

Writing Proficiency in the Montana University System

Newsletter Eighteen July 2005

Additional Test Data Compares Modes

The Montana University System Writing Assessment was administered for the fifth time in 103 of Montana's high schools. All tests were scored using the same criteria, a holistic rubric aligned with Montana's Content Standards. Scores were sent to schools in May, accompanied by Newsletter 17, which summarized statewide results, as well as survey instruments completed by teachers and scorers.

After yearly gains, statewide scores reached a plateau in 2005, in part due to the addition of over 1,000 students from new testing sites.

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Comparison of Writing Modes					
Score	All Modes	Handwritten	All Word Processed	Online	WP in Booklet
1.0	1.5%	1.9%	1.0%	1.2%	0.6%
1.5	2.2%	2.8%	1.5%	1.6%	1.4%
2.0	10.1%	13.0%	6.9%	7.1%	6.6%
2.5	9.8%	11.1%	8.4%	8.8%	7.7%
3.0	23.8%	26.2%	21.2%	20.5%	22.2%
3.5	14.9%	14.1%	15.9%	15.9%	15.8%
4.0	17.7%	17.1%	18.3%	19.2%	16.8%
4.5	10.4%	7.9%	13.2%	12.9%	13.8%
5.0	6.7%	4.6%	9.1%	9.4%	8.7%
5.5	1.8%	0.8%	2.8%	2.3%	3.6%
6.0	1.1%	0.5%	1.7%	1.1%	2.6%
Mean	3.4	3.2	3.6	3.6	3.7
SD	1.0	1.0	1.0	1.0	1.0
N	5969	3060	2718	1642	1076

The table above shows scores of tests handwritten and word-processed and also separates the word-processed into two categories: tests taken and submitted online and those printed at each school site from word-processed essays, then stapled into conventional test booklets.

Because students often bubble in information incorrectly and the test booklets, with two perforated pages for bubble-in scan sheets, cost about \$1 each, OCHE encourages schools to try the online test option. It saves paper and postage, as well as collects data electronically.

Office of the Commissioner of Higher Education

Proficiency
Admissions

Demographics

Racial/Ethnic Data Helps Target Instruction

Ethnicity is an important factor in analyzing test results. However, because students self-identify, this data may not be completely accurate. In order to mitigate bias in scoring, training materials for scorers include sample papers that use narrative to persuade or less linear approaches to organization, yet still earn high ratings. Strength and Weakness data show that, like other students in Montana, the development of ideas is a particular weakness among American Indian writers and focusing on the topic is a strength. Further studies related to demographics may help guide improvements in writing instruction for low-performing groups.

Score	Total	No Resp	Black		American Indian		Caucasian		Mex-Am/Latino		Asian-American		Hispanic		Multi-racial	
			Count	Pct.	Count	Pct.	Count	Pct	Count	Pct	Count	Pct	Count	Pct	Count	Pct
1.0	89	11	3	12.0%	11	3.6%	51	1.0%	3	2.2%	3	3.3%	1	3.2%	6	2.8%
1.5	136	5	1	4.0%	18	5.9%	98	1.9%	7	5.2%	1	1.1%	0	0.0%	6	2.8%
2.0	614	22	7	28.0%	83	27.0%	435	8.6%	23	17.2%	11	12.1%	4	12.9%	29	13.4%
2.5	592	17	3	12.0%	51	16.6%	457	9.0%	24	17.9%	12	13.2%	5	16.1%	23	10.6%
3.0	1435	39	3	12.0%	68	22.1%	1207	23.9%	34	25.4%	21	23.1%	5	16.1%	58	26.7%
3.5	893	21	1	4.0%	29	9.4%	786	15.5%	14	10.4%	8	8.8%	5	16.1%	29	13.4%
4.0	1061	20	3	12.0%	25	8.1%	934	18.5%	17	12.7%	17	18.7%	9	29.0%	36	16.6%
4.5	625	14	1	4.0%	17	5.5%	555	11.0%	6	4.5%	12	13.2%	2	6.5%	18	8.3%
5.0	402	5	2	8.0%	5	1.6%	373	7.4%	4	3.0%	5	5.5%	0	0.0%	8	3.7%
5.5	108	4	0	0.0%	0	0.0%	99	2.0%	1	0.7%	1	1.1%	0	0.0%	3	1.4%
6.0	66	2	1	4.0%	0	0.0%	61	1.2%	1	0.7%	0	0.0%	0	0.0%	1	0.5%
Total	6021	160	25	100.0%	307	100.0%	5056	100.0%	134	100.0%	91	100.0%	31	100.0%	217	100.0%
Mean	3.40	3.11	2.84		2.73		3.48		2.96		3.30		3.19		3.20	

American Indian Students Making Gains

The table below charts scores of students who self-identified as American Indian and as Caucasian over five testing years. Scorers are convinced that student essays are improving, rather than standards declining. The increase in the percentage of American Indian students scoring above 3.5 is particularly impressive.

