

Score Distributions

Introduction

Score distributions have been generated for the population of test takers who completed the test at the main test centre located at Carleton University during the period from January 1997 through September 1999 (Table 5.1.a) and from January 2002 through January 2008 (Table 5.1.b). Score distributions are reported for the Overall Result as well as for each sub-test (Writing, Listening, Reading & Speaking). The number of test takers achieving each band score is shown both as a frequency count and as a percent. Summary statistics in the form of means and standard deviations are also provided in order to describe both the central tendency and extent of variance in the test taker population.

These score distributions are presented in an effort to provide a clear description of the performance of typical CAEL test takers. These distributions should not be interpreted as representative of norms for use at other institutions. The performance of test takers at any institution will be strongly influenced by factors such as the background characteristics of the test takers, the amount and type of English language training, and the level and intended course of study of the test takers. For this reason, the score distributions of test takers at other test centres may vary considerably from the scores reported here.

Distribution of Overall Results

Table 5.1.a presents the 1997-1999 Overall Results for the full sample and also offers a comparison by gender. Most of the test takers tend to cluster around the middle range of proficiency. The most frequently occurring Overall Result is a band score of 50 with 56% of test takers achieve a band score of 40 or 50. There are relatively few test takers (7.6%) scoring in the lowest band scores of 10 and 20. This distribution likely reflects the fact that CAEL test takers generally have some previous English language training prior to applying to study at an English language university.

Table 5.1.b presents the 2001-2008 Overall Results for the full sample and by gender. In this group, the most frequently occurring Overall Result is band score 30 (34.4%) with the majority of test takers achieving an Overall Result of a band score of 30 or 40 (58.5%). 22% of test takers fall into the lowest band levels of 10 and 20. This change in distribution possibly reflects the significant change in country of origin and the fact that more students are beginning their studies at English language universities with little or no previous English language training.

The highest Overall Results achieved by test takers in both cohorts at the main test centre are at the 70 and 80 band levels. The number of test takers to achieve this level has dropped from 8.6% in the 1997-1999 cohort to 2.6% in the 2002-2008 cohort.

It is these test takers who have achieved a sufficient level of English language proficiency to register for full-time courses at the university without further ESL/EAP training. Test takers who achieve a band score of 40 or below require intensive ESL training before they can begin their university studies. This cut point is currently under review at Carleton University and may

be lowered to 30. Presently at Carleton University test takers who achieve band scores of 40, 50 or 60 may be permitted to take between one and three university courses in addition to their ESL/EAP courses. Again, the lower cut point is under review and may be lowered to band score 30. This gradual admission policy is unique to Carleton University and does not reflect the English language proficiency requirements at other universities which accept CAEL Assessment scores. A full description of the Overall Results of band scores is provided in the chapter entitled *Scoring Criteria, Methods & Reliability*.

Table 5.1.a: Overall Results for Full Sample and by Gender 1997-1999

*Overall Result Band Score	Full Sample		Males		Females	
	Freq	%	Freq	%	Freq	%
10	28	1.3	15	1.2	12	1.4
20	133	6.3	87	6.9	46	5.4
30	208	9.8	122	9.6	86	10.1
40	568	26.8	347	27.4	221	26.0
50	620	29.2	384	30.3	236	27.7
60	383	18.0	212	16.7	171	20.1
70	174	8.2	95	7.5	77	9.0
80	9	0.4	6	0.5	2	0.2
Total	2123	100	1268	100	851	100

*information concerning gender was not available for some test takers

Table 5.1.b: Overall Results for Full Sample and by Gender 2002-2008

*Overall Result Band Score	Full Sample		Males		Females	
	Freq	%	Freq	%	Freq	%
10	167	2.1	120	2.7	46	1.4
20	1564	19.9	1018	22.7	539	16.4
30	2697	34.4	1604	35.7	1075	32.7
40	1892	24.1	1003	22.3	881	26.8
50	886	11.3	438	9.7	439	13.4
60	404	5.2	200	4.5	200	6.1
70	180	2.3	93	2.1	86	2.6
80	27	0.3	7	0.2	19	0.6
Total	7817	100	4494	100	3285	100

*information concerning gender was not available for some test takers

Distribution of Writing Performance Scores

Tables 5.2.a and 5.2.b present the distribution of writing scores observed for these populations. Both the frequency and percent of test takers scoring at each band score is provided for the full sample and by gender. As for the Overall Results, the majority of test takers score at band scores of 40 or 50 (46.3%) in the 1997-1999 cohort and at band scores of 2 or 30 (62.2%) in the 2002-

2008 cohort. While females score marginally higher than males on the Writing Performance sub-test, the pattern of results is quite similar across cohorts.

