

Senior Project Evaluation

Jan 26-27, 2002

UHWO Assessment Office

The Senior Project Evaluation took place on January 26-27, 2002. This evaluation covered projects completed mostly from Fall 2001 and some from Fall 2000. A total of 106 projects were read in three divisions.

The readers were selected on the basis of their affiliations with the three divisions. (See appendix for the list of readers). There were 36 read in Business Administration and Public Administration, 46 in the Social Sciences, and 24 in the Humanities. Forty-five of the 106 projects were read twice, once each by two different readers.

Summary of Findings

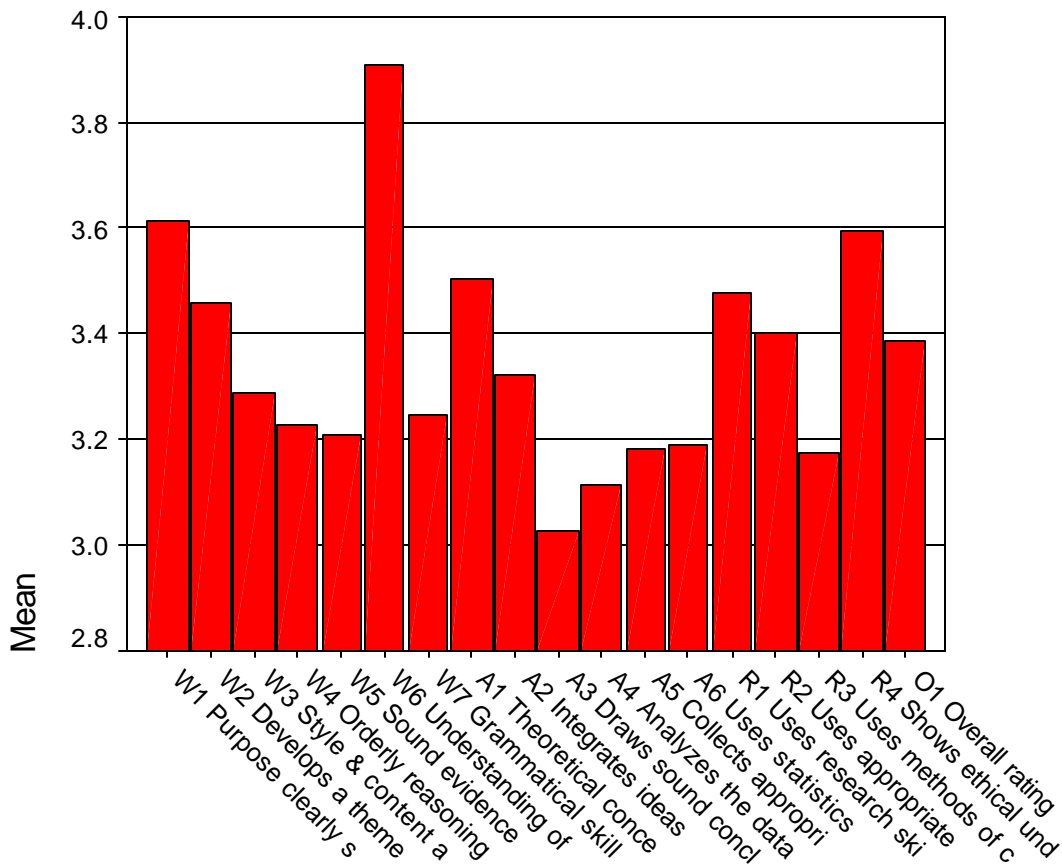
Ratings were done by skill categories in writing (W1 to W7), analytical reasoning (A1 to A6), research skills (R1 to R4), and an overall rating score (O1). The means for all skill categories ranged from a low of 3.0 (for A3) to a high of 3.9 (for W6), with an average of all categories of 3.4. W6, the skill category of "Understanding what constitutes plagiarism" had the highest mean and was high in all disciplines. A3, the category of "Draws sound conclusions and interpretations from the data and/or material" was the lowest among all categories.

The distribution of ratings across skill categories showed lower ratings in the Analytical Skills category. The average for the Analytical Skills was 3.2 while for Writing Skills it was 3.4 and for Research Skills it was 3.4. The specific skills which had lowest ratings were: (A3) "Draws sound conclusions", (A4) "Analyzes data in a meaningful way", and (A5) "Collects and organizes appropriate data". The disciplines which had the lowest ratings were Business, Public Administration, and Sociology. (See Figure 3 below.)