Scores	2001		2002		2003		2004		2005	
	Am Indian	Caucasian	Am Indian	Caucasian	Am Indian	Caucasian	Am Indian	Caucasian	Am Indian	Caucasian
0	3.5	4.0			0.36	0.29				
0.5	0.4	0.1			1.09	0.1				
1	15.8	2.4	5	1.6	6.91	1.68	4.78	1.11	3.6	1.0
1.5	12.7	3.7	5	2.4	8.0	3.41	7.17	1.16	5.9	1.9
2	28.5	13.7	23.5	10.6	24.36	9.57	22.87	8.92	27.0	8.6
2.5	16.7	13.8	17	11.3	16.36	10.76	19.11	9.72	16.6	9.0
3	14.0	22.3	28	27.9	22.18	21.42	26.62	23.07	22.1	23.9
3.5	4.4	14.8	10.5	16.6	14.55	18.17	7.85	16.4	9.4	15.5
4	3.5	12.3	7.5	15.8	4.73	14.47	6.83	18.19	8.1	18.5
4.5	0.4	7.0	1.0	7.1	1.09	9.92	3.07	10.98	5.5	11.0
5		4.3	0.5	4.7	0.36	6.89	1.37	7.28	1.6	7.4
5.5		1.0	0.5	1.3		2.55	0.34	2.24		2.0
6		0.7	0	0.4		0.77		0.93		1.2
Number	228	2793	200	2679	275	3104	297	3984	307	5056
% below 2.5	60.9	23.9	33.5	14.6	40.72	15.05	34.82	11.19	36.5	11.5
% above 3.5	3.9	25.3	9.5	29.3	6.18	34.6	11.61	39.62	15.2	40.1
Mean					2.55		2.66		2.73	

Demographics and Writing Process

Gender Gap Returns to Previous Level

Last year, this newsletter announced a decrease in the gender gap, from around .4 in 2002 and 2003 to .22 in 2004. For 2005, the mean difference stood at .4 once again.

In 2004, 46% of the 6's were written by males and 54% were by females. However, in 2005, 39% of the 6's were written by males and 58% by females. "No response" for the gender question was a new phenomenon this year.

Score	Total	No Resp	Male		Female	
			Count	Pct.	Count	Pct.
1.0	89	3	69	2.3%	17	0.6%
1.5	136	1	111	3.7%	24	0.8%
2.0	614	18	397	13.1%	199	6.8%
2.5	592	3	368	12.1%	221	7.6%
3.0	1435	16	751	24.8%	668	22.8%
3.5	893	9	395	13.0%	489	16.7%
4.0	1061	5	469	15.5%	587	20.0%
4.5	625	5	263	8.7%	357	12.2%
5.0	402	0	149	4.9%	253	8.6%
5.5	108	1	35	1.2%	72	2.5%
6.0	66	2	26	0.9%	38	1.3%
Total	6021	63	3033	100.0%	2925	100.0%
Average	3.40	3.42	3.21		3.61	

To determine if students are using the Writing Process, they were asked, "How often do you write more than one draft of a paper before it is graded by a teacher?"

Score	Total	No Resp	Never		Sometimes		Usually		Always	
			Count	Pct.	Count	Pct.	Count	Pct.	Count	Pct.
1.0	89	6	15	3.0%	41	1.7%	24	1.3%	3	0.3%
1.5	136	5	18	3.7%	62	2.5%	37	1.9%	14	1.4%
2.0	614	27	82	16.7%	284	11.5%	144	7.5%	77	7.4%
2.5	592	18	54	11.0%	274	11.1%	167	8.7%	79	7.6%
3.0	1435	22	124	25.2%	639	25.9%	417	21.8%	233	22.5%
3.5	893	10	55	11.2%	341	13.8%	321	16.8%	166	16.1%
4.0	1061	7	67	13.6%	411	16.6%	374	19.6%	202	19.4%
4.5	625	11	36	7.3%	224	9.1%	222	11.6%	132	12.8%
5.0	402	4	31	6.3%	132	5.3%	145	7.6%	90	8.7%
5.5	108	3	8	1.6%	42	1.7%	34	1.8%	21	2.0%
6.0	66	2	2	0.4%	19	0.8%	26	1.4%	17	1.6%
Total	6021	115	492	100.0%	2469	100.0%	1911	100.0%	1034	99.9%
Average	3.40	2.95	3.14		3.30		3.52		3.60	

Students continue to perform better on a timed writing if they use the writing process.

Of those students with scores below 2.5, 23.4% never use the writing process; and 9.1% always use the writing process.

How often do students use the computer from first draft through final?

Although the majority "sometimes" do, this table shows that the more often students use computers during the entire writing process, the higher they are able to score on a timed, prompted writing assessment, using either mode.

Score	Total	No Resp	Never		Sometimes		Usually		Always	
			Count	Pct.	Count	Pct.	Count	Pct.	Count	Pct.
1.0	89	4	14	1.8%	39	1.6%	26	1.4%	6	0.7%
1.5	136	3	28	3.6%	57	2.3%	32	1.7%	16	1.9%
2.0	614	18	113	14.7%	274	11.0%	137	7.4%	72	8.7%
2.5	592	11	87	11.3%	256	10.3%	174	9.4%	64	7.7%
3.0	1435	14	198	25.7%	643	25.8%	401	21.6%	179	21.5%
3.5	893	7	100	13.0%	377	15.1%	285	15.4%	124	14.9%
4.0	1061	6	129	16.8%	415	16.7%	356	19.2%	155	18.6%
4.5	625	9	62	8.1%	231	9.3%	225	12.1%	98	11.8%
5.0	402	1	31	4.0%	146	5.9%	145	7.8%	79	9.5%
5.5	108	3	5	0.6%	34	1.4%	47	2.5%	19	2.3%
6.0	66	1	3	0.4%	17	0.7%	25	1.3%	20	2.4%
Total	6021	77	770	100.0%	2489	100.0%	1853	99.9%	832	100.0%
Average	3.40	2.99	3.17		3.33		3.54		3.59	