Table 5.2.a: Writing Performance Band Scores for Full Sample and by Gender 1997-1999

*Writing Performance Band Score	Full Sample		Males		Females	
	Freq	%	Freq	%	Freq	%
10	34	1.6	23	1.8	11	1.3
20	248	11.7	147	11.6	101	11.9
30	344	16.2	202	15.9	142	16.7
40	539	25.4	336	26.5	203	23.9
50	443	20.9	271	21.4	171	20.1
60	309	14.6	170	13.4	139	16.3
70	86	4.1	54	4.3	29	3.4
80	116	5.5	63	5.0	53	6.2
90	4	0.2	2	0.2	2	0.2
Total	2123	100	1268	100	851	100

*information concerning gender was not available for some test takers

Table 5.2.b: Writing Performance Band Scores for Full Sample and by Gender 2002-2008

*Writing Performance Band Score	Full Sample		Males		Females	
	Freq	%	Freq	%	Freq	%
10	282	3.6	194	4.3	86	2.6
20	2603	33.2	1614	35.9	975	29.7
30	2277	29	1299	28.9	966	29.4
40	1224	15.6	635	14.1	585	17.8
50	708	9.0	385	8.6	315	9.6
60	366	4.7	183	4.1	179	5.4
70	216	2.8	107	2.4	105	3.2
80	119	1.5	54	1.2	64	1.9
90	22	0.3	12	0.3	10	0.3
Total	7817	100	4483	100	3285	100

*information concerning gender was not available for some test takers

Distribution of Listening Performance Scores

Table 5.3.a and 5.3.b present the distribution of Listening Performance results for these samples . Both the frequency and percent of test takers scoring at each band score is provided for the full sample and by gender.

Table 5.3.a: Listening Performance Scores for Full Sample and by Gender 1997-1999

Listening Performance Band Score	Full Sample		Males		Females	
	Freq	%	Freq	%	Freq	%
10	71	3.3	45	3.5	26	3.0
20	190	8.9	107	8.4	83	9.7
30	262	12.3	161	12.6	101	11.8
40	429	20.1	260	20.4	169	19.7
50	587	27.5	362	28.4	225	26.3
60	453	21.2	266	20.9	185	21.6
70	90	4.2	51	4.0	39	4.6
80	42	2.0	19	1.5	21	2.5
90	10	0.5	3	0.2	7	0.8
Total	2134	100	1274	100	856	100

*information concerning gender was not available for some test takers

**Table 5.3.b: Listening Performance Scores for Full Sample and by Gender
2002-2008**

Listening Performance Band Score	Full Sample		Males		Females	
	Freq	%	Freq	%	Freq	%
10	475	6.1	308	6.9	164	5.0
20	1271	16.2	798	17.8	467	14.2
30	1793	22.9	1055	23.5	727	22.1
40	1673	21.4	936	20.9	723	22.0
50	1648	21.1	895	20.0	742	22.6
60	751	9.6	403	9.0	345	10.5
70	142	1.8	63	1.4	79	2.4
80	59	0.8	24	0.5	34	1.0
90	5	0.1	1	0.0	4	0.1
Total	7817	100	4483	100	3285	100

*information concerning gender was not available for some test takers

Distribution of Reading Performance Scores

Table 5.4.a and 5.4.b present the distribution of Reading Performance results for these samples. Both the frequency and percent of test takers scoring at each band score is provided for the full sample and by gender.

**Table 5.4.a: Reading Performance for Full Sample and by Gender
1997-1999**

Reading Performance Band Score	Full Sample		Males		Females	
	Freq	%	Freq	%	Freq	%
10	47	2.2	27	2.1	20	2.3
20	140	6.5	92	7.2	48	5.6
30	257	12.0	172	13.5	85	9.9
40	423	19.8	268	21.0	155	18.1
50	596	27.9	347	27.2	247	28.9
60	492	23.0	265	20.8	226	26.4
70	120	5.6	71	5.6	49	5.7
80	55	2.6	30	2.4	24	2.8
90	6	0.3	4	0.3	2	0.2
Total	2136	100	1276	100	856	100

*information concerning gender was not available for some test takers

**Table 5.4.b: Reading Performance for Full Sample and by Gender
2002-2008**

Reading Performance Band Score	Full Sample		Males		Females	
	Freq	%	Freq	%	Freq	%
10	139	1.8	100	2.2	38	1.2
20	741	9.5	489	10.9	249	7.6
30	1577	20.2	985	22.0	582	17.7
40	1870	23.9	1072	23.9	790	24.0
50	1938	24.8	1089	24.3	836	25.4
60	1184	15.1	577	12.9	597	18.2
70	268	3.4	130	2.9	137	4.2
80	90	1.2	37	0.8	51	1.6
90	10	0.1	4	0.1	5	0.2
Total	7817	100	4483	100	3285	100

*information concerning gender was not available for some test takers

Distribution of Speaking Performance Scores

Table 5.5.a and 5.5.b present the distribution of Speaking Performance results for this sample. It should be noted that the number of test takers reported for the 1997-1999 Speaking Performance sub-test (n=1779) is smaller than that reported for the Overall Result (n=2123) and the other sub-tests because the current version of the Oral Language Test was brought into use in the spring of 1997. By contrast, the distributions reported for the Overall Result and the Writing, Listening and Reading Performances of this sample were collected from January of 1997.

