and Editing fell below the cut score of 7. Scores above 7 or above were recorded for each of the other variables.<sup>1</sup>

**Conclusion: The spring 2009 portfolio scores of the 12 students in the sample were below the cut score of 7 on 4 of 5 writing variables. The portfolio scores of the 98 students in the sample were above the cut score on 4 of 5 variables. We must recognize, however, that we are analyzing the portfolio scores of 12 admitted students –1.3 percent of the admitted first year students. At this level, we are analyzing individuals, not a placed first-year class.**

Performance of the Thirty Seven Misplaced Students: Criterion Measures, 2009

How did the 37 “misplaced” students perform in the spring of 2009? Listed below are their average course grades in either Hum 102 or a subsequent humanities course as recorded in SIS in their spring transcripts. Included as well are their cumulative GPAs for the spring 2009 semester.

**Table 5. Descriptive Statistics for Misplaced Students, Spring 2009**

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Sp09HumCrsGr	25	4.00	.00	4.00	1.8600	1.27083
Sp09CumGPA	34	2.21	1.16	3.37	2.1676	.52051

Twelve students (22.6%) of the students were not enrolled in any humanities course in the spring of 2009; three students (5.7%) were not enrolled at the university. The average humanities course grade is 1.86—a grade similar to the 1.9 recorded in the fall of 2008. The average cumulative GPA is 2.16—similar to that of the 2.0 recorded for these students in the fall of 2008.

As Table 6 demonstrates, however, only 22 percent of the students earned grades of W, F, or D. Forty six percent earned grades of C or above. (In that students are not required

to take Hum 102 or Cultural History immediately after Hum 101, 32 percent of the students stepped away from our courses.)

**Table 6 Sp09HumCrsGr for Misplaced Students**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	6	11.3	24.0	24.0
	1.00	2	3.8	8.0	32.0
	2.00	6	11.3	24.0	56.0
	2.50	5	9.4	20.0	76.0
	3.00	4	7.5	16.0	92.0
	4.00	2	3.8	8.0	100.0
	Total	25	47.2	100.0	
Missing	999.00	12	22.6		
	System	16	30.2		
	Total	28	52.8		
Total		53	100.0		

As Table 7 reveals, 35 percent earned cumulative GPAs below 2.0. Fifty six percent of the students earned cumulative GPAs of 2.0 or above. Only eight percent of the students are no longer enrolled.

**Table 7. Sp09CumGPA or Misplaced Students**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.16	1	1.9	2.9	2.9
	1.20	1	1.9	2.9	5.9
	1.50	3	5.7	8.8	14.7
	1.60	1	1.9	2.9	17.6
	1.69	1	1.9	2.9	20.6
	1.80	4	7.5	11.8	32.4
	1.83	1	1.9	2.9	35.3
	1.98	1	1.9	2.9	38.2
	2.00	2	3.8	5.9	44.1
	2.05	1	1.9	2.9	47.1
	2.28	1	1.9	2.9	50.0
	2.29	1	1.9	2.9	52.9
	2.40	1	1.9	2.9	55.9
	2.42	2	3.8	5.9	61.8
	2.43	1	1.9	2.9	64.7
	2.44	1	1.9	2.9	67.6
	2.45	1	1.9	2.9	70.6
	2.46	1	1.9	2.9	73.5
	2.50	2	3.8	5.9	79.4
	2.65	1	1.9	2.9	82.4
	2.66	1	1.9	2.9	85.3

	2.71	1	1.9	2.9	88.2
	2.77	1	1.9	2.9	91.2
	2.79	1	1.9	2.9	94.1
	2.97	1	1.9	2.9	97.1
	3.37	1	1.9	2.9	100.0
	Total	34	64.2	100.0	
Missing	999.00	3	5.7		
	System	16	30.2		
	Total	19	35.8		
Total		53	100.0		

