

Report on Testing Center Preparations for Spring 2011 Finals and Results

Problem

From FY 2009 through FY 2011 we have seen an annual growth rate of tests of 17% per year.

During the Fall 2010 finals week we handled 1749 tests. Students suffered with wait times of 2 to 4 hours over 4 of the days in finals week. Sometimes it took students 45 minutes to register for a test, then they would have to wait for a testing seat.

The CTC saw a 26% increase in tests during Fall finals week from Fall 2009 to Fall 2010. If there is a similar increase in Fall 2011 we can anticipate about 2200 tests. However, this number may be conservative, based on anticipated student enrollment for Fall.

Analysis

The ITT workgroup, of which CTC is a part, reviewed testing data collected over several years and testing patterns during finals weeks. ITT examined CTC's workflows and space and technology capacity. We reviewed comments from our online student survey.

CTC discussed the fact that during finals week there are days of either very low usage of the testing seats and days when demand was well beyond capacity. Students typically prefer to wait until the last few days of the exam period before taking their tests. CTC learned that on days they had about 300 tests they started to see waiting times of 30 minutes.

With the increase in student enrollments and distance education offerings and recent reductions in testing space CTC can no longer effectively handle the demand. To make matters worse, CTC anticipates the demand to grow.

The ITT workgroup brainstormed solutions. The goals were to: distribute demand over the 7 days of the testing week, decrease make-up testing, increase testing seats, and improve the handling of test-taking transactions. We decided to implement as many improvements as possible to test them during Spring 2011 finals.

Results

Our efforts resulted in an increase in efficiency. In Fall 2010, CTC saw a 30 minute wait on the day that they administered about 300 tests. In Spring 2011 CTC saw a 30 minute wait on the day that they administered 341 tests. This means they handled more tests with less waiting time (see Chart 1 below). We also improved in the distribution of tests over the finals period. CTC handled 201 tests over the

weekend (in Fall we handled 20 tests over the weekend). In Spring 2011 CTC had a waiting line on only one day.

These results were because of a new staggered testing schedule, improvements in check-in procedures, banning make-up testing during finals week, a small PR campaign, and increasing space, IT, and personnel capacity (see section on Measures Taken for more details).

Another effect of our new staggered testing schedule and publicity campaign was a decrease in demand for testing. Kahikoluamea pulled approximately 229 paper tests for PCM 23, Math 24, 25, and 81. Many F2F instructors administered their tests in their classrooms.

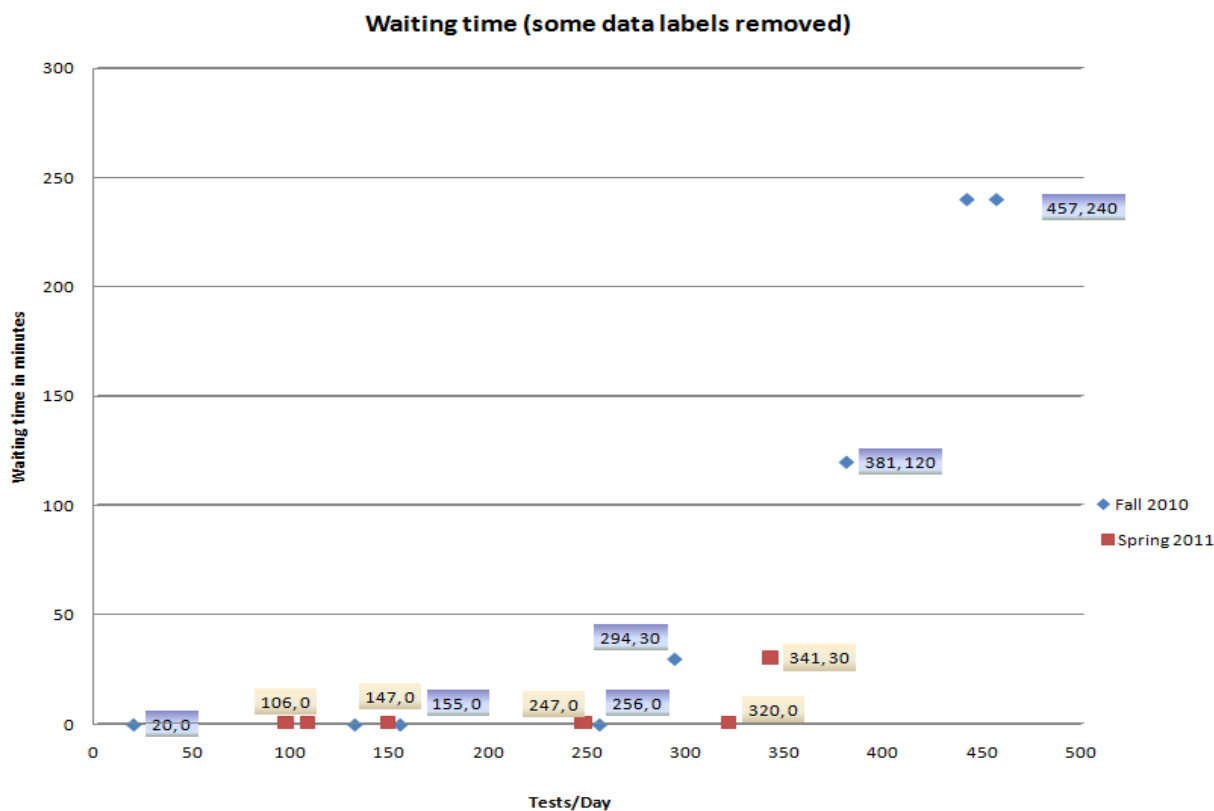


Chart 1. The blue scatterplot shows how, in Fall 2010, waiting time increased as a function of the number of tests administered that day. The brown scatterplot shows how, in Spring 2011, we were able to accommodate more students with less waiting time.

Measures Taken

1. To reduce and distribute demand for testing:

- The Head Librarