

Cultural Differences in Student Evaluations of Professors

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Felton, Mitchell and Stinson (2004) reported that web-based student evaluations of teaching (SET) demonstrated a student preference for course easiness and instructor sexiness. This study explores these same relationships with a larger and improved database. Results indicate even stronger relationships than previously reported. In addition, this study demonstrates significant cultural differences by institution and discipline in the relationships between quality, easiness, and "hotness" in web-based SET.

INTRODUCTION

RateMyProfessor.com is a website with the motto "Where the students do the grading." At the website, students voluntarily rate their professors on Quality, Easiness, and "Hotness." Student evaluations of teaching, whether in-class or online, can provide professors with valuable feedback. However, in-class student opinions are often used by faculty and administrators as a measure of teaching quality or effectiveness. This may not be a legitimate use, as the students' views of teaching quality may be biased by a number of extraneous factors. Felton *et al.* (2004) found that Quality scores at RateMyProfessor.com have a strong positive correlation with perceived course Easiness and professor Sexiness. Written student comments support their empirical findings that a large percentage of American college students who post professor evaluations at RateMyProfessor.com consider courses to be high-quality when the professor is attractive and the course is easy.

LITERATURE REVIEW

Research on the question of a possible relation between grading leniency and student evaluation of teaching (SET) is mixed. Felton, Mitchell, and Stinson (2004), Stimpert and Antonuccio (2003) and Millea and Grimes (2002) reference much of the literature. Literature on possible relationships between instructor attractiveness and SET is also reviewed in Felton *et al.* (2004).

Numerous authors have posited a relationship between student background and other environmental factors on the one hand and student attitudes and performance on the other. Obnechain, Abernathy and West (2001) found differences in SET between academic disciplines with education ranking high and math and science low. Similarly, Cashin (1990) and Feldman (1978) found that hard sciences were rated lower. Cerrito (2000) reported statistically insignificant differences between colleges in SET with the humanities ranking highest followed by social sciences with the natural sciences ranking lowest.

Numerous factors may cause such differences in SET. Smart and Elton (1982) suggest that faculty in the soft and applied disciplines place a greater emphasis on the process of teaching and therefore may receive higher SET. Braxton (2002) reviews a collection of articles (Hearn and Holdsworth; Berger; Del Favarro; Hirschy and Wilson; and Caboni, Mundy and

Duesterhaus) that explore political, organizational, social and psychological factors affecting college student learning. Hearn and Holdsworth (2002) posit that state-level politics and educational governance affect student learning through funding and assessment practices. Berger (2002) suggests that the organizational structure of the institution affects student learning. Del Favero (2002) theorizes that administrative behavior affects student learning by its effect on a learning-centered process.

In this same collection, Hirschy and Wilson (2002) discuss the sociology of the classroom (university) and how it affects student learning. They state that “research . . . indicates that student peers have a significant effect on the norms of the classroom, both by how individuals choose to interact and how they hinder or encourage their classmates’ involvement (Colbeck, Campbell and Bjorklund, 2000; Fassinger 1997 and Hallinan and Smith 1989).” Palmer (1998) also noted the communal nature of learning and Fassinger (1997) stated that even short-term groupings, such as classes, have communal beliefs that may influence individual behavior.

Caboni, Mundy and Duesterhaus (2002) discuss Chickering and Gamson’s (1987) seven principles of good practice and how student norms may or may not support them. They found general support for having faculty-student contact, cooperation among students and high expectations. They also found that both student race and affiliation with a Greek social organization were related to student attitudes toward the seven principles. They suggested that institutional differences may exist because of a lack of normative support for at least some of Chickering and Gamson’s principles at some institutions. Similarly, Chickering (1972) suggested that there are “systemic interrelationships within different institutions among major elements of the objective environment. Included in this list are mental activities in class and student studying and attitudes about courses.” McKenzie (1979) discusses “how the institutional setting of the university influences the amount of human capital that the student acquires.” Miller *et al.* (2001) state that differences in the criteria employed to rate teaching effectiveness suggest likely differences in SET between countries. Church, Elliot, and Gable (2001) provide evidence that the perceived classroom environment affects student goal adoption and therefore motivation and performance. Yarrow and Millwater (1995) found that students perform better in their preferred classroom environment and that the environment can be modified to better meet their preferences.

Numerous other factors are posited as having implications for student learning. Warburton, Bugarin and Nunez (2001) state that first generation college student status “has a negative association with students’ academic preparation and persistence” while Pascarella and Terenzini (1991) note that “minorities inhabit substantially different academic, social and psychological worlds than their white counterparts.” Bennett and Bennett (2000) report statistics on the study and work habits of incoming freshmen and state that “Formerly, professors had students who worked. These days, some academics say they have workers who study.” There may well be systemic differences between universities in the percent of students that work and these differences in the learning environment may reflect differences in attitudes and opportunities to study.

These factors collectively establish a context within which students learn and because these factors are likely to differ among academic institutions and academic disciplines they provide a basis for expecting differences in student learning and attitudes both between institutions and disciplines. Such differences in learning and attitudes between different institutions and different academic disciplines may be reflected in SET.

THE DATA

The rating categories for RateMyProfessors.com (2004) are described at the web site as follows:

Easiness - This is definitely the most controversial of the three rating categories, which is why it is NOT included in the "Overall Quality" rating. Although we do not necessarily condone it, it is certainly true that many students decide what class to take based on the difficulty of the teacher. When rating a teacher's easiness, ask yourself "How easy are the classes that this professor teaches? Is it possible to get an A without too much work?"

Helpfulness - This category rates the teacher's helpfulness and approachability. Is the teacher approachable and nice? Is he rude, arrogant, or just plain mean? Is he willing to help you after class?

Clarity - This is the most important of the three categories, at least to most people. How well does the teacher convey the class topics? Is he clear in his presentation? Is he organized and does he use class time effectively?

Overall Quality - The Overall Quality rating is the average of a teacher's Helpfulness and Clarity ratings, and is what determines the type of "smiley face" that the Professor receives. Due to popular demand, a teacher's Easiness rating is NOT used when computing the Overall Quality rating, since an Easiness of 5 may actually mean the teacher is TOO easy.

Hotness - The chili pepper is based on the SUM of the "hot" and "not hot" votes, where hot is +1 and not hot is -1. A chili pepper only shows up if the sum is positive. If the sum is zero or negative, no chili pepper is displayed. In addition, we display negative sums as zero, because we're nice guys. :)

In September 2003, the president and founder of RateMyProfessor.com, John Swapceinski, provided this study with data for all professors in the United States and Canada with at least 20 student ratings. We have data for 6,852 professors from 369 institutions in the United States and Canada with at least 20 ratings on September 13, 2003. Since student posts at RateMyProfessors.com are voluntary, our sample data are self-selected.

