

**New Student Orientation
Summer 2013 Analysis**

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Office of Planning and Institutional Research



Executive Summary

Several statistical tests were conducted to evaluate the effectiveness of TCC's Summer 2013 New Student Orientation. In particular, analyses examined whether students who completed the orientation reported increases over their pre-orientation scores on knowledge about TCC services, comfort level with college, and understanding about success in college. Although the New Student Orientation is open to all students, one of the target populations is TCC's cohort of first-time degree- or certificate-seeking students who enrolled in the fall and who first entered TCC in the summer or fall of the cohort year. Thus, additional analyses were performed to explore the effectiveness of the orientation for TCC's Fall 2013 first-time cohort. Specifically, pre/post survey and assessment comparisons were examined for this group and further tests were conducted to compare the course grades and fall-to-spring persistence rates of students in the cohort who did and did not attend orientation.

Participants

The same survey and assessment instrument was administered both at the beginning and again at the end of each orientation session. A total of 1,399 students responded to at least a portion of both pre and post administrations of the survey and assessment instrument. Of those students, 988 (70.6%) were in the Fall 2013 cohort of first-time degree/certificate-seeking students. These 988 students represented 30.2% of the entire Fall 2013 first-time cohort at TCC (N = 3,267).

Survey

Students responded to 15 New Student Orientation survey items on a 4-point scale (from 1 = *strongly disagree* to 4 = *strongly agree*) both before and after going through orientation. To examine changes in students' responses on the survey items, dependent-samples *t*-tests were conducted for each pre and post item pair, with a 95% confidence level. Responses of "not applicable" were not used. Mean post-orientation scores were significantly higher than the mean pre-orientation scores for 13 of the 15 survey items. The only items for which the difference between pre- and post-orientation scores was not significant were "I am comfortable in my ability to balance my life outside of college with my life at school" (mean decrease of .03) and "I plan to get a degree from TCC before moving on to the next stage of my life" (mean increase by .03). Table 1 includes the means and standard deviations for pre and post item pairs and Table 2 presents the results of the *t*-tests for each pair.

Table 1. Pre- and Post-orientation Means on Survey Items (Statistically Significant Differences in Yellow)

Item	Survey Item	N Pairs	Test	Mean	Std. Deviation
1	I am comfortable about attending college.	1254	Pre	3.42	.63
			Post	3.49	.60
2	I believe college will be just like high school.	1249	Pre	1.94	.68
			Post	2.09	.89
3	I am comfortable in my ability to balance my life outside of college with my life at school.	1228	Pre	3.38	.63
			Post	3.35	.59
4	I plan to get a degree from TCC before moving on to the next stage of my life.	1166	Pre	3.28	.78
			Post	3.31	.72
5	I know how to log in and access TCC's various electronic resources (i.e., TED, MyTCC, Blackboard).	1228	Pre	3.14	.82
			Post	3.39	.59
6	I am comfortable using TCC's electronic resources to enroll, obtain information and check online resources.	1209	Pre	3.09	.74
			Post	3.35	.60
7	I know where to go for assistance if I have problems with TCC's electronic resources.	1221	Pre	2.65	.86
			Post	3.33	.62
8	I understand the enrollment process more clearly.	1219	Pre	2.91	.70
			Post	3.36	.59
9	I understand how to use the academic calendar to know when to add, drop, or withdraw from a class.	1219	Pre	2.79	.84
			Post	3.37	.59
10	I understand the importance of completing the Educational Planning Worksheet early in my college career.	1184	Pre	2.77	.86
			Post	3.33	.62
11	I understand that Academic Advisors assist students with choosing classes that relate to their academic goals.	1229	Pre	3.35	.61
			Post	3.45	.55
12	I understand that students who have not decided on a major should meet regularly with career services.	1195	Pre	3.17	.64
			Post	3.40	.58
13	I understand that I should plan to spend 2-3 hours outside class studying for each hour I am in class.	1234	Pre	3.29	.63
			Post	3.46	.57
14	I know there is a financial aid office on each campus.	1217	Pre	3.26	.71
			Post	3.47	.58
15	I know where to go for assistance if I have problems with the financial aid process.	1227	Pre	3.03	.81
			Post	3.44	.59