Table 5.5: Speaking Performance Scores for Full Sample and by Gender 1997-1999

Speaking Performance Band Score	Full Sample		Males		Females	
	Freq	%	Freq	%	Freq	%
10	4	0.2	2	0.2	2	0.3
20	25	1.4	17	1.6	8	1.1
30	275	15.5	177	16.5	98	14.0
40	398	22.4	244	22.7	154	21.9
50	500	28.1	310	28.9	189	26.9
60	241	13.5	133	12.4	108	15.4
70	123	6.9	71	6.6	50	7.1
80	182	10.2	101	9.4	80	11.4
90	31	1.7	18	1.7	13	1.9
Total	1779	100	1073	100	702	100

*information concerning gender was not available for some test takers

Table 5.5: Speaking Performance Scores for Full Sample and by Gender 2002-2008

Speaking Performance Band Score	Full Sample		Males		Females	
	Freq	%	Freq	%	Freq	%
10	47	.6	35	.8	12	.4
20	361	4.6	238	5.3	120	3.6
30	1426	18.2	901	20.1	516	15.7
40	1729	22.1	1079	24.1	639	19.4
50	2129	27.2	1143	25.5	977	29.7
60	1261	16.1	674	15.0	579	17.6
70	350	4.5	164	3.7	184	5.6
80	460	5.9	226	5.0	231	7.0
90	54	0.7	20	0.4	30	0.9
Total	7817	100	4480	100	3288	100

*information concerning gender was not available for some test takers

Central Tendency and Variance of Score Distributions

Table 5.6 presents the means and standard deviations for the Overall Results and each of the sub-tests for both samples of test takers. This information is provided for the full sample and then separately for males and females. The highest overall mean in both samples is achieved for the Speaking Performance sub-test while Writing Performance has the lowest overall mean. The sub-test with the greatest amount of variance in the 1997 – 1999 sample is the Writing Performance as indicated by the standard deviation of 16.40 for the full sample, while in the 2002 – 2008 sample the greatest variance is in the Speaking subtest. The least amount of variance for both samples is reflected in the Overall Results with a standard deviation of 13.62 and 12.89, respectively.

Table 5.6: Means & Standard Deviations for Sub-tests and Overall Results

Statistic	Overall Result		Writing		Listening		Reading		Speaking	
	97-99	02-07	97-99	02-07	97-99	02-07	97-99	02-07	97-99	02-07
Mean (Full Sample)	46.55 n=2122	34.9 n=7817	44.05 n=2122	32.77 n=7817	45.27 n=2133	37.54 n=7817	47.08 n=2135	42.61 n=7817	50.66 n=1778	47.06 n=7817
Std Deviation (Full Sample)	13.62	12.89	16.40	15.05	15.61	15.04	15.07	14.32	16.17	15.35
Mean (Females Only)	47.09 n=851	36.6 n=3285	44.48 n=851	34.28 n=3285	45.68 n=856	39.0 n=3285	48.31 n=856	44.49 n=3285	51.68 n=702	49.03 n=3228
Std Deviation (Females Only)	13.70	13.04	16.66	15.43	16.11	15.13	14.88	14.24	16.32	15.42
Mean (Males Only)	46.12 n=1268	33.63 n=4483	43.71 n=1268	31.61 n=4483	44.93 n=1274	36.47 n=4483	46.21 n=1276	41.20 n=4483	49.93 n=1073	45.59 n=4480
Std Deviation (Males Only)	13.51	12.61	16.18	14.63	15.22	14.89	15.12	14.2	16.02	15.09

A comparison of male and female scores indicates that female test takers score marginally higher on all of the sub-tests as well as on the Overall Result. The sub-test with the greatest difference between males and females in the 1997 – 1999 sample is Reading Performance, while in the 2002-2008 sample, the speaking sub-test shows the greatest difference. Continued tracking of the performance of test takers by gender may reveal the extent to which these observations are related to difference in sample size, characteristics of the test takers themselves, or a result of the test items. Further tracking of CAEL test scores is necessary before a conclusion can be drawn. In addition, a comparison of the performance of the CAEL Assessment across gender with other tests of English for academic purposes would also be insightful.