Mean Ratings by Skill Category

The mean ratings by category are shown in the chart and table below. There is a variation in the ratings from a low of 3.0 (A3: Draws sound conclusions) to a high of 3.9 (W6: Shows an understanding of what constitutes plagiarism). W6 is well above the other categories and A3 stands out as the lowest category. Generally the mean ratings can be defined into four ranges, 3.0 to 3.2 - low, 3.2 to 3.4 - average, 3.4 and above - high. The mean for all categories is 3.35 (not shown). The categories in the low range include four out of the six categories from analytical reasoning (A3, A4, A5, and A6) and one from research skills (R3). The Overall rating (O1) is 3.4.

Figure1: Mean Ratings by Skill Category



Most of the categories in the low range come from the general area of Analytical, Quantitative, and Qualitative Reasoning. These include "A3: Draws sound conclusions and interpretations from the data and/or material", "A4: Analyzes and discusses the data and /or material in a meaningful way", "A5: Collects and organizes appropriate data and examples", and "A6: If appropriate, uses statistics in analyzing the data".

Table 1: Mean and Standard Deviation by Skill Category

	Mean	Std Deviation
W1 Purpose clearly stated	3.61	.93
W2 Develops a theme	3.46	.98
W3 Style & content appropriate	3.29	1.03
W4 Orderly reasoning	3.23	1.08
W5 Sound evidence	3.21	1.08
W6 Understanding of plagiarism	3.91	1.05
W7 Grammatical skills	3.25	1.04
A1 Theoretical concepts	3.50	.97
A2 Integrates ideas	3.32	.95
A3 Draws sound conclusions	3.03	1.12
A4 Analyzes the data	3.12	1.14
A5 Collects appropriate data	3.18	1.03
A6 Uses statistics	3.19	.94
R1 Uses research skills	3.48	.92
R2 Uses appropriate data sources	3.40	.97
R3 Uses methods of citation	3.17	1.00
R4 Shows ethical understanding	3.60	1.10
O1 Overall rating	3.39	1.22

Ratings by General Skill Areas

In terms of general skills, the Writing Skills area has one very high category with W6. Two others are high, these are "W1: Purpose of the paper is clearly stated or implied" and "W2: Develops a theme, thesis or hypothesis pertinent to the field". And the other four categories are low average: "W3: Style and content are appropriate for an audience of peers" is about average, while "W4: Presents and orderly and logical chain of reasoning", "W5: Presents sound evidence using appropriate data and examples" and "W7: Demonstrates proficiency in the mechanical and grammatical skills appropriate to the writing task".

The Analytical, Quantitative and Qualitative Reasoning Skills are generally on the low side. The first two categories are high, the last four are low. The high categories include "A1: Uses theoretical concepts from this field" and "A2: Presents and integrates ideas from different sources". The low categories are the lowest for all of the means and these include "A3: Draws sound conclusions and interpretations from the data and/or material", "A4: Analyzes and discusses the data and/or material in a meaningful way", "A5: Collects and organizes appropriate data and examples", and "A6: If appropriate, uses statistics in analyzing the data".

A look at the distribution of A3 in Table 2 below shows that about 34% of the projects were rated as "No Evidence" or "Minimal Evidence" and 28% as Very Good or Exemplary Evidence for this category. In contrast, the category "W6: Shows and understanding of what constitutes plagiarism" had the highest mean. Its distribution shows only 12% as "No Evidence" or "Minimal Evidence" and 72% as Very Good or Exemplary Evidence.

The Research Skills has high marks for three of the four categories, the high marks are for "R1: Uses research skills accepted in the field", "R2: Uses appropriate, traditional, and/or electronic sources for data", and "R4: Shows and understanding of ethical concerns in research as appropriate". The low mark is for "R3: Uses methods of citation and documentation appropriate to this field".