Table 2. Dependent t-test Results for Survey Items (Statistically Significant Differences in Yellow)

Survey Item		t	df	p-value
Pair 1	I am comfortable about attending college.	-4.02	1253	< .001
Pair 2	I believe college will be just like high school.	-6.56	1248	< .001
Pair 3	I am comfortable in my ability to balance my life outside of college with my life at school.	1.40	1227	.161
Pair 4	I plan to get a degree from TCC before moving on to the next stage of my life.	-1.39	1165	.164
Pair 5	I know how to log in and access TCC's various electronic resources (i.e., TED, MyTCC, Blackboard).	-11.30	1227	< .001
Pair 6	I am comfortable using TCC's electronic resources to enroll, obtain information and check online resources.	-12.31	1208	< .001
Pair 7	I know where to go for assistance if I have problems with TCC's electronic resources.	-27.38	1220	< .001
Pair 8	I understand the enrollment process more clearly.	-21.72	1218	< .001
Pair 9	I understand how to use the academic calendar to know when to add, drop, or withdraw from a class.	-24.46	1218	< .001
Pair 10	I understand the importance of completing the Educational Planning Worksheet early in my college career.	-22.01	1183	< .001
Pair 11	I understand that Academic Advisors assist students with choosing classes that relate to their academic goals.	-5.38	1228	< .001
Pair 12	I understand that students who have not decided on a major should meet regularly with career services.	-11.66	1194	< .001
Pair 13	I understand that I should plan to spend 2-3 hours outside class studying for each hour I am in class.	-9.33	1233	< .001
Pair 14	I know there is a financial aid office on each campus.	-10.22	1216	< .001
Pair 15	I know where to go for assistance if I have problems with the financial aid process.	-17.50	1226	< .001

When examining the survey results of orientation attendees in the Fall 2013 cohort of first-time degree/certificate-seeking students (N = 988), the only difference from the overall results was that the difference between the pre- and post-orientation means for one item was significant for this cohort but not when the scores of all attendees were combined. Specifically, the first-time students' post-mean was significantly lower than the pre-mean for the item, "I am comfortable in my ability to balance my life outside of college with my life at school" (mean decrease of .04).

Assessment

Students completed a 10 item multiple choice assessment before and after the orientation program. Each response was coded as 1 (correct) or 0 (incorrect) and valid pair responses were examined by item using dependent-samples *t*-tests. Blank responses invalidated a score pair for the analysis. Table 3 includes the numbers of all matched pre and post score pairs as well as the means and standard deviations for the pre and post scores on a scale of 0 – 1. As seen in Table 4, all item pairs demonstrated a statistically significant change in the positive direction in a 95% confidence interval, with the exception of assessment item 4.

Additional analysis was performed examining the overall mean student score change on the orientation assessment. Using the same coding scheme as previously mentioned, student score pairs were included for analysis if all ten assessment items were completed for both the pre and post assessments. A total of 1,151 valid pair scores were analyzed using a dependent-samples *t*-test. Results indicated a statistically significant increase in scores from the pre-test ($M = 6.77, SD = 1.74$) to the post-test ($M = 7.67, SD = 1.57$), at the 95% confidence level, $t(1150) = -17.86, p < .001$.