Planning for College

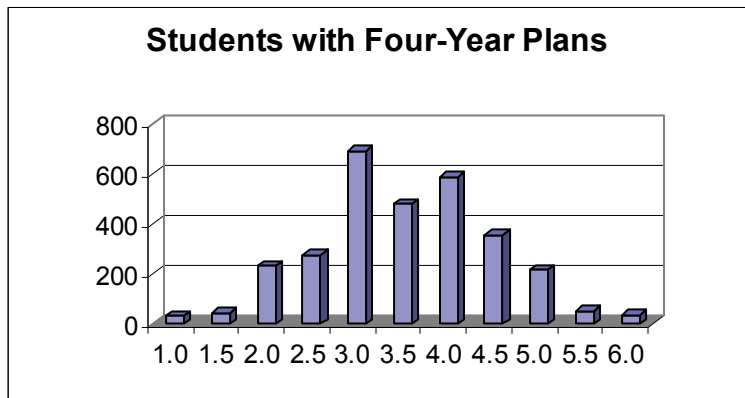
If you plan to attend college in Montana, where would you go as a first year student?

Score	Total	No Resp	Tribal College		Community College		College of Technology		Public 4-Yr University		Private College	
			Count	Pct.	Count	Pct.	Count	Pct	Count	Pct	Count	Pct
1.0	89	30	4	4.1%	3	1.0%	17	2.2%	32	1.1%	3	1.4%
1.5	136	43	6	6.2%	7	2.4%	33	4.2%	44	1.5%	3	1.4%
2.0	614	169	32	33.0%	29	10.0%	131	16.9%	234	7.8%	19	8.7%
2.5	592	155	11	11.3%	32	11.0%	108	13.9%	275	9.2%	11	5.0%
3.0	1435	342	23	23.7%	85	29.3%	235	30.2%	691	23.0%	59	27.1%
3.5	893	221	7	7.2%	51	17.6%	101	13.0%	480	16.0%	33	15.1%
4.0	1060	287	7	7.2%	36	12.4%	95	12.2%	589	19.6%	47	21.6%
4.5	625	178	6	6.2%	30	10.3%	32	4.1%	357	11.9%	22	10.1%
5.0	402	142	0	0.0%	15	5.2%	18	2.3%	214	7.1%	13	6.0%
5.5	108	41	1	1.0%	0	0.0%	6	0.8%	52	1.7%	8	3.7%
6.0	66	28	0	0.0%	2	0.7%	1	0.1%	35	1.2%	0	0.0%
Total	6020	1636	97	100.0%	290	100.0%	777	100.0%	3003	100.0%	218	100.0%
Average	3.40	3.47	2.66		3.28		2.97		3.51		3.49	

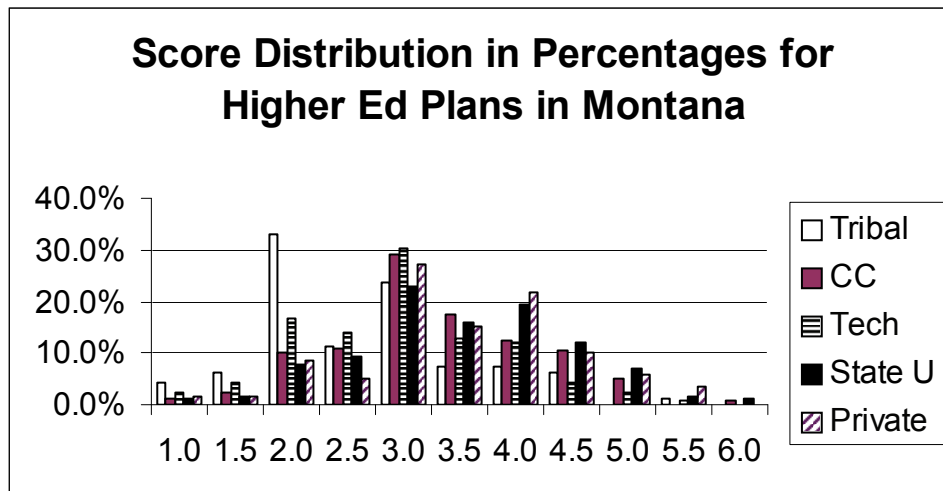
Students with Highest Scores Plan to Attend Four-Year State Universities

Newsletter 17 showed that 82.5% of the students who tested plan to attend a college or university after leaving high school. About half of the tested students then selected a four-year university in Montana (names of schools were listed in the questionnaire). Their average writing score was 3.51.

The graph on the right shows the score distribution of those students who hope to attend one of Montana's Four-Year Universities. These students tend to score above the 2.5 range.



Scores Graphed Based on Student Higher Education Plans in Montana



The graph to the left shows the percent of students who selected each of five options for attending post-secondary schools in Montana and their scores.

For example, where 7.8% of the students who scored 2 want to attend a four-year state university, 33% of the students who scored 2 want to attend a tribal college.