The Hotness scores that we obtained from RateMyProfessor.com are an improvement over the data downloaded by Felton *et al.* (2004). At RateMyProfessor.com, students have the optional selection of "hot" or "not hot" when they evaluate professors. A selection of "hot" counts as +1 to a professor's Hotness score, and a selection of "not hot" counts as -1. If a professor has had 50 student ratings at the website, his or her Hotness total could range from -50 to +50. However, RateMyProfessor.com does not want to embarrass professors with negative scores. Therefore, they show scores of zero for professors who have Hotness totals in this example from zero to -50. Felton *et al.* (2004) did not have access to negative scores since they downloaded data from the website. They used Hotness scores that ranged from 0% to 100% by

taking RateMyProfessor.com's score divided by the number of ratings. That is, an Average Hotness score for each faculty member was calculated by taking the *net positive* number of posts where students said that the professor is "hot" divided by the total number of posts for that professor. The range for the hotness score used was 0% to 100%. This paper uses improved data for evaluating attractiveness since we use the negative scores from RateMyProfessor.com. Hotness scores therefore range from -100% to +100%.

Correlations of the Data

The correlations for 6,852 faculty on Helpfulness, Clarity, Quality, Easiness, Hotness, and (number of) Ratings are listed in Table 1. The correlation for Quality and Easiness is 0.62, the correlation for Quality and Hotness is 0.64, and the correlation for Easiness and Hotness is 0.39. It is important to note that all of these correlations are significant at the level of 0.01 on a two-tailed test. The Quality-Hotness correlation is twice as high as in Felton *et al.* (2004) due to the improved data obtained from RateMyProfessor.com.

Figure 1 is a scatter diagram of the variables Clarity and Helpfulness and provides a visual indication of the correlation between the two. It appears that either clarity and helpfulness are professor qualities that are highly correlated or students are consistent in their answers based on an overall impression of their professors. Figure 2 shows the relation between Quality and Easiness for the 6,852 professors in our sample, and Figure 3 shows the correlation between their Quality and Hotness scores.

Figure 4 contains the relation between Quality and Easiness for the 102 least attractive professors in our sample. Professors in this group have Hotness scores that range from -90% to -100%. Their Average Quality is 2.14 and their Average Easiness is 2.20. The relation between Quality and Easiness for the most attractive professors in our sample is shown in Figure 5. These are the 99 faculty with Hotness scores ranging from +70% to +100%. Their Average Quality is 4.43 and their Average Easiness is 3.50. The differences between the least-attractive group and the most-attractive group are striking.

Results by Discipline

Table 2 gives rankings of Quality, Easiness, and Hotness by department. There are 6,852 faculty and 35 departments (and Not Specified). The average Quality rating is 3.436, the average Easiness rating is 2.980, and the average Hotness rating is -0.2345. Cultural differences by discipline (excluding Not Specified) are found, based on the following correlations (N=35): Quality-Easiness, $r = 0.65$ ($p=0.00$), Quality-Hotness, $r = 0.84$ ($p=0.00$), Easiness-Hotness, $r = 0.47$ ($p=0.00$). The departments that have the highest average Quality are Languages, Sociology, and Political Science (1, 2 and 3 respectively). The lowest ranking departments for Quality are Engineering, Computer Science, and Chemistry (36, 35 and 34 respectively). It might also be noted that Language, Sociology, and Political Science rank 1, 6 and 5 in Hotness. Conversely, Engineering, Computer Science, and Chemistry had Hotness ratings of 34, 35, and 36 respectively out of 36 categories.

Table 3 is an attempt to examine the disciplines by adjusting Quality for Easiness and Hotness. The table shows the Quality score minus the value for Easiness, and then the Quality score minus the score for Easiness minus the adjusted Hotness score. The adjustment for the Hotness score is to change the Hotness score from a -1.00 to +1.00 range to the range 1.00 to

5.00. When we rank these new data, we see the top ranked disciplines as Chemistry, Accounting, and Science. The lowest ranked disciplines with this adjusted score are Music, Education and Business Information.

Results by Institution

Table 4 lists the data by institution for the combined 73 American and Canadian institutions for faculty with at least 20 posts. We find cultural differences by institution based on the following correlations: Quality–Easiness, $r = 0.40$ ($p = 0.00$); Quality– Hotness, $r = 0.60$ ($p = 0.00$); Easiness–Hotness, $r = 0.05$ ($p = 0.67$). These institutions are ranked by their Average Quality from 1 to 73. The institutions with the highest quality rankings are Delta College, University of Massachusetts, and Malaspina University Co-op. The universities with the lowest rankings are Tennessee Technological, Saginaw Valley State University and University of British Columbia.

The schools' Hotness scores are interesting as well. We see the highest Quality ranking schools, Delta College, University of Massachusetts, and Malaspina University, have Hotness rankings of 2, 28 and 7 out of 75 respectively. Tennessee Technological, Saginaw Valley State University, and University of British Columbia have Hotness rankings of 64, 71 and 73 (respectively) out of 75.

Canadian and American Institutions

Tables 5 and 6 give the results by institution broken into Canadian and American institutions. The institutions are ranked by Quality-Easiness correlations in an attempt to measure the seriousness of the students at each institution. Table 5 shows that students at the University of Winnipeg who post at RateMyProfessor.com do not appear to be looking for an easy class since the correlation between Quality and Easiness is only 0.219. However, the correlation between Quality and Easiness at Mohawk College is 0.934. In the United States, Boston University students who post at RateMyProfessor.com appear serious since the correlation between Quality and Easiness is only 0.299. Conversely, students at Stephen F. Austin who post on RateMyProfessor.com appear to equate quality with easiness.

The Quality average for Canada is 3.43 while the U.S. is 3.45. The Easiness average for Canada is 2.98 and for the United States it is 2.99. The Hotness average for the Canadian schools is -0.231 while the American institutions average is -0.240 . It is striking how similar the averages are for American and Canadian schools.

CONCLUSIONS

Our findings extend the research of Felton, Mitchell, and Stinson (2004). We find strong positive Quality-Easiness and Quality-Hotness correlations. Due to improved data, we find Quality-Hotness correlations that are roughly twice as high as those reported in Felton *et al.* (2004). We find that Canadian students who post at RateMyProfessor.com are similarly influenced by the easiness of the course and the appearance of the professor. Further, we find cultural differences by department and institution. Taken as a whole, these self-selected data from RateMyProfessor.com cast considerable doubt on the usefulness of in-class student opinion surveys for purposes of examining quality and effectiveness of teaching.

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Table 1

The correlations between Helpfulness, Clarity, Quality, Easiness, Hotness, and Ratings for 6,852 faculty from 369 American and Canadian institutions, for faculty with at least twenty posts on Sept. 13, 2003.

