

## **Four-Year Study of the Impact of the ZAPS ACT Test-Preparation Class on ACT Composite Performance, Melissa Whitman**

### **Study Questions**

- 1) Does the ZAPS ACT Test-Preparation Class have a significant impact on the ACT Composite Score?
- 2) Is the ZAPS class more effective if students are allowed a longer period of study and practice before taking the ACT?

### **Summary of the Study**

Juniors who had never taken the ACT were encouraged to sign up for the October or December test date. This provided baseline scores for the purpose of evaluating the effectiveness of the ZAPS ACT Test-Preparation Class, which were scheduled in late February or early March. Following the ZAPS class, students again took the ACT in April or June. Over a period of four years, there were 94 students who took both of the ACT tests and also participated in a ZAPS class. This is about 15% of the total number of students who took the ACT during this period. Five of these students were eliminated from the study because they had taken the test multiple times prior or had participated in extensive outside test preparation courses.

**Conclusion on Question 1:** As shown on Table 1, the 89 students in the study scored an average ACT Composite of 19.78 on the initial test. This score was slightly below the district average of 20.1. On the second test, these students scored an average ACT Composite of 21.59, an average increase of 1.81. Depending on a student's percentile rank, this increase translates to 11-14 percentile points improvement. This change is significant, both statistically and practically.

**Conclusion on Question 2:** On the 89 students in the study, 67 of them took the post test in April, 4-5 weeks after completing the ZAPS class. The other 22 students took the post test in June, about 12-13 weeks after completing the class. As shown on Table 2, the change in the April scores averaged 1.81. As shown on Table 3, the change in the June scores averaged 1.82. There is no indication that the additional study time makes any difference in the post test score.

### **Limitations of the Data**

The data suggests that the ZAPS Seminar had the greatest impact with students who initially scored between 18 and 24, although our sample size at each score point was not large enough to draw any firm conclusions.

In general, students who scored 30 or higher on the first test chose not to take the ZAPS class or retake the ACT. With only one student in the data set, we cannot make any statements about effectiveness of ZAPS with the top 1%.

No record was kept of the amount of time each student studied the materials after attending the ZAPS class, so it is not possible to correlate study time with performance.

### **Questions for Further Study**

- What is the impact of the ZAPS class on students within each quartile?
- What is the impact by subject area?
- What is the relationship between study time and performance on the post test?
- Would there be a greater benefit if the study time were guided by a teacher or tutor?

*Whitman 1*

Table 1

Pretest and Post Test ACT Scores of 89 Students Who Participated in the ZAPS Test-Preparation Class

Student	First ACT Composite		Second ACT Composite		Change
1	Oct	17	Apr	19	2
2	Oct	15	Apr	17	2
3	Oct	18	Apr	19	1
4	Oct	19	Apr	21	2
5	Oct	15	Apr	16	1
6	Oct	20	Apr	23	3
7	Oct	22	Apr	22	0
8	Oct	26	Apr	31	5
9	Oct	15	Apr	14	-1
10	Oct	18	Jun	18	0
11	Oct	18	Jun	19	1
12	Oct	25	Jun	25	0
13	Dec	19	Apr	20	1
14	Dec	18	Apr	17	-1
15	Dec	16	Apr	18	2
16	Dec	20	Apr	22	2
17	Dec	25	Apr	27	2
18	Dec	21	Apr	23	2
19	Dec	26	Jun	26	0
20	Dec	20	Jun	22	2
21	Dec	29	Jun	29	0
22	Oct	24	Apr	27	3
23	Oct	22	Apr	23	1
24	Oct	23	Apr	24	1
25	Oct	24	Apr	27	3
26	Oct	20	Apr	21	1
27	Oct	19	Apr	19	0
28	Oct	22	Apr	25	3
29	Oct	16	Apr	16	0
30	Oct	26	Jun	26	0
31	Oct	25	Apr	28	3
32	Oct	23	Jun	26	3
33	Oct	20	Jun	23	3
34	Oct	24	Jun	25	1
35	Oct	19	Jun	22	3
36	Dec	20	Apr	21	1
37	Dec	26	Apr	29	3
38	Dec	17	Apr	19	2
39	Dec	20	Apr	23	3
40	Dec	14	Apr	15	1
41	Dec	19	Apr	22	3
42	Dec	22	Apr	25	3
43	Dec	21	Apr	24	3
44	Dec	21	Apr	25	4
45	Dec	23	Apr	22	-1