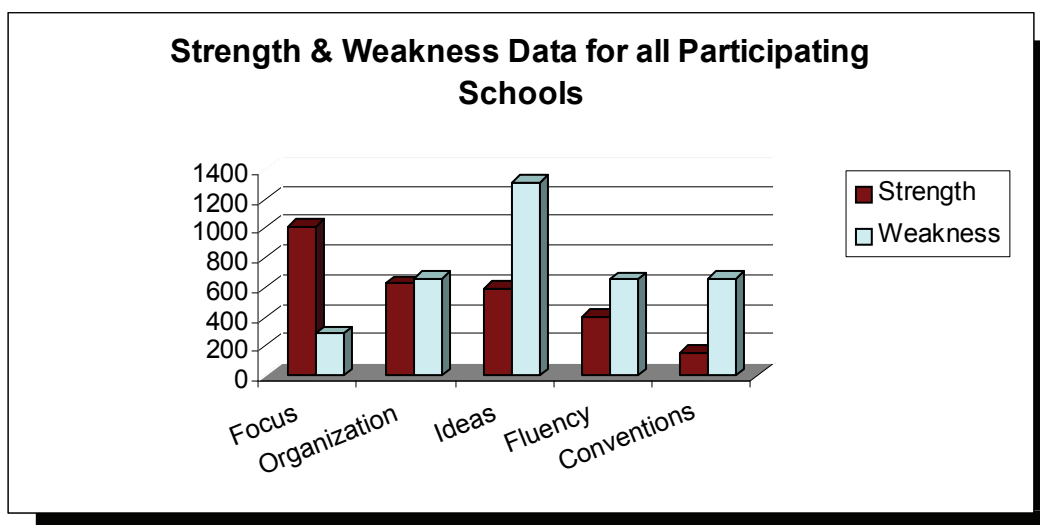
Strength and Weakness Data Helps Inform Instruction

Schools participating in the Montana University System Writing Assessment receive individual reports about the strengths and weaknesses that scorers identified in their students' essays. Since holistic scoring is the primary objective of this writing assessment, scorers are not required to mark a strength or weakness for every paper scored. Scorers mark strengths or weaknesses that particularly influenced the overall holistic score. Each school's report shows the percent of papers that had at least one strength or weakness marked. Across the state, this percentage ranged from 7.1% to 100%, although most schools had over 75% of their papers marked. When both school size and the percent of papers marked is small, even one paper with a strength or weakness can impact this data. For each trait (Focus, Organization, Development of Ideas, Language Fluency, and Language Conventions) the number of instances that scorers marked this trait as a strength and the number of instances that scorers marked this trait as a weakness is recorded. These numbers are graphed to help school staff see the data and quickly compare their school's writing traits with the overall state report.

At the state level, the major weakness is development of ideas. Students must learn to more effectively provide support for their arguments in order to be effective, persuasive writers. Secondly, we need to work with students to improve their use of standard written conventions—grammar, usage, and mechanics. Since 2002, overall fluency (well-controlled sentences, clear and effective expression of ideas, and precise word choice) has improved slightly each year. Based on statewide data, students appear to be doing well with focusing on the topic and clarifying their position.

Scorers tend to mark weaknesses more often than they mark strengths and tend to mark low-scoring papers more often than they mark the high-scoring paper. Often, a 6 earns no strength or weakness marks, because the score of 6 says it all: this paper is strong in all traits. At the same time, when a proficient (4) paper is read, the scorer may think, "This is a good, solid paper. Nothing stands out as particularly brilliant here, but problems with language, organization, etc., are so minor that I won't note them, either." However, when faced with an essay that scores 3 or below, the scorer thinks, "If only the student had developed this idea better, I could give the essay a higher score. Idea development is a real weakness here. If I could coach this student, I would tell him/her to think of an example or illustration for each of

	Focus	Organization	Ideas	Fluency	Conventions	Total
Strength	1964	1226	952	860	373	5375
Weakness	674	1180	2209	1226	1380	6669



Instructional and Organizational Effects

How many students were enrolled in the tested English class?

Score	Total	No Resp	1-7		8-14		15-20		21-26		27-32	
			Count	Pct.	Count	Pct.	Count	Pct	Count	Pct	Count	Pct
1.0	89	25	1	1.0%	18	2.8%	24	1.5%	14	0.8%	7	1.0%
1.5	136	24	5	4.8%	18	2.8%	30	1.9%	43	2.5%	16	2.2%
2.0	614	120	14	13.3%	68	10.6%	163	10.1%	178	10.5%	71	10.0%
2.5	592	122	8	7.6%	76	11.9%	168	10.4%	160	9.4%	58	8.1%
3.0	1435	300	23	21.9%	148	23.2%	369	22.8%	401	23.6%	194	27.2%
3.5	893	181	20	19.0%	93	14.6%	239	14.8%	257	15.1%	103	14.5%
4.0	1061	226	20	19.0%	114	17.8%	276	17.1%	312	18.4%	148	20.8%
4.5	625	137	7	6.7%	62	9.7%	170	10.5%	175	10.3%	74	10.4%
5.0	402	96	4	3.8%	33	5.2%	126	7.8%	108	6.4%	35	4.9%
5.5	108	33	3	2.9%	7	1.1%	32	2.0%	29	1.7%	4	0.6%
6.0	66	19	0	0.0%	2	0.3%	21	1.3%	22	1.3%	2	0.3%
Total	6021	1283	105	100.0%	639	100.0%	1618	100.0%	1699	100.0%	712	100.0%
Average	3.40	3.46	3.27		3.27		3.44		3.42		3.36	

Does class size matter?