Table 2: Frequency Distribution of Responses

		No Evidence	Minimal Evidence	Satisfactory Evidence	Very Good Evidence	Exemplary Evidence
W1 Purpose clearly stated	Count		14	32	41	19
	%		13.2%	30.2%	38.7%	17.9%
W2 Develops a theme	Count		21	31	37	16
	%		20.0%	29.5%	35.2%	15.2%
W3 Style & content appropriate	Count	2	23	38	27	15
	%	1.9%	21.9%	36.2%	25.7%	14.3%
W4 Orderly reasoning	Count	2	30	30	28	15
	%	1.9%	28.6%	28.6%	26.7%	14.3%
W5 Sound evidence	Count	2	28	34	21	16
	%	2.0%	27.7%	33.7%	20.8%	15.8%
W6 Understanding of plagiarism	Count	2	7	12	30	25
	%	2.6%	9.2%	15.8%	39.5%	32.9%
W7 Grammatical skills	Count	2	26	35	28	14
	%	1.9%	24.8%	33.3%	26.7%	13.3%
A1 Theoretical concepts	Count	2	12	38	34	17
	%	1.9%	11.7%	36.9%	33.0%	16.5%
A2 Integrates ideas	Count	1	18	46	26	14
	%	1.0%	17.1%	43.8%	24.8%	13.3%
A3 Draws sound conclusions	Count	6	29	38	14	15
	%	5.9%	28.4%	37.3%	13.7%	14.7%
A4 Analyzes the data	Count	4	33	31	19	17
	%	3.8%	31.7%	29.8%	18.3%	16.3%
A5 Collects appropriate data	Count	1	31	34	26	13
	%	1.0%	29.5%	32.4%	24.8%	12.4%
A6 Uses statistics	Count	2	8	26	12	5
	%	3.8%	15.1%	49.1%	22.6%	9.4%
R1 Uses research skills	Count	1	10	48	27	17
	%	1.0%	9.7%	46.6%	26.2%	16.5%
R2 Uses appropriate data sources	Count	1	15	45	24	17
	%	1.0%	14.7%	44.1%	23.5%	16.7%
R3 Uses methods of citation	Count	3	22	40	23	11
	%	3.0%	22.2%	40.4%	23.2%	11.1%
R4 Shows ethical understanding	Count	2	3	20	9	13
	%	4.3%	6.4%	42.6%	19.1%	27.7%
O1 Overall rating	Count	7	21	25	30	23
	%	6.6%	19.8%	23.6%	28.3%	21.7%

Means by Disciplines and Skill Category

Table 3 shows the means of each skill category by discipline (i.e. major). Business, Humanities, Psychology, and Sociology all had samples of over 10 readings, Economics, Political Science, and Public Administration had five or less projects evaluated. The charts below breaks the analysis down by general skills.

Table 3: Means by Discipline and Skill Category

(Sample sizes were: Business 31, Economics 4, Humanites 24, Political Science 2, Psychology 29, Public Administration 5, Sociology 11)

	Major						
	Business	Economic	Humaniti	Politcal	Psycholo	Public A	Sociolog
	Mean	Mean	Mean	Mean	Mean	Mean	Mean
W1 Purpose clearly stated	3.52	3.75	4.00	2.00	3.62	3.40	3.36
W2 Develops a theme	3.48	3.50	3.67	3.00	3.38	3.00	3.36
W3 Style & content appropriate	3.19	3.50	3.75	3.00	3.28	2.60	2.82
W4 Orderly reasoning	2.93	3.75	3.71	3.00	3.24	3.20	2.82
W5 Sound evidence	3.03	3.75	3.71	3.00	3.21	3.00	2.64
W6 Understanding of plagiarism	3.65	3.75	3.82	5.00	4.47	2.80	4.67
W7 Grammatical skills	3.07	3.00	3.38	3.00	3.55	3.00	2.91
A1 Theoretical concepts	3.39	3.50	4.14	3.50	3.41	2.80	3.18
A2 Integrates ideas	3.10	3.50	3.96	3.00	3.34	2.40	3.00
A3 Draws sound conclusions	2.73	3.50	3.76	2.50	3.10	2.40	2.45
A4 Analyzes the data	2.77	3.50	3.74	3.00	3.24	2.60	2.55
A5 Collects appropriate data	2.84	3.75	3.96	3.00	3.17	3.00	2.45
A6 Uses statistics	2.62	5.00	3.50	.	3.41	.	3.00
R1 Uses research skills	3.32	3.75	4.09	3.00	3.38	2.60	3.20
R2 Uses appropriate data sources	3.33	4.00	4.00	3.00	3.21	3.00	2.90
R3 Uses methods of citation	3.10	3.50	3.24	3.00	3.24	2.80	3.10
R4 Shows ethical understanding	3.25	.	3.00	3.00	3.76	.	3.50
O1 Overall rating	3.19	3.50	3.58	3.50	3.72	2.60	2.91

Figure 2 below shows the means for Writing Skills by majors. The means can be generally analyzed as three relative ranges 2.5 to 3.0 (low), 3.0 to 3.5 (average), above 3.5 (high). W1, W2, and W6 are the highest means for all disciplines except Public Administration. W7 is low for Business and marginally low for Economics and Pub Ad but is high for Psychology and average for Humanities and Sociology. Overall, the five Pub Ad projects scored the lowest in terms of writing skills with W3 and W6 as low, W2, W5, and W7 as marginally low and W1 and W4 average.