		Helpfulness	Clarity	Quality	Easiness	Hotness	Ratings
Helpfulness	Pearson Correlation	1	.94	.99	.64	.64	-.01
	Sig. (2-tailed)	.	.00**	.00**	.00**	.00**	.28
Clarity	Pearson Correlation	.94	1	.99	.60	.62	.00
	Sig. (2-tailed)	.00**	.	.00**	.00**	.00**	.99
Quality	Pearson Correlation	.99	.99	1	.62	.64	-.01
	Sig. (2-tailed)	.00**	.00**	.	.00**	.00**	.59
Easiness	Pearson Correlation	.64	.60	.62	1	.39	-.03
	Sig. (2-tailed)	.00**	.00**	.00**	.	.00**	.01**
Hotness	Pearson Correlation	.64	.62	.64	.39	1	-.01
	Sig. (2-tailed)	.00**	.00**	.00**	.00**	.	.71
Ratings	Pearson Correlation	-.01	.00	-.01	-.03	-.01	1
	Sig. (2-tailed)	.28	.99	.59	.01**	.71	.
	N	6852	6852	6852	6852	6852	6852

** Correlation is significant at the 0.01 level (2-tailed).

Figure 1

The relation between Helpfulness and Clarity for 6,852 faculty from 369 American and Canadian institutions, for faculty with at least twenty posts on Sept. 13, 2003.

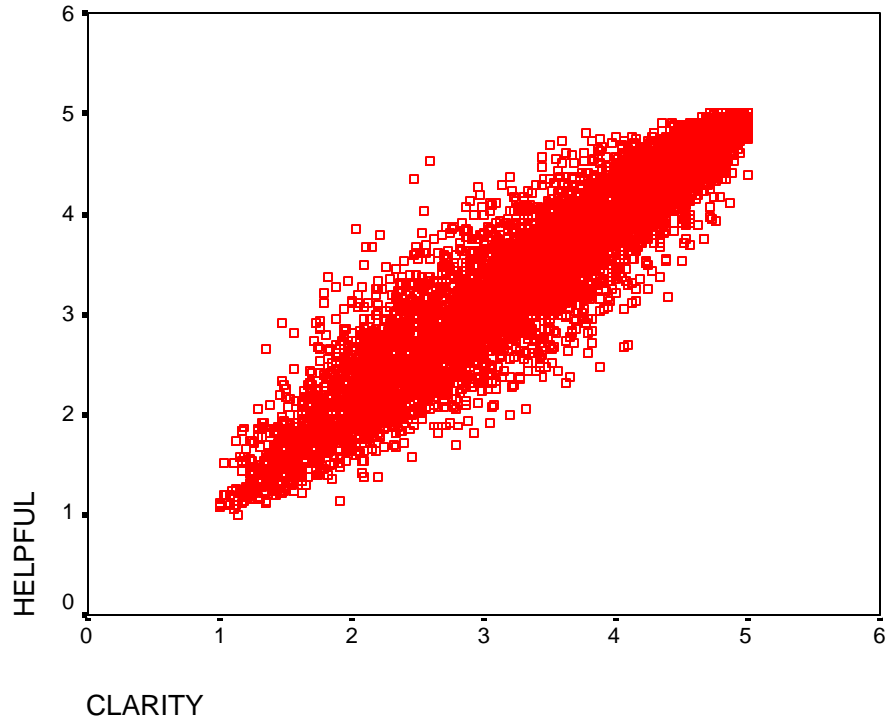


Figure 2

The relation between Quality and Easiness for 6,852 faculty from 369 American and Canadian institutions, for faculty with at least twenty posts on Sept. 13, 2003.

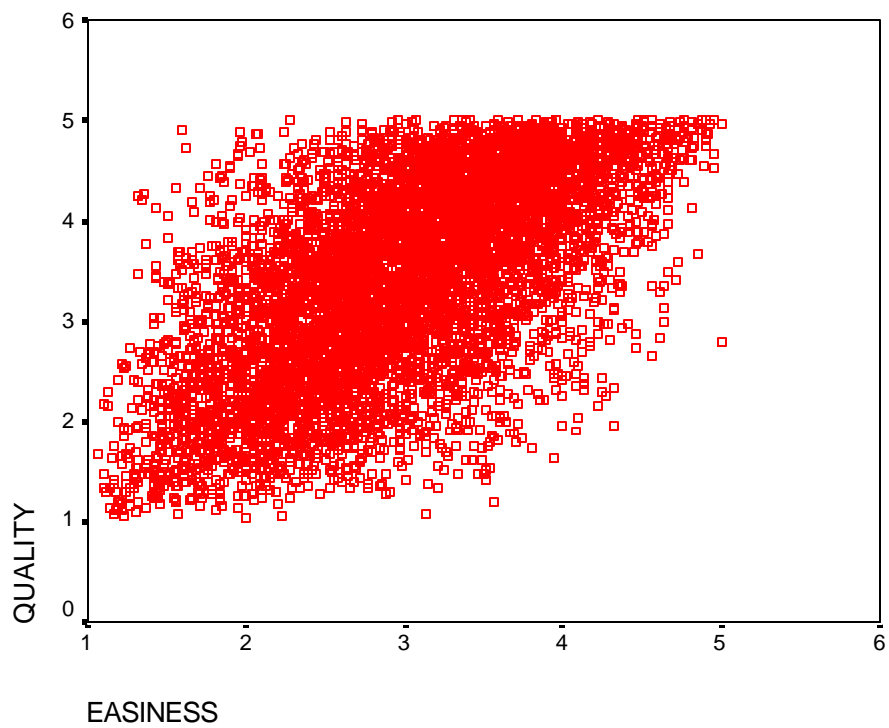


Figure 3

The relation between Quality and Hotness for 6,852 faculty from 369 American and Canadian institutions, for faculty with at least twenty posts on Sept. 13, 2003.

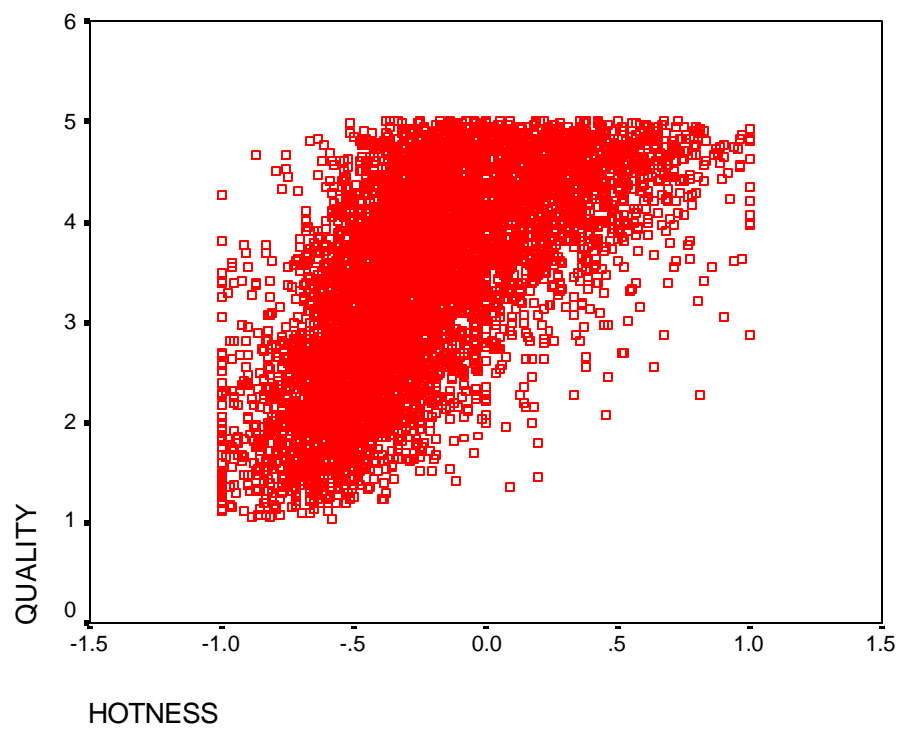


Figure 4

The relation between Quality and Easiness for the least attractive faculty, with hotness scores from -0.90 to -1.00, N = 102, for faculty with at least twenty posts on Sept. 13, 2003.
Ave. Quality = 2.14, Ave. Easiness = 2.20