Student	First ACT Composite		Second ACT Composite		Change
46	Dec	17	Apr	19	2
47	Dec	17	Apr	16	-1
48	Dec	19	Apr	22	3
49	Dec	15	Jun	20	5
50	Dec	18	Jun	20	2
51	Dec	19	Jun	23	4
52	Oct	26	Apr	26	0
53	Oct	23	Apr	24	1
54	Oct	22	Apr	25	3
55	Oct	16	Apr	15	-1
56	Oct	18	Apr	18	0
57	Oct	16	Apr	20	4
58	Oct	13	Apr	17	4
59	Oct	20	Apr	21	1
60	Oct	15	Jun	16	1
61	Oct	17	Jun	18	1
62	Dec	19	Apr	20	1
63	Dec	17	Apr	18	1
64	Dec	20	Apr	24	4
65	Dec	16	Apr	18	2
66	Dec	22	Apr	27	5
67	Dec	18	Apr	21	3
68	Dec	20	Apr	21	1
69	Dec	25	Jun	29	4
70	Oct	21	Apr	22	1
71	Oct	16	Apr	18	2
72	Oct	24	Apr	26	2
73	Oct	17	Apr	20	3
74	Oct	19	Apr	19	0
75	Oct	31	Apr	31	0
76	Oct	20	Apr	23	3
77	Oct	14	Apr	17	3
78	Oct	20	Jun	21	1
79	Oct	14	Jun	14	0
80	Oct	22	Jun	23	1
81	Dec	14	Apr	19	5
82	Dec	15	Apr	15	0
83	Dec	19	Apr	19	0
84	Dec	19	Apr	20	1
85	Dec	20	Apr	22	2
86	Dec	22	Apr	24	2
87	Dec	13	Apr	17	4
88	Dec	19	Jun	23	4
89	Dec	21	Jun	25	4
<b>Average</b>		<b>19.78</b>		<b>21.59</b>	<b>1.81</b>

*Whitman 2*

Table 2  
 Post Test Allowing One Month of Study After the ZAPS Class

**Post Test Allowing One Month of Study After the Seminar**

Student	First ACT Composite	Second ACT Composite	Change
1	Oct 17	Apr 19	2
2	Oct 15	Apr 17	2
3	Oct 18	Apr 19	1
4	Oct 19	Apr 21	2
5	Oct 15	Apr 16	1
6	Oct 20	Apr 23	3
7	Oct 22	Apr 22	0
8	Oct 26	Apr 31	5
9	Oct 15	Apr 14	-1
13	Dec 19	Apr 20	1
14	Dec 18	Apr 17	-1
15	Dec 16	Apr 18	2
16	Dec 20	Apr 22	2
17	Dec 25	Apr 27	2
18	Dec 21	Apr 23	2
22	Oct 24	Apr 27	3
23	Oct 22	Apr 23	1
24	Oct 23	Apr 24	1
25	Oct 24	Apr 27	3
26	Oct 20	Apr 21	1
27	Oct 19	Apr 19	0
28	Oct 22	Apr 25	3
29	Oct 16	Apr 16	0
31	Oct 25	Apr 28	3
36	Dec 20	Apr 21	1
37	Dec 26	Apr 29	3
38	Dec 17	Apr 19	2
39	Dec 20	Apr 23	3
40	Dec 14	Apr 15	1
41	Dec 19	Apr 22	3
42	Dec 22	Apr 25	3
43	Dec 21	Apr 24	3
44	Dec 21	Apr 25	4
45	Dec 23	Apr 22	-1
46	Dec 17	Apr 19	2
47	Dec 17	Apr 16	-1
48	Dec 19	Apr 22	3
52	Oct 26	Apr 26	0
53	Oct 23	Apr 24	1
54	Oct 22	Apr 25	3
55	Oct 16	Apr 15	-1
56	Oct 18	Apr 18	0
57	Oct 16	Apr 20	4
58	Oct 13	Apr 17	4
59	Oct 20	Apr 21	1
62	Dec 19	Apr 20	1
63	Dec 17	Apr 18	1
64	Dec 20	Apr 24	4
65	Dec 16	Apr 18	2
66	Dec 22	Apr 27	5
67	Dec 18	Apr 21	3
68	Dec 20	Apr 21	1
70	Oct 21	Apr 22	1
71	Oct 16	Apr 18	2
72	Oct 24	Apr 26	2
73	Oct 17	Apr 20	3
74	Oct 19	Apr 19	0
75	Oct 31	Apr 31	0
76	Oct 20	Apr 23	3
77	Oct 14	Apr 17	3
81	Dec 14	Apr 19	5
82	Dec 15	Apr 15	0
83	Dec 19	Apr 19	0
84	Dec 19	Apr 20	1
85	Dec 20	Apr 22	2
86	Dec 22	Apr 24	2
87	Dec 13	Apr 17	4
<b>Average</b>	19.5	21.3	1.81

*Whitman 3*

Table 3  
Post Test Allowing Three Month of Study After the ZAPS Class

**Post Test Allowing Three Months of Study After the Seminar**

Student	First ACT Composite		Second ACT Composite		Change
10	Oct	18	Jun	18	0
11	Oct	18	Jun	19	1
12	Oct	25	Jun	25	0
19	Dec	26	Jun	26	0
20	Dec	20	Jun	22	2
21	Dec	29	Jun	29	0
30	Oct	26	Jun	26	0
32	Oct	23	Jun	26	3
33	Oct	20	Jun	23	3
34	Oct	24	Jun	25	1
35	Oct	19	Jun	22	3
49	Dec	15	Jun	20	5
50	Dec	18	Jun	20	2
51	Dec	19	Jun	23	4
60	Oct	15	Jun	16	1
61	Oct	17	Jun	18	1
69	Dec	25	Jun	29	4
78	Oct	20	Jun	21	1
79	Oct	14	Jun	14	0
80	Oct	22	Jun	23	1
88	Dec	19	Jun	23	4
89	Dec	21	Jun	25	4
<b>Average</b>	<b>20.59</b>		<b>22.41</b>		<b>1.82</b>