Figure 2: Means of Writing Skills by Major

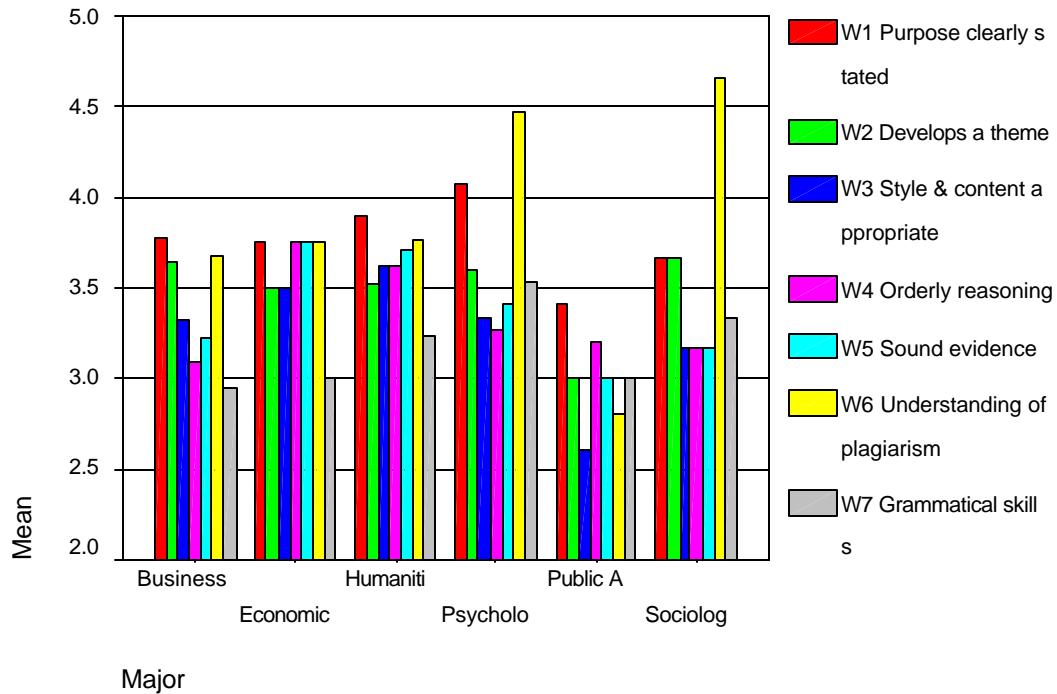
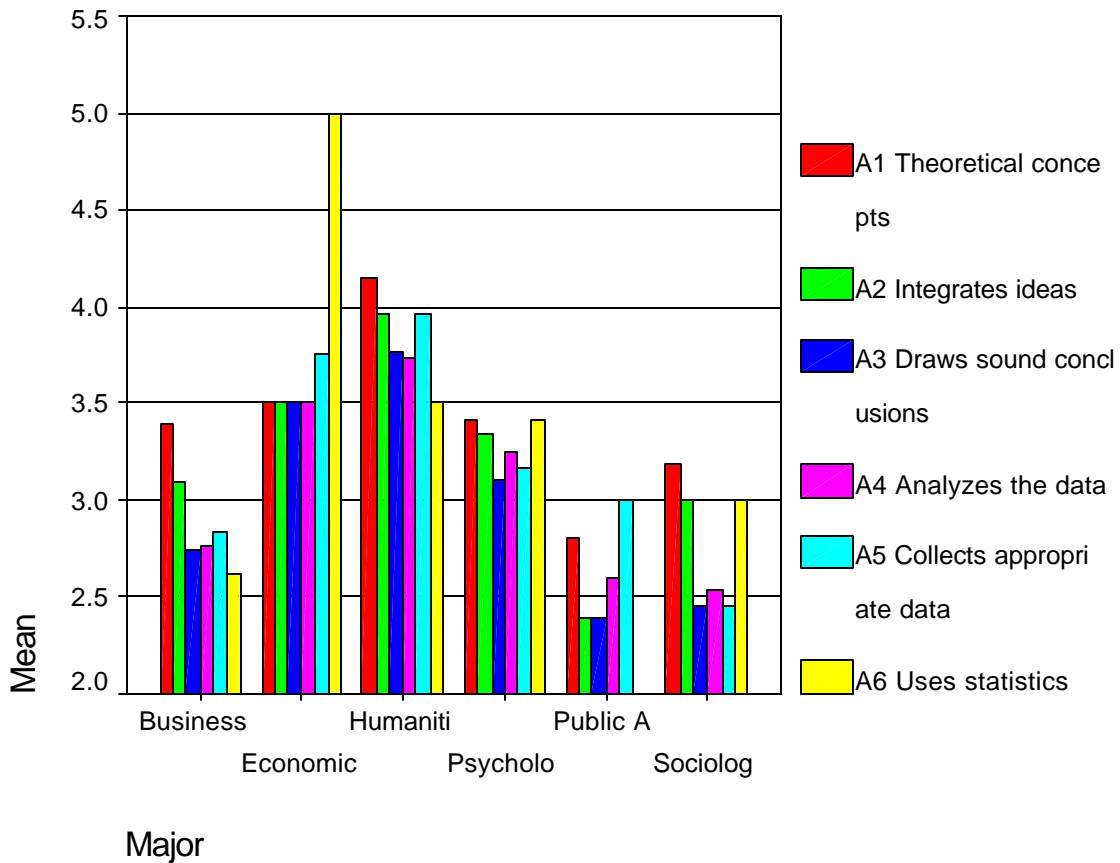