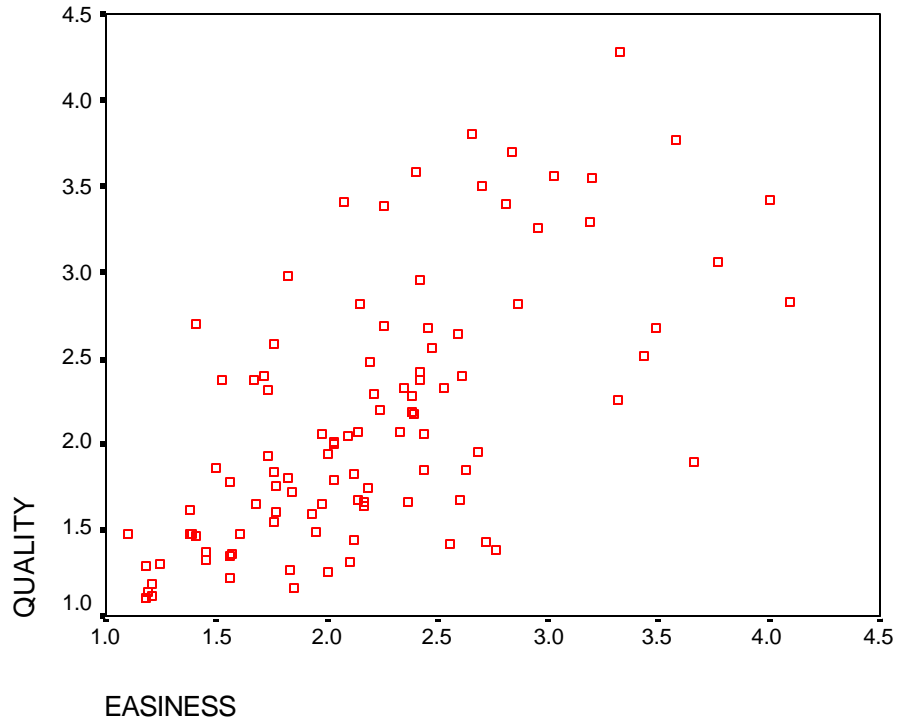


Figure 5

The relation between Quality and Easiness for the most attractive faculty, with hotness scores from 0.70 to 1.00, N = 99, for faculty with at least twenty posts on Sept. 13, 2003.
Ave. Quality = 4.43, Ave. Easiness = 3.50.

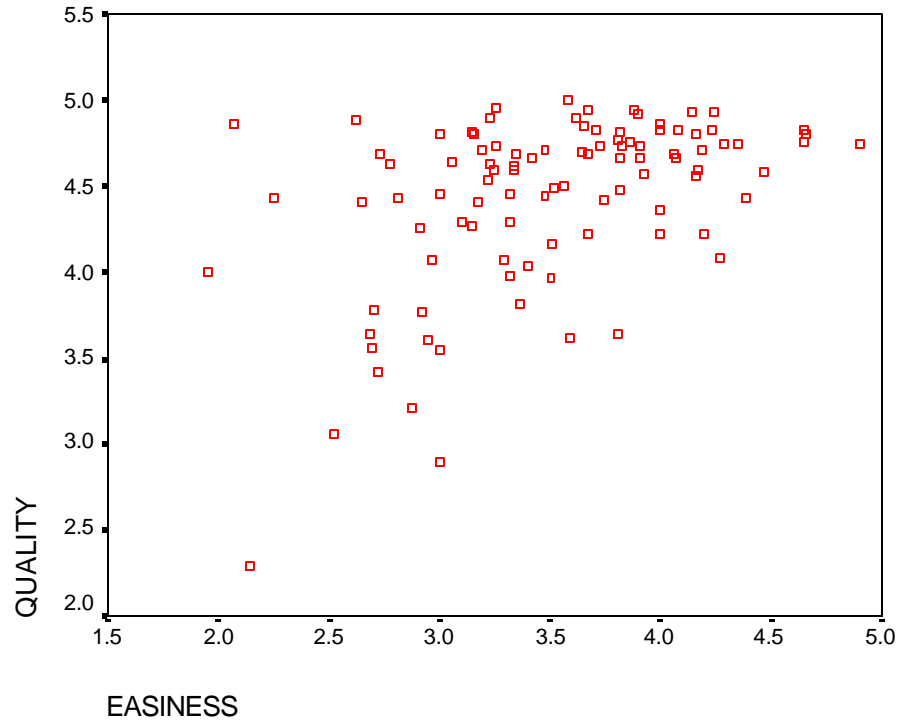


Table 2

Quality, Easiness, and Hotness Averages for 6,852 faculty from 369 American and Canadian institutions, ranked by Average Quality per discipline for faculty with at least twenty posts on Sept. 13, 2003.*