Questions related to classroom practices, class size, etc., were printed on the back of the scan sheet which teachers completed for each of their classes. As a result, many teachers did not turn the page over and answer the questions. Therefore, this information is incomplete. However, even without answers from the teachers of 1283 students, the number of responses is still significant. Research on class size, showing that ideal classrooms have 15-20 students, appears to be confirmed by the data reported above.

How many districts have writing assessments?

The teachers of 3,238 students reported that their school districts have formal writing assessments and those of 1,777 said theirs do not. Of those, 61% use analytic scoring rubrics and 25% use holistic rubrics.

How often do students write assignments using the computer for the first draft through the final draft (according to their teachers)?

Score	Total	No Resp	Never		Sometimes		Usually		Always	
			Count	Pct.	Count	Pct.	Count	Pct	Count	Pct
1.0	89	21	3	0.9%	38	1.6%	18	0.9%	9	2.4%
1.5	136	21	9	2.8%	59	2.5%	37	1.8%	10	2.6%
2.0	614	98	25	7.7%	277	11.9%	185	9.2%	29	7.6%
2.5	592	84	32	9.9%	246	10.5%	192	9.6%	38	9.9%
3.0	1435	232	74	22.9%	576	24.6%	459	22.9%	94	24.6%
3.5	893	129	64	19.8%	324	13.9%	318	15.8%	58	15.2%
4.0	1061	226	59	18.3%	408	17.5%	374	18.6%	69	18.1%
4.5	625	106	37	11.5%	204	8.7%	237	11.8%	41	10.7%
5.0	402	80	15	4.6%	159	6.8%	128	6.4%	20	5.2%
5.5	108	33	4	1.2%	26	1.1%	34	1.7%	11	2.9%
6.0	66	16	1	0.3%	20	0.9%	26	1.3%	3	0.8%
Total	6021	1046	323	100.0%	2337	100.0%	2008	100.0%	382	100.0%
Average	3.40	3.50	3.40		3.32		3.47		3.41	

Students whose teachers report that they "usually" use computers to compose tend to score higher than the other categories. This differs from the information that students self-reported, which shows increasingly higher scores for more computer usage (page 3).

What kind of writing do you most often assign to students in this class?

Total	No Resp	Narrative		Descriptive		Analytic		Expository		Persuasive	
		Count	Pct.	Count	Pct.	Count	Pct	Count	Pct	Count	Pct
89	26	2	1.8%	6	2.8%	17	1.0%	25	1.7%	13	1.2%
136	34	3	2.7%	9	4.1%	30	1.7%	36	2.5%	24	2.2%
614	136	14	12.6%	33	15.1%	192	11.0%	146	10.0%	93	8.4%
592	120	8	7.2%	23	10.6%	182	10.4%	147	10.0%	112	10.1%
1435	337	34	30.6%	55	25.2%	402	23.0%	345	23.5%	262	23.6%
893	195	12	10.8%	30	13.8%	269	15.4%	238	16.2%	149	13.4%
1061	226	23	20.7%	44	20.2%	305	17.5%	260	17.7%	203	18.3%
625	149	9	8.1%	10	4.6%	179	10.2%	145	9.9%	133	12.0%
402	95	4	3.6%	7	3.2%	131	7.5%	87	5.9%	78	7.0%
108	33	2	1.8%	1	0.5%	28	1.6%	23	1.6%	21	1.9%
66	17	0	0.0%	0	0.0%	12	0.7%	13	0.9%	24	2.2%
6021	1368	111	100.0%	218	100.0%	1747	100.0%	1465	100.0%	1112	100.0%
3.40	3.42	3.26		3.09		3.41		3.37		3.49	

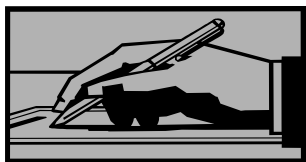
Students of teachers who most often assign persuasion as a writing mode tend to score higher than students whose teachers assign other types of writing most often. The lowest scores are earned by students whose teachers most often assign descriptive writing.

**What Are the Top Three Benefits of the Writing Proficiency Initiative?
By Jan Clinard, Ed.D.**

While chatting with someone outside the field of education about the MUS Writing Assessment, I was asked to list the top three positive outcomes of this project. He was surprised by my answer:

First: Calibrating Teachers

When teachers, college instructors, and college students convene to score the essays written by high school students who represent small schools, large schools, reservation schools, rural schools, and Montana's largest towns, they often come with different perspectives about what constitutes good writing. During the course of the school year, some have not been privileged to read a student paper that would score "6." Some have become so frustrated by sentence fragments that they have become egregious errors, resulting in an automatic "F." Some are so wedded to the *five-paragraph essay*, that any other organizational format is considered disorganized. Some are so impressed to find a student using figurative language that it can elevate a structurally flawed paper to brilliant. Holistic scoring evens out



these discrepancies and calibrates all the scorers to the same set of standards. When they return to their classrooms, they apply more consistent criteria to their grading systems. Were these discussions to expand, high school transcripts could become more meaningful, as a "B" in Whitefish reflects the same qualities as a "B" in Ekalaka.