**Conclusion: The spring 2009 humanities course grades scores of those enrolled in the spring of 2009 were similar to those earned in the fall of 2008. The spring 2009 cumulative GPAs were also similar to those earned in the fall of 2008. Of the students who continued to take humanities courses, 46 percent earned grades of C or above. Fifty six percent of the students earned cumulative GPAs of 2.0 or above, and only eight percent left the university. We must recognize, again, that we are now analyzing individual students, not a placed first-year class; however, we must also remember that over-remediation is historically associated with students leaving the university. It appears that our first-year humanities courses are not posing a barrier to our entering students in terms of retention and progression.**

(Because of time constraints—I prepared this study overnight—I have not yet had time to keystroke the spring 2009 course grades and cumulative GPAs for Hum 102 students. A preliminary analysis, however, suggests that we will find a course grade of approximately 3.0 and a cumulative GPA of over 2.5. That is, the students placed in Hum 101 in the fall are progressing very well in Hum 102 in the spring, as the portfolio scores demonstrate.)

**Discussion:**

It is remarkable that, responding to the gross request that “misplaced” students be identified—a request made without reference to the variables models in place since 1996—instructors identified only 5.5 percent of the NJIT class admitted to Hum 101 (n = 675). Under traditional criterion measures of the SAT Reasoning Test sections of Critical Reading and Writing, the targeted students performed at levels equal to students across New Jersey. Under the Acuplacer measure, the students, as a group, placed within the score ranges of Hum 101 for the Reading Comprehension, Sentence Sense, and Writing sections of that test. Remarkable is the fact that these students achieved, on average, a course grade of C and a cumulative first-semester GPA of 2.0. While these students were identified as “misplaced,” they nevertheless earned passing grades, and their cumulative GPAs allowed them to proceed into the second semester. Time to graduation was not delayed by unnecessary and unwarranted remediation.

To reply to Burt in his memo of June 29, 2009, in language paraphrasing his own, I concluded the following:

We are now—as we have been because of our peer-reviewed placement system, one adhering to educational measurement best practices—in a position to confirm that no adjustment in placement criteria should be made. Because we have, once again, found that the cut scores we are presently using are suitable, we continue to understand a more about our placement methods. We have, once again, assured ourselves that the cut scores were not too low and that future students, whether by SAT scores or by Accuplacer scores, will be placed into an appropriate course. The knowledge we have gained from this present study—along with other studies I have led for NJIT—will help us to decide the extent of our relationship with the Educational Testing Service, specifically future utilization of E-Rater and other software.

It is this last point that is now most important. In that I have been charged by with a “procedural error,” one that “anybody could have made” by the chair and the head of Institutional Research, I feel that must recommend to my ETS and NJIT colleagues that planned research in the area of automated assessment be put on hold. If the leadership in the Department of Humanities has no faith in my work as one of the nation’s leading writing assessment specialists, then it would be folly to embarrass ourselves in front of the nation’s leading non-profit testing agencies. Failure to adhere to decisions collaboratively made on January 25, 2009—and to continue to object to procedures consistently shown to be beneficial to our students—suggests an internal disharmony that would be embarrass NJIT. That is, a failure of professionalism on a major research project with an external partner of the kind we have witnessed here would surely harm our university. For my part, I have worked too hard for too many years to allow my reputation—and that of NJIT—to be compromised.

Within the Department of Humanities, we appear to be unable to reach decisions, maintain them, and operate on a professional level regarding the assessment of writing ability for placement purposes. There is no reason to demonstrate such erratic behaviors publically in a high-stakes research endeavor in which consistency, tenacity, and collegiality are critical for research.

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<sup>1</sup> For the sake of comparison across semesters, scores of students in the fall 2008 sampling plan are provided below. Scores across semesters for these students are similar/

**Table 4A . Descriptive Statistics of Students Enrolled in Fall 2008 Hum 101**

	N	Minimum	Maximum	Mean	Std. Deviation
TotalWri_Hol	106	4	12	7.94	1.351
Wri_CT_Total	97	4	12	7.79	1.274
Wri_RE_Total	98	3	10	7.35	1.527
Wri_CO_Total	99	4	12	7.90	1.182
Wri_SCM_Total	99	4	12	7.72	1.356