Discipline	Sample Faculty	Sample Inst.	Sample Ratings	Ave. Quality (Std. Dev.) Rank		Ave. Easiness (Std. Dev.) Rank		Ave. Hotness (Std. Dev.) Rank	
Languages	112	40	3,364	3.859 (0.92)	1	3.253 (0.87)	7	-0.062 (0.37)	1
Sociology	43	15	1,575	3.733 (0.74)	2	3.398 (0.65)	2	-0.152 (0.28)	6
Political Science	282	110	8,755	3.695 (0.81)	3	3.034 (0.67)	19	-0.139 (0.38)	5
Psychology	482	135	16,980	3.690 (0.88)	4	3.145 (0.72)	12	-0.165 (0.38)	10
Religion	71	39	2,028	3.678 (0.84)	5	3.131 (0.72)	13	-0.125 (0.32)	3
Criminal Justice	59	33	2,041	3.669 (0.91)	6	3.131 (0.66)	14	-0.136 (0.37)	4
Athletics	25	17	766	3.636 (1.02)	7	3.337 (0.73)	4	-0.243 (0.45)	23
Geography	124	44	3,719	3.630 (0.81)	8	3.221 (0.64)	9	-0.196 (0.33)	13
Humanities	25	15	711	3.626 (0.84)	9	3.058 (0.72)	18	-0.223 (0.33)	20
History	465	125	14,779	3.617 (0.89)	10	2.936 (0.73)	24	-0.209 (0.34)	16
Law	52	20	1,675	3.609 (0.97)	11	3.097 (0.79)	15	-0.104 (0.30)	2
Education	83	34	2,783	3.605 (1.08)	12	3.365 (0.85)	3	-0.160 (0.40)	8
Biology	22	10	687	3.553 (0.83)	13	2.903 (0.82)	26	-0.208 (0.38)	15
Social Science	200	88	6,449	3.540 (0.88)	14	3.263 (0.73)	6	-0.210 (0.37)	17
Management	81	28	2,798	3.534 (0.99)	15	3.191 (0.75)	10	-0.224 (0.32)	21
Music	86	42	2,483	3.528 (0.90)	16	3.474 (0.82)	1	-0.220 (0.37)	19
English	663	133	19,902	3.509 (0.88)	17	2.919 (0.77)	25	-0.191 (0.37)	12
Anthropology	95	45	3,114	3.508 (0.87)	18	3.066 (0.79)	16	-0.273 (0.33)	23
Philosophy	242	85	7,920	3.503 (0.84)	19	3.020 (0.70)	21	-0.162 (0.34)	9
Communications	266	79	8,274	3.474 (0.95)	20	3.059 (0.81)	17	-0.257 (0.35)	25
Marketing	68	36	2,355	3.459 (0.97)	21	2.892 (0.77)	28	-0.198 (0.40)	14
Health & Medicine	21	13	671	3.407 (1.21)	22	2.771 (0.92)	33	-0.216 (0.43)	18
Business Info.	35	13	1,321	3.386 (1.03)	23	3.267 (0.97)	5	-0.245 (0.32)	24
Science	684	125	23,289	3.385 (0.97)	24	2.804 (0.77)	32	-0.271 (0.35)	27
Fine Arts	84	38	2,690	3.372 (0.93)	25	3.027 (0.83)	20	-0.229 (0.35)	22
Women's, Ethnic	22	14	780	3.339 (0.95)	26	3.166 (0.79)	11	-0.302 (0.24)	33
Finance	49	14	1,592	3.335 (0.89)	27	2.714 (0.68)	34	-0.190 (0.31)	11
Math	727	142	24,489	3.300 (1.03)	28	2.892 (0.76)	29	-0.301 (0.33)	31
Economics	352	99	12,264	3.293 (0.93)	29	2.938 (0.72)	23	-0.294 (0.30)	30
Not Specified	29	18	835	3.253 (1.07)	30	3.237 (0.90)	8	-0.157 (0.32)	7
Accounting	153	56	5,724	3.244 (1.02)	31	2.602 (0.78)	35	-0.301 (0.29)	32
Business	204	56	6,539	3.235 (0.99)	32	2.858 (0.66)	30	-0.260 (0.41)	26
Literature	15	13	483	3.187 (1.02)	33	2.835 (0.80)	31	-0.281 (0.42)	29
Chemistry	19	12	591	3.183 (0.88)	34	2.585 (0.67)	36	-0.332 (0.25)	36
Computer Science	661	153	22,393	3.162 (1.02)	35	2.951 (0.79)	22	-0.309 (0.33)	35
Engineering	251	60	7,672	3.091 (1.09)	36	2.896 (0.79)	27	-0.309 (0.37)	34
Totals, Averages	6,852		224,491	3.436 (0.96)		2.980 (0.77)		-0.235 (0.35)	

*The correlations by discipline (excluding Not Specified) are as follows (N = 35): Quality-Easiness, $r = 0.65$ ($p = 0.00$), Quality-Hotness $r = 0.84$ ($p = 0.00$), Easiness-Hotness $r = 0.47$ ($p = 0.00$), Helpful-Clarity $r = 0.95$ ($p = 0.00$).

Table 3

Quality averages by discipline adjusted for Easiness and Hotness, for 6,852 faculty from 369 American and Canadian institutions with at least twenty posts on Sept. 13, 2003, ranked by Quality minus Easiness minus (Adjusted) Hotness.

Discipline	Quality (Rank)	Easiness (Rank)	Adj. Hotness (Rank)	Q-E (Rank)	Q-E-H (Rank)
Chemistry	3.183 (33)	2.585 (35)	2.337 (35)	0.598 (8)	-1.74 (1)
Accounting	3.243 (30)	2.602 (34)	2.398 (31)	0.642 (4)	-1.76 (2)
Science	3.385 (24)	2.804 (31)	2.457 (26)	0.581 (10)	-1.88 (3)
History	3.617 (10)	2.936 (23)	2.582 (15)	0.681 (1)	-1.90 (4)
Health & Medicine	3.407 (22)	2.772 (32)	2.568 (17)	0.634 (5)	-1.93 (5)
Biology	3.553 (13)	3.903 (25)	2.584 (14)	0.650 (3)	-1.93 (6)
Humanities	3.626 (9)	3.058 (17)	2.553 (19)	0.568 (11)	-1.99 (7)
Math	3.300 (28)	2.892 (28)	2.398 (30)	0.408 (21)	-1.99 (8)
Finance	3.335 (27)	2.714 (33)	2.619 (10)	0.622 (8)	-2.00 (9)
Anthropology	3.508 (18)	3.066 (15)	2.455 (27)	0.443 (18)	-2.01 (10)
English	3.509 (17)	2.919 (24)	2.617 (11)	0.590 (9)	-2.03 (11)
Marketing	3.459 (21)	2.892 (27)	2.605 (13)	0.567 (12)	-2.04 (12)
Economics	3.293 (29)	2.938 (22)	2.413 (29)	0.355 (23)	-2.06 (13)
Political Science	3.695 (3)	3.034 (18)	2.723 (5)	0.661 (2)	-2.06 (14)
Communications	3.474 (20)	3.059 (16)	2.485 (24)	0.415 (19)	-2.07 (15)
Literature	3.187 (32)	2.835 (30)	2.438 (28)	0.353 (24)	-2.09 (16)
Business	3.235 (31)	2.858 (29)	2.480 (25)	0.377 (22)	-2.10 (17)
Psychology	3.690 (4)	3.145 (11)	2.670 (9)	0.545 (14)	-2.13 (18)
Computer Science	3.162 (34)	2.951 (21)	2.381 (34)	0.212 (31)	-2.17 (19)
Engineering	3.091 (35)	2.896 (26)	2.383 (33)	0.195 (32)	-2.19 (20)
Criminal Justice	3.669 (6)	3.131 (13)	2.728 (4)	0.538 (15)	-2.19 (21)
Philosophy	3.501 (19)	3.020 (20)	2.675 (8)	0.482 (17)	-2.19 (22)
Fine Arts	3.372 (25)	3.027 (19)	2.542 (22)	0.345 (25)	-2.20 (23)
Geography	3.630 (8)	3.221 (8)	2.607 (12)	0.409 (20)	-2.20 (24)
Religion	3.678 (5)	3.131 (12)	2.749 (3)	0.547 (14)	-2.20 (25)
Management	3.534 (15)	3.197 (9)	2.551 (20)	0.344 (26)	-2.21 (26)
Athletics	3.636 (7)	3.337 (4)	2.514 (23)	0.298 (28)	-2.22 (27)
Women's, Ethnic	3.339 (26)	3.166 (10)	2.396 (32)	0.173 (33)	-2.22 (28)
Languages	3.859 (1)	3.253 (7)	2.876 (1)	0.606 (7)	-2.27 (29)
Law	3.602 (11)	3.097 (14)	2.793 (2)	0.512 (16)	-2.28 (30)
Social Science	3.540 (14)	3.263 (6)	2.580 (16)	0.276 (29)	-2.30 (31)
Sociology	3.733 (2)	3.398 (2)	2.696 (6)	0.335 (27)	-2.36 (32)
Business Information	3.386 (23)	3.267 (5)	2.551 (21)	0.119 (34)	-2.43 (33)
Education	3.605 (12)	3.365 (3)	2.680 (7)	0.240 (30)	-2.44 (34)
Music	3.528 (16)	3.474 (1)	2.559 (18)	0.054 (35)	-2.51 (35)
Averages (St. Dev.)	3.436 (0.96)	2.980 (0.77)	2.561 (0.13)	0.439 (0.17)	-2.122 (0.18)