Next: Attending to Writing

I've taught high school English and journalism, middle school English, and college composition. As the Language Arts Specialist at the Office of Public Instruction, I wanted language arts, and especially writing, to receive the same funding and attention that was given math and science. There was no NSF or SIMMS project available for language arts! Sadly, the National Assessment of Educational Progress (NAEP) shows that the percent of Montana's eighth graders who score at or above proficient is lowest in writing. In math, 37% are proficient or above, compared to 34% in the top-performing states; in reading, 38% are proficient or above (38% in top states); in science, 46% are proficient or above

(42% in top states); and in writing, only 25% are proficient or above, compared to 31% in the top states (Measuring Up, 2002). With the MUS Writing Assessment and the prospect of requiring a demonstration of basic writing skill for college admission, districts, schools, and teachers are paying more attention to writing. English teachers all over Montana applaud that their discipline has been rediscovered as fundamental to student success.

Third: Conducting Research

The MUS Writing Assessment has collected enough data to keep researchers busy for years. This information is vital to analyzing approaches to writing instruction, developing valid and reliable testing instruments, studying students' post-secondary aspirations as related to their skill levels, and improving the writing curriculum. In addition to this statistical bonanza, we are learning a great deal about student attitudes toward writing, student responses to educational and statewide issues, and the incredible appetite that our teachers have for professional development, collegiality, and improving their students' writing skills.

Dissertation Studies Prewriting for the 2004 MUS Writing Assessment by Robyn Wingo, Ed.D.

The following pages describe the findings of Dr. Robyn Wingo, whose dissertation used 2004 pilot writing assessments to study the effects of prewriting on scores.

In order to determine whether prewriting activities have a relationship to writing proficiency, the mean score of writing samples from the 2004 Montana Writing Assessment that included prewriting were compared to the mean score of writing samples that did not include any prewriting. On the two blank planning pages of the test booklet, the six most popular prewriting activities students utilized were outlining, listing ideas, drawing T-diagrams and webs, restating the prompt, and drafting. To a lesser extent, students made drawings related to the topic, made unrelated doodles, and wrote individual words, both related and unrelated to the topic. Many students also employed multiple prewriting techniques.

Results with Outlining

An outline addresses both purposes of prewriting: generating ideas and arranging them in an organized fashion. Outlining was the most popular prewriting technique, used by 30 % of the students who showed prewriting. The 584 essays that showed outlining as the prewriting method had a mean score of 3.9. Students who outlined their ideas used many forms, but all prewriting in this category showed ideas that were labeled in an order, arranged in a hierarchy, or both.

Outlining as a prewriting method correlated to an important increase in holistic score. Students who outlined and handwrote their essays in 40 minutes had a mean score of 3.8, which was a score 0.6 higher than those in their category who did no prewriting. Those who word-processed their essays in 40 minutes with outlining had a mean score of 4.1, while those without prewriting had a mean score of 3.6.

Results with Listing

Listing was almost as popular a prewriting method as outlining; 28 % of the students who showed prewriting listed their ideas. The 536 writing samples that showed listing ideas had a mean score of 3.6. Prewriting in this category differed from outlining in that these lists of ideas were not numbered in any way nor arranged in any form of hierarchy.

For students who made use of the technique of listing ideas, their mean scores were higher than those of their peers who had no prewriting, though not as significant a difference as

outlining. Listing was likely not as successful as outlining because a list only helps generate ideas and does not address the organization of those ideas. Those who listed ideas and handwrote their essays in 40 minutes had a mean score of 3.5, a score 0.3 higher than those without prewriting. Students who listed their ideas and word-processed their writing samples in 40 minutes had a mean score of 4.0, a 0.4 score increase over those with no prewriting.

Results with T-Diagramming

Utilizing T-diagrams was another prewriting technique that was used frequently by students; 14 % of the prewriting included in the test booklets were T-diagrams. The 259 essays that showed T-diagrams as the prewriting technique had a mean score of 3.7. Many students did show the pros and cons for the side of the issue they would take, using the traditional format. Other students used their T-diagram to show only the pros of both sides of the issue to see how they compared. Some students separated their pros or their pros and cons on the page without drawing the T shape as a divider. Still other students listed their pros or their pros and cons horizontally, both with and without the dividing lines.

Writing samples that showed the method of using a T-diagram for ideas had higher mean scores than those with no prewriting. Those who made T-diagrams and word-processed their essays in 40 minutes had a mean score of 4.2, a score increase of 0.6 over those who did not do any prewriting; those who made T-diagrams and handwrote their essays in 40 minutes had a mean score of 3.7, a score increase of 0.5 over those who did not prewrite. T-diagrams are beneficial prewriting techniques because they allow students to generate ideas, and although they do not provide for specific organization, they do allow students to formulate comparative and opposing relationships among their ideas. These connections can indirectly aid students in the organization of ideas within their paragraphs. Students need to be aware of the benefits T-diagrams provide.

Results with Webbing

Of the students who utilized prewriting, 6 % made webs. The webs made by students included traditional clusters and semantic maps. The 108 writing samples that showed webbing had a mean score of 3.3.

Prewriting Research

Writing samples that showed the technique of webbing also had higher mean scores than those with no prewriting, but not as great a difference as the methods previously discussed. The category of essays that were handwritten in 40 minutes showed a 0.1 increase in the mean score of 3.3 when webbing was used as a prewriting technique. Writing samples that were word-processed in 40 minutes showed a 0.2 increase in the mean score of 3.8 when webbing was used. It is surprising that webbing did not have a stronger correlation to mean scores, because it functions as a visual outline. Perhaps this is due to the fact that given a choice between outlining and webbing, webbing would be chosen by more visually-oriented students and outlining would be the choice of language-oriented students. Visually-oriented students would likely be less proficient writers than their language-oriented counterparts, so their holistic scores on a direct writing assessment would be lower, due more to their level of writing skill than their choice of prewriting technique.

Results with Drafting

Drafting was done by 9 % of students who prewrote. Some students drafted only their opening sentence or sentence fragment; most drafted a paragraph; a few took the time to draft their entire essay. The 164 writing samples that had drafting on the planning pages had a mean score of 3.0.

Drafting was the only prewriting method for which the mean score was lower than the

mean score of no prewriting. The mean scores dropped by 0.3: those who used the prewriting technique of drafting and word-processed their essays in 40 minutes had a mean score of 3.3; those who drafted and handwrote their essays in 40 minutes had a mean score of 2.9. Perhaps drafting was unsuccessful because many students do not understand the use of a draft as a means for revision, or that the process of revising is more than surface editing. Most students simply recopy a draft version verbatim; therefore, their copy of a draft is really not an example of prewriting at all, because it is not used for the purpose of generating ideas and organizing them. Because drafting as a prewriting method was shown to be unsuccessful for all testing categories in which it was used, students should be made aware that writing a separate draft is not a good use of prewriting time, especially during a time-limited writing assessment.

Comparisons among Prewriting Techniques

The following table shows how prewriting methods compared to one another with both the 30- and 40-minute time allotments and the two composition methods combined. Writing samples that showed the prewriting technique of outlining scored higher than those with webbing, restating the prompt, and drafting, and essays that showed the prewriting method of listing or T-diagramming also scored higher than those with drafting. Essays that showed drafting scored lower than writing samples that contained any of the other prewriting techniques.

Multiple Comparisons of Mean Differences within Categories of Prewriting Methods

Comparative prewriting techniques						
Prewriting technique	Outline	List	T	Web	Prompt	Draft
Outline	–	0.3	0.2	0.5 *	0.5 *	0.9 *
List	-0.3	–	-0.1	0.3	0.2	0.6 *
T-diagram	-0.2	0.1	–	0.4	0.3	0.7 *
Web	-0.5 *	-0.3	-0.4	–	-0.1	0.4
Prompt restatement	-0.5 *	-0.2	-0.3	0.1	–	0.4
Draft	-0.9 *	-0.6 *	-0.7 *	-0.4	-0.4	–

* The mean difference is experimentally important and consistent at the 0.01 level.

Prewriting Research

Prewriting Results with Word-Processed Essays

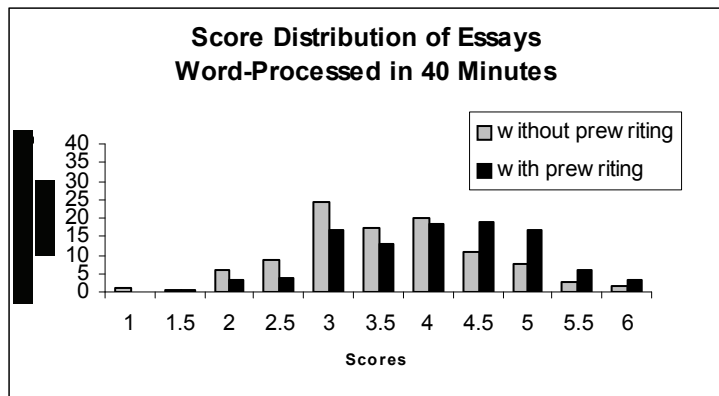
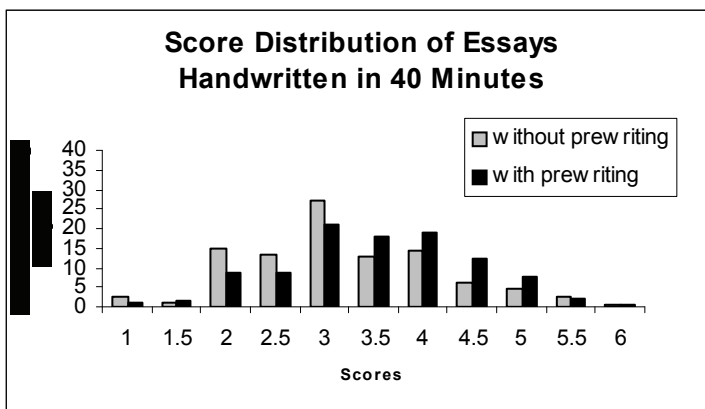
The most important increase was shown by the category of writing samples that were word-processed during the 40-minute time allotment. The mean score of essays that included prewriting was 4.1, which was a score 0.5 higher than the essays that did not include prewriting.

There was also an important difference in the number of students whose essays scored at and above the proficient 4.0 score point when prewriting was used for essays that were word-processed in 40 minutes. Of the students who made use of prewriting techniques, 62.9 % scored at and above the 4.0 level, compared to 42.8 % who scored 4.0 and above without utilizing prewriting. Thus, 47.0 % more students scored at and above the proficient 4.0 score point when prewriting was used.

Prewriting Results with Handwritten Essays

This category of writing samples that were handwritten in 40 minutes showed a mean score increase of 0.3 with prewriting. Those that included prewriting had a mean score of 3.5, and those that did not show prewriting had a mean score of 3.2.

There was an important difference in the number of students whose essays scored at and above the proficient 4.0 score point when prewriting was used for essays that were handwritten in 40 minutes. Of the students who made use of prewriting techniques, 41.9 % scored at and above the 4.0 level, compared to 28.1 % who scored 4.0 and above without utilizing prewriting. Thus, 49.1 % more students scored at and above the proficient 4.0 score point when prewriting was used.



Conclusion

As the data have shown, there is a positive correlation between prewriting and holistic scores on a direct writing assessment. The element of time is the most constraining factor of a direct writing assessment; therefore, students who plan their writing will take and are better prepared to use the time allotted, regardless of how long that time is. It is recommended that students use the first quarter of their available minutes for planning. This schedule provides students who take the Montana Writing Assessment with an average of 10 minutes for prewriting. There was no single best method of prewriting; therefore, teachers must provide students with opportunities to practice many prewriting techniques to produce a better piece of writing and motivate their students to see the value of utilizing prewriting techniques. This study supports the efforts of teachers who will use the results of prewriting techniques found through this study in order to help students master the standards for proficient writing as measured by direct writing assessments for college entrance, such as the ACT, SAT, and the Montana Writing Assessment.

Source

The complete results of this study will be available later this summer through the UM-Missoula and UM-Western libraries, in a dissertation titled *The Relationship between Prewriting and Holistic Scores of a Direct Writing Assessment* by Robyn Wingo.

The Writing Proficiency Initiative Underscores the Importance of Academics in College Preparation

- Survey data from the MUS Writing Assessment shows that 82.6% of these high school juniors plan to continue their educations through post-secondary education. Preparation is essential to their success.
- Data about college entrance and AP test scores, post-secondary plans, and college-going rates are published in many schools' profiles. School leaders understand that the quality of their educational programs can be determined, in part, by how well students perform on these measures.
- A 1998 Survey of School Superintendents showed that 81% believe that college admissions exams, such as SAT and ACT are "good to strong" indicators of school effectiveness (Farrier, 1998).
- Research substantiates that virtually all of our students have the potential to learn at a high level ***so long as they have essential prerequisite knowledge*** (Gardner, 2002). Measuring those prerequisite skills and knowledge early so that the necessary remedial instruction can be delivered before students enter post-secondary institutions helps all students reach their full educational potential more efficiently than waiting for them to struggle in an unfamiliar environment while paying tuition.
- The Montana Association of Secondary School Principals has embraced the principals of Breaking Ranks II, which encourages state leaders to "develop more coherent K-16 systems—thinking of high school as a bridge between elementary/middle school and postsecondary education rather than as an end point." The cross-level collaboration found in the development, administration, training and scoring of the MUS Writing Assessment represents a concrete pillar of that bridge.

The MUS Writing Assessment Has Generated Much Needed Data

- 21,518 tests have been scored, generating data that correlates test scores to ethnicity, gender, school size, instructional practices, use of the writing process and of computers in the composition process, district testing practices, and more.
- To date, OCHE has published and posted 18 newsletters, filled with data about test results.
- Every participating school receives "Strength and Weakness" data and graphs to help them improve their writing programs. Schools that have actively participated tend to earn the highest mean scores and have generally increased their scores over time. Whole school mean scores ranged from 1.9 to 4.5 in 2005.
- Inter-rater reliability for the 2004 test was calculated at .8644 (Cronbach's Alpha). Each year, inter-rater reliability is studied for each of the scoring sites in order to maintain quality and consistency.
- The **Dropout Study** (Colling, 2005), commissioned by Billings School District #2, used 497 MUSWA essays to triangulate data on why students drop out of high school and to generate recommendations for addressing this problem.
- A doctoral dissertation, **The Relationship Between Prewriting and Holistic Scores of a Direct Writing Assessment** (Wingo, 2005), analyzed the prewriting strategies of 3,808 students. Findings showed significantly higher scores among students who employed the prewriting (planning) strategies of outlining, creating T-Charts, or listing. Students who drafted a response, then rewrote it in the test booklet scored lower, on average, than students who employed no prewriting strategies.
- Preliminary studies of predictive validity have shown a positive correlation between Writing Assessment scores and freshmen GPA. Further studies are planned.
- Additional studies will contribute to the research base on writing assessment, models of professional development, approaches to writing, and writing instruction.



Student Assistance Foundation Funds Web Assistance

The Student Assistance Foundation of Montana (SAF) is interested in ensuring that students will be successful when they enter the University System. For the fourth year, SAF is funding this forward-thinking web-based tutorial designed to help Montana students prepare for and/or improve their scores on the Montana University System Writing Assessment. The website includes the scoring rubric, with excerpts from sample essays. "Annotations" describe how certain features of an essay were scored and there are released and non-operational prompts for students to write about as practice. During the 2005 school year, 8,624 students and/or teacher accessed the site.

The site has the capacity to accept student essays submitted electronically and send those essays by rotation to the trained teacher/scorers who provide feedback to students about how their essays are scored. Any juniors in schools participating in the writing field test can log-on to use the test. Webscorers are paid \$5 for the first 5 essays scored, and \$3 each thereafter. Teachers who have experience as onsite scorers can apply to become webscorers.

This site is hosted at the MSU Great Falls College of Technology and funded by the Student Assistance Foundation of Montana. It can be accessed at <http://webwriters.msugf.edu/>.



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*Writing Proficiency
Admissions Standards*