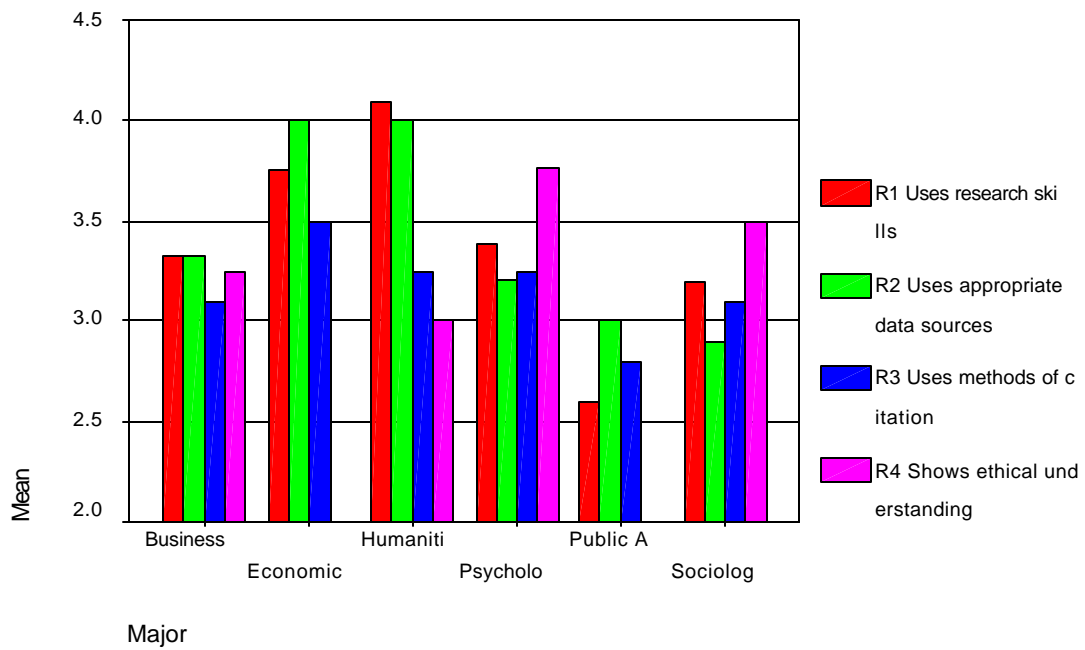
Figure 3 shows the means of Analytical Skills by disciplines. Again the general ranges are 2.5 to 3.0 low, 3.0 to 3.5 average, and above 3.5 high. The Economics and the Humanities projects stand out as being in the high range for all of the categories (A6 is marginally high in Humanities but that category is "Use of Statistics" which is not used often in that division.) Business scored low in all categories except for A1. Sociology is low in A3, A4, and A5, high in A1 and A2, and marginally high in A6.