Table 4

Quality, Easiness, and Hotness averages by institution for 73 American and Canadian institutions in sample with at least 20 faculty. Ranked by Average Quality at RMP on September 13, 2003.*

University, College, or Community College	Sample Faculty	Sample Ratings	Ave. Quality (Std. Dev.) Rank	Ave. Easiness (Std. Dev.) Rank	Ave. Hotness (Std. Dev.) Rank
Delta College	20	615	3.775 (0.81) 1	2.925 (0.58) 53	-0.048 (0.27) 2
University of Massachusetts	34	1046	3.680 (1.02) 2	3.197(0.71) 6	-0.221 (0.32) 28
Malaspina University Co-op	25	690	3.680 (0.99) 3	2.933 (0.61) 50	-0.109 (0.43) 7
Loyola College (Maryland)	26	691	3.665 (0.85) 4	3.042 (0.73) 25	-0.207(0.37) 24
Christopher Newport University	33	946	3.665 (0.94) 5	2.908 (0.93) 56	-0.231(0.28) 30
University of California-Davis	31	1005	3.657 (0.83) 6	2.897 (0.78) 57	-0.221 (0.32) 27
Grove City College	40	1323	3.646 (0.91) 7	2.844 (0.91) 63	-0.129 (0.31) 8
Wilfrid Laurier University	63	2001	3.645 (0.84) 8	3.043 (0.66) 24	-0.211 (0.44) 25
University of Western Ontario	44	1332	3.625 (0.91) 9	3.112 (0.58) 13	-0.079 (0.51) 6
Embry-Riddle Aeronautic	26	696	3.579 (1.18) 10	3.202 (0.86) 5	-0.291 (0.31) 54
St. Joseph's College	23	647	3.577 (1.31) 11	3.157 (1.00) 7	+0.006 (0.48) 1
McGill University	59	1790	3.570 (0.86) 12	2.943 (0.61) 46	-0.077 (0.44) 4
Mohawk College	25	780	3.560 (1.14) 13	3.413 (0.87) 1	-0.258 (0.39) 44
Grand Rapids Comm. College	58	1968	3.555 (0.89) 14	3.048 (0.80) 22	-0.198 (0.29) 18
Marianopolis College	59	1714	3.553 (1.02) 15	3.220 (0.62) 3	-0.255 (0.34) 42
Grand Valley State University	501	20,648	3.551 (0.85) 16	3.040 (0.73) 26	-0.199 (0.24) 20
Siena College	30	799	3.543 (0.98) 17	2.715 (0.68) 70	-0.247 (0.36) 38
Grossmont College	40	1241	3.537 (0.97) 18	2.973 (0.96) 40	-0.164 (0.30) 11
University of Delaware	317	13,012	3.527 (0.87) 19	3.079 (0.78) 16	-0.240 (0.25) 34
University of Ottawa	56	1916	3.526 (0.97) 20	3.016 (0.74) 33	-0.240 (0.36) 36
Boston University	31	953	3.517 (0.97) 21	3.077 (0.57) 17	-0.258 (0.41) 45
Seneca College	66	2074	3.516 (0.91) 22	3.142 (0.79) 11	-0.192 (0.35) 17
Brock University	25	729	3.507 (0.86) 23	3.025 (0.46) 31	-0.233 (0.33) 32
St. Vincent College	20	567	3.504 (1.01) 24	2.880 (0.89) 59	-0.077(0.39) 5
St. Francis Xavier University	58	1741	3.504 (0.91) 25	2.950 (0.55) 42	-0.199 (0.32) 19
Brandon University	31	878	3.503 (0.95) 26	3.063 (0.86) 20	-0.143 (0.37) 9
Stephen F. Austin	20	532	3.501 (1.03) 27	3.014 (1.03) 34	-0.248 (0.34) 39
University of Victoria	140	4464	3.500 (0.83) 28	2.934 (0.63) 48	-0.199 (0.37) 21
St. John's University	40	1105	3.499 (1.26) 29	2.994 (1.00) 35	-0.244 (0.39) 37
Memorial Univ. Newfoundland	132	4459	3.496 (0.96) 30	2.875 (0.64) 60	-0.226 (0.33) 29
James Madison University	205	6969	3.489 (0.94) 31	3.026 (0.95) 30	-0.328 (0.29) 66
Douglas College	51	1539	3.484 (0.99) 32	2.895 (0.80) 58	-0.177 (0.38) 14
Carleton University	33	952	3.470 (1.11) 33	3.152 (0.66) 10	-0.251 (0.38) 40
Millersville University	88	2453	3.457 (0.97) 34	3.083 (0.78) 15	-0.318 (0.40) 62
Towson University	123	3513	3.452 (1.01) 35	3.047 (0.91) 23	-0.328 (0.32) 65
Northwest Missouri State	97	3296	3.451 (0.90) 36	3.074 (0.74) 18	-0.201 (0.37) 23
University of Guelph	66	2255	3.443 (0.98) 37	2.949 (0.69) 43	-0.294 (0.40) 55
University of Windsor	98	3547	3.440 (0.87) 38	3.031 (0.62) 28	-0.218(0.33) 3