Table 3. Pre- and Post-orientation Means on Assessment Items (Statistically Significant Differences in Yellow)

Item	Assessment Item	N Pairs	Test	Mean Correct	Std. Deviation
1	Which of the following offices provides assistance with technical issues involving e-mail, the enrollment system (TED), and TCC's teaching platform (Blackboard)?	1334	Pre	.40	.49
			Post	.53	.50
2	Academic support labs are available in which of the following areas?	1390	Pre	.87	.34
			Post	.93	.26
3	The primary resource for personalized information about your student Financial Aid account (status) can be found:	1321	Pre	.62	.48
			Post	.76	.43
4	Which office provides the following services: advisement, career services, student job placement, graduation checks, and information about advanced placement?	1342	Pre	.62	.49
			Post	.63	.48
5	Which office should a student go to in order to obtain a TCC student ID card?	1357	Pre	.45	.50
			Post	.73	.44
6	Which of the following services are provided to TCC students for no additional fees beyond those assessed in standard tuition and fees?	1360	Pre	.73	.44
			Post	.89	.32
7	The document which an instructor will distribute during the first class session will serve as a contract/roadmap for the class is:	1349	Pre	.79	.41
			Post	.90	.30
8	As a college student, I should plan to spend how much time (on average) doing homework and course preparation for each credit hour of class time?	1352	Pre	.79	.41
			Post	.91	.29
9	Which of the following is true?	1320	Pre	.88	.33
			Post	.94	.24
10	If for some reason I need to withdraw from class, I can do so:	1306	Pre	.29	.45
			Post	.33	.47

Table 4. Dependent t-test Results for Assessment Items (Statistically Significant Differences in Yellow)

Assessment Item		t	df	p-value
Pair 1	Which of the following offices provides assistance with technical issues involving e-mail, the enrollment system (TED), and TCC's teaching platform (Blackboard)?	-9.23	1333	< .001
Pair 2	Academic support labs are available in which of the following areas?	-6.33	1389	< .001
Pair 3	The primary resource for personalized information about your student Financial Aid account (status) can be found:	-9.88	1320	< .001
Pair 4	Which office provides the following services: advisement, career services, student job placement, graduation checks, and information about advanced placement?	-.78	1341	.433
Pair 5	Which office should a student go to in order to obtain a TCC student ID card?	-19.58	1356	< .001
Pair 6	Which of the following services are provided to TCC students for no additional fees beyond those assessed in standard tuition and fees?	-12.78	1359	< .001
Pair 7	The document which an instructor will distribute during the first class session will serve as a contract/roadmap for the class is:.	-9.13	1348	< .001
Pair 8	I understand the enrollment process more clearly. As a college student, I should plan to spend how much time (on average) doing homework and course preparation for each credit hour of class time?	-9.61	1351	< .001
Pair 9	Which of the following is true?	-6.31	1319	< .001
Pair 10	If for some reason I need to withdraw from class, I can do so:	-2.48	1305	.013

The same significant differences on the assessment noted above were found when examining the results of all orientation attendees and when examining just those of students in the Fall 2013 cohort of first-time degree/certificate-seeking students (N = 988).

Course Grades and Persistence

Of the 3,267 students in TCC's Fall 2013 cohort of first-time degree/certificate-seeking students, 988 (30.2%) attended the New Student Orientation in Summer 2013, leaving 2,279 (69.8%) who did not. Using chi-square tests with a 95% confidence level, these two groups of students were compared on their rates of course success (defined as earning a grade of C or better) and persistence from the fall to their first spring semester. Findings revealed that students in the first-time cohort who attended orientation (2,594 of 3,639 grades = **71.3%**) had a significantly higher rate of success across all of their Fall 2013 courses than did those who did not attend orientation (4,326 of 7,025 grades = **61.6%**). Moreover, students in the first-time cohort who attended orientation (804 of 988 students = **81.4%**) persisted to their first spring at a significantly higher rate than did those who did not attend orientation (1,522 of 2,279 students = **66.8%**).

Conclusions

Survey and assessment results suggest that students who attended TCC's New Student Orientation learned a lot about college in general and, more specifically, about how to navigate TCC's campuses, systems, and offices. Although it is not possible to draw causal conclusions based on these results, findings also revealed that first-time degree/certificate-seeking students who attended the orientation demonstrated better performance in their classes overall and had higher rates of fall-to-spring persistence than those who did not attend.