Figure 3: Means of Analytical Skills by Major



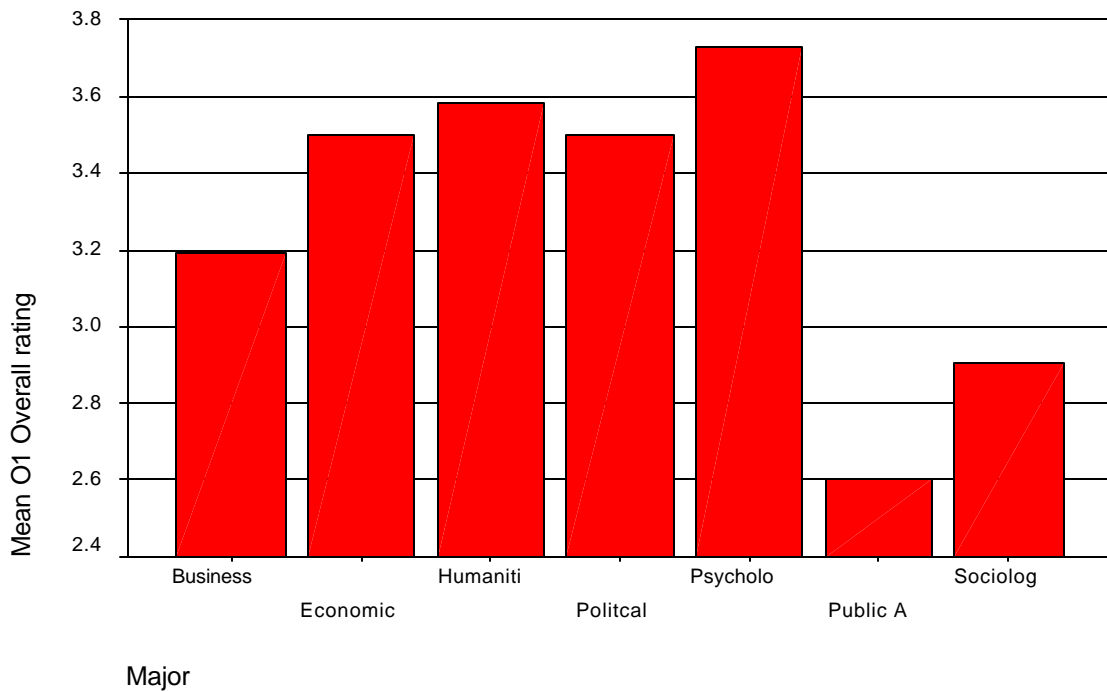
The chart below show the mean ratings for Research skills. All of the disciplines except Public Administration show above average scores (except for R2 in Sociology which is slightly below average. Pub Ad shows low marks in R1 an R3 with avererge score in R2).

Figure 4: Means of Research Skills by Major



The Overall mean (O1) score is shown below for each discipline. The average is 3.4. Economics, Humanities, Political Science, and Psychology scored above average. Business is slightly below at 3.2, Sociology is at 2.9, and Public Administration is 2.6.

Figure 5: Overall Mean by Major



Characteristics of the Weakest Projects

The weakest projects are defined as those receiving a rating of 1 (No Evidence) or 2 (Minimal Evidence) on the Overall Rating category. Evidence here refers to the evidence of being a good paper. Of the 61 projects which were read once, 19 (31%) fell into these categories. Four projects had a score of 1 while 15 projects had a score of 2.

Table 4: Frequencies of Overall Rating by Major

Count			No Evidence	Minimal Evidence	Satisfactory Evidence	Very Good Evidence	Exemplary Evidence
Major	Business	O1 Overall rating		5	7	4	2
	Economic	O1 Overall rating			2	2	
	Humaniti	O1 Overall rating	1	4	1	3	3
	Politcal	O1 Overall rating			1		
	Psycholo	O1 Overall rating		4	1	5	5
	Public A	O1 Overall rating	2	1		1	1
	Sociolog	O1 Overall rating	1	1	4		

Some of the comments on these papers by the evaluators were: they were badly written or had vague or confusing writing, the organization was poor, they were not grammer or spell checked, they had poor or superficial analysis, they lacked a conclusion, there were indications of plagiarism, they were not able to integrate ideas into focused thesis, there was a lack of a bibliography or references, some had poorly cited references-eg Cliffs Notes or internet sources, and there was a need for better documentation.