University, College, or Community College	Sample Faculty	Sample Ratings	Ave. Quality (Std. Dev.) Rank	Ave. Easiness (Std. Dev.) Rank	Ave. Hotness (Std. Dev.) Rank
University of Maine	58	1873	3.438 (0.78) 39	3.084 (0.67) 14	-0.334 (0.28) 67
University of Waterloo	219	8340	3.430 (0.98) 40	2.986 (0.62) 37	-0.272 (0.35) 48
University of Winnipeg	27	852	3.421 (0.95) 41	2.966 (0.54) 41	-0.060 (0.38) 3
Edinboro Univ. of Pennsylvania	29	730	3.418 (1.03) 42	3.063 (0.90) 19	-0.190 (0.42) 16
University of North Carolina	160	6391	3.412 (0.92) 43	2.986 (0.81) 36	-0.200 (0.24) 22
McMaster University	31	1016	3.411 (1.09) 44	3.057 (0.88) 21	-0.251 (0.54) 41
Bridgewater State University	55	1604	3.411(1.07) 45	2.819 (0.87) 67	-0.164 (0.33) 10
San Diego State University	200	7051	3.411 (0.95) 46	3.027 (0.84) 29	-0.240 (0.36) 35
Pace University	230	8896	3.397 (0.96) 47	3.153 (0.79) 9	-0.258 (0.32) 43
Marshall University	82	2414	3.397 (0.95) 48	2.820 (0.73) 66	-0.165 (0.38) 12
Kwantlen University	96	3014	3.389 (0.92) 49	2.945 (0.85) 45	-0.235 (0.38) 33
University of Manitoba	48	1576	3.380 (0.94) 50	3.018 (0.58) 32	-0.299 (0.41) 58
University of Toronto	129	4607	3.375 (0.88) 51	2.915 (0.62) 54	-0.290 (0.37) 53
Langara College	63	1791	3.374 (0.89) 52	2.943 (0.67) 47	-0.165 (0.35) 13
University of Regina	104	3600	3.369 (0.87) 53	2.984 (0.65) 38	-0.232 (0.32) 31
Central Michigan University	128	3902	3.366 (0.97) 54	3.035 (0.87) 27	-0.315 (0.33) 61
University of Central Florida	71	2601	3.341 (1.03) 55	3.153 (0.93) 8	-0.338 (0.31) 69
Queen's Univ. at Kingston	36	1061	3.339 (1.13) 56	2.978 (0.81) 39	-0.323 (0.46) 63
Marist College	63	1829	3.328 (0.97) 57	2.704 (0.80) 71	-0.290 (0.32) 52
University of California-Irvine	23	730	3.326 (1.11) 58	2.908 (0.94) 55	-0.314 (0.28) 60
New Jersey Institute of Tech.	20	616	3.326 (1.15) 59	3.247 (0.72) 2	-0.355 (0.34) 72
University of Saskatchewan	63	1757	3.318 (0.98) 60	2.948 (0.68) 44	-0.179 (0.42) 15
York University	116	4056	3.318 (0.97) 61	2.926 (0.71) 52	-0.270 (0.35) 47
University of British Columbia	128	4538	3.312 (0.88) 62	2.848 (0.63) 62	-0.296 (0.32) 57
University of Scranton	43	1127	3.307 (0.92) 63	2.822 (0.78) 65	-0.277 (0.37) 50
Ryerson University	184	6542	3.303 (0.98) 64	2.927 (0.71) 51	-0.295 (0.36) 56
New Brunswick	23	703	3.287 (0.98) 65	2.934 (0.82) 49	-0.276 (0.25) 49
Kettering University	61	1985	3.256 (1.07) 66	3.203 (0.94) 4	-0.312 (0.32) 59
Seton Hall University	28	732	3.240 (0.89) 67	2.824 (0.90) 64	-0.264 (0.29) 46
Simon Fraser University	102	3246	3.221 (0.89) 68	2.783 (0.55) 68	-0.335 (0.31) 68
University of Missouri	37	990	3.187 (1.22) 69	3.126 (0.82) 12	-0.279 (0.41) 51
University of New Brunswick	26	764	3.150 (1.17) 70	2.868 (0.86) 61	-0.340 (0.41) 70
University of N. British Columbia	20	526	3.140 (0.94) 71	2.754 (0.65) 69	-0.370 (0.23) 73
Saginaw Valley State University	25	712	3.032 (0.91) 72	2.696 (0.96) 25	-0.349 (0.27) 71
Tennessee Technological	22	587	2.962 (1.19) 73	2.612 (0.61) 22	-0.325 (0.36) 64
Totals, Averages (Std. Dev.)	5584	189,645	3.441 (0.94)	2.997 (0.76)	-0.244 (0.34)

*The correlations by institution are as follows (N = 73): Quality-Easiness, $r = 0.40$ ($p = 0.00$), Quality-Hotness, $r = 0.60$ ($p = 0.00$), Easiness-Hotness, $r = 0.05$ ($p = 0.67$).

Table 5

Quality-Easiness and Quality-Hotness Correlations by Institution for 34 Canadian Institutions in sample with at least 20 faculty. Ranked by Quality-Easiness correlation at RMP on September 13, 2003.

University or College	Quality-Easiness Corr. (Rank)	Quality-Hotness Corr. (Rank)	Quality (Rank)	Easiness (Rank)	Hotness (Rank)
University of Winnipeg	0.219 (1)	0.552 (2)	3.421 (19)	2.966 (16)	-0.060 (1)
Marianopolis College	0.224 (2)	0.651 (18)	3.553 (6)	3.220 (2)	-0.255 (21)
U. of Northern B.C.	0.288 (3)	0.774 (33)	3.140 (34)	2.754 (34)	-0.370 (34)
U. of N. Brunswick-St. John	0.390 (4)	0.792 (34)	3.287 (31)	2.934 (24)	-0.276 (25)
University of Windsor	0.394 (5)	0.646 (16)	3.440 (17)	3.031 (9)	-0.218 (13)
U. of Western Ontario	0.404 (6)	0.683 (26)	3.625 (3)	3.112 (5)	-0.079 (3)
St. Francis Xavier Univ.	0.476 (7)	0.676 (24)	3.504 (10)	2.950 (17)	-0.199 (10)
Simon Fraser University	0.500 (8)	0.530 (1)	3.221 (32)	2.783 (33)	-0.335 (32)
McGill University	0.505 (9)	0.652 (19)	3.570 (4)	2.943 (21)	-0.077 (2)
Wilfrid Laurier Univ.	0.508 (10)	0.573 (4)	3.645 (2)	3.043 (8)	-0.211 (12)
University of Victoria	0.527 (11)	0.618 (9)	3.500 (12)	2.934 (23)	-0.199 (11)
University of Manitoba	0.551 (12)	0.622 (10)	3.380 (22)	3.018 (11)	-0.299 (30)
University of Toronto	0.560 (13)	0.567 (3)	3.375 (23)	2.915 (28)	-0.290 (26)
U. of British Columbia	0.562 (14)	0.582 (6)	3.312 (29)	2.848 (32)	-0.296 (29)
Brandon University	0.576 (15)	0.652 (20)	3.503 (11)	3.063 (6)	-0.143 (5)
University of Regina	0.604 (16)	0.629 (13)	3.369 (25)	2.984 (14)	-0.232 (15)
University of Waterloo	0.614 (17)	0.683 (27)	3.430 (18)	2.986 (13)	-0.272 (24)
University of Ottawa	0.617 (18)	0.624 (11)	3.526 (7)	3.016 (12)	-0.240 (18)
Kwantlen University	0.626 (19)	0.701 (29)	3.389 (21)	2.945 (20)	-0.235 (17)
Douglas College	0.657 (20)	0.637 (15)	3.484 (14)	2.895 (29)	-0.177 (7)
Langara College	0.679 (21)	0.680 (25)	3.374 (24)	2.943 (22)	-0.165 (6)
Univ. of Newfoundland	0.688 (22)	0.656 (21)	3.496 (13)	2.875 (30)	-0.226 (14)
Seneca College	0.689 (23)	0.662 (22)	3.516 (8)	3.142 (4)	-0.192 (9)
Ryerson University	0.698 (24)	0.729 (31)	3.303 (30)	2.927 (26)	-0.295 (28)
Brock University	0.727 (25)	0.574 (5)	3.507 (9)	3.025 (10)	-0.233 (16)
Malaspina Univ.-College	0.749 (26)	0.722 (30)	3.680 (1)	2.933 (25)	-0.109 (4)
University of Guelph	0.757 (27)	0.592 (7)	3.443 (16)	2.949 (18)	-0.294 (27)
York University	0.767 (28)	0.662 (23)	3.318 (28)	2.926 (27)	-0.270 (23)
U. of Saskatchewan	0.772 (29)	0.692 (28)	3.318 (27)	2.948 (19)	-0.179 (8)
Queen's U. at Kingston	0.778 (30)	0.626 (12)	3.339 (26)	2.978 (15)	-0.323 (31)
McMaster University	0.792 (31)	0.761 (32)	3.411 (20)	3.057 (7)	-0.251 (20)
Carleton University	0.812 (32)	0.646 (17)	3.470 (15)	3.152 (3)	-0.251 (19)
U. of New Brunswick	0.841 (33)	0.631 (15)	3.150 (33)	2.856 (31)	-0.340 (33)
Mohawk College	0.934 (34)	0.599 (8)	3.560 (5)	3.413 (1)	-0.258 (22)
Averages (Standard Deviation)	0.603 (0.17)	0.649 (0.06)	3.428 (0.13)	2.984 (0.12)	-0.231 (0.08)

Table 6

Quality-Easiness and Quality-Hotness Correlations by Institution for 39 American Institutions in sample with at least 20 faculty. Ranked by Quality-Easiness correlation at RMP on September 13, 2003.

University or College	Q-E Corr. (Rank)	Q-H Corr. (Rank)	Quality (Rank)	Easiness (Rank)	Hotness (Rank)
Boston University	0.299 (1)	.6420 (16)	3.517 (14)	3.077 (12)	-0.258 (23)
Grove City College	.3100 (2)	.7540 (33)	3.6455 (6)	2.8435 (31)	-0.1287 (4)
University of Scranton	.3260 (3)	.6490 (17)	3.3070 (34)	2.8221 (33)	-.2770 (25)
Siena College	.3640 (4)	.6890 (24)	3.5427 (11)	2.7153 (36)	-.2468 (20)
Loyola College- Maryland	.3690 (5)	.4510 (1)	3.6654 (3)	3.0423 (17)	-.2074 (13)
New Jersey Inst. Of Tech.	.4840 (6)	.7170 (28)	3.3255 (33)	3.2465 (1)	-.3548 (39)
Marshall University	.5150 (7)	.7990 (37)	3.3967 (28)	2.8206 (34)	-.1646 (7)
Gr. Rapids Comm. College	.5160 (8)	.7280 (30)	3.5552 (9)	3.0483 (15)	-.1975 (9)
Edinboro Univ. of PA	.5190 (9)	.7420 (32)	3.4183 (23)	3.0634 (14)	-.1903 (8)
University of Massachusetts	.5370 (10)	.7630 (34)	3.6803 (2)	3.1971 (4)	-.2214 (15)
University of Maine	.5710 (11)	.5580 (6)	3.4381 (22)	3.0836 (9)	-.3337 (36)
Marist College	.5750 (12)	.6040 (11)	3.3279 (31)	2.7044 (37)	-.2900 (27)
Seton Hall University	.5770 (13)	.5460 (5)	3.2396 (36)	2.8236 (32)	-.2635 (24)
Univ. of California (Davis)	.6380 (14)	.7060 (26)	3.6571 (4)	2.8974 (29)	-.2208 (14)
Embry-Riddle Aeronautic	.6400 (15)	.8290 (39)	3.5785 (7)	3.2015 (3)	-.2908 (28)
Grand Valley State Univ.	.6400 (16)	.5620 (7)	3.5510 (10)	3.0403 (18)	-.1992 (10)
Christopher Newport Univ.	.6450 (17)	.6130 (12)	3.6645 (4)	2.9076 (28)	-.2307 (16)
Kettering University	.6450 (18)	.6130 (13)	3.2564 (35)	3.2028 (2)	-.3117 (29)
Millersville University	.6580 (19)	.6850 (23)	3.4570 (19)	3.0832 (10)	-.3178 (32)
University of Central Florida	.6590 (20)	.6390 (14)	3.3411 (30)	3.1530 (6)	-.3378 (37)
University of Delaware	.6630 (21)	.4890 (2)	3.5273 (13)	3.0787 (11)	-.2399 (17)
James Madison University	.6650 (22)	.5920 (9)	3.4892 (18)	3.0260 (21)	-.3282 (35)
Saginaw Valley State Univ.	.6670 (23)	.6670 (21)	3.0320 (38)	2.6964 (38)	-.3493 (38)
Univ. of Missouri-Rolla	.6730 (24)	.7720 (35)	3.1865 (37)	3.1257 (7)	-.2792 (26)
Pace University	.6960 (25)	.5920 (10)	3.3967 (27)	3.1526 (8)	-.2576 (22)
St. Vincent College	.7000 (26)	.7410 (31)	3.5040 (15)	2.8800 (30)	-.0771 (3)
Towson University	.7050 (27)	.6730 (22)	3.4515 (20)	3.0474 (16)	-.3280 (34)
Bridgewater State College	.7060 (28)	.6410 (15)	3.4109 (25)	2.8191 (35)	-.1635 (5)
Univ. of N.C. –Charlotte	.7240 (29)	.5400 (4)	3.4123 (24)	2.9860 (24)	-.1998 (11)
Central Michigan University	.7290 (30)	.6580 (19)	3.3657 (29)	3.0352 (19)	-.3149 (31)
NW Missouri State Univ.	.7320 (31)	.6670 (20)	3.4512 (21)	3.0743 (13)	-.2008 (12)
San Diego State University	.7410 (32)	.5740 (8)	3.4107 (26)	3.0265 (5)	-.2399 (18)
St. Joseph’s College	.7620 (33)	.8210 (38)	3.5770 (8)	3.1574 (20)	.0057 (1)
Delta College	.7820 (34)	.4920 (3)	3.7745 (1)	2.9250 (26)	-.0481 (2)
Univ. of California (Irvine)	.7840 (35)	.7240 (29)	3.3257 (32)	2.9083 (27)	-.3140 (30)
Tennessee Tech. University	.7930 (36)	.7100 (27)	2.9623 (39)	2.6123	-.6253 (33)
Grossmont College	.7950 (37)	.7000 (25)	3.5370 (12)	2.9727 (25)	-.1643 (6)
St. John’s University	.8610 (38)	.7930 (36)	3.4988 (17)	2.9940 (23)	-.2440 (19)
Stephen F. Austin State	.8670 (39)	.6520 (18)	3.5010 (16)	3.0135 (22)	-.2476 (21)
Averages (Standard Deviation)	0.629 0.15	0.661 0.09	3.45 0.17	2.99 0.16	-0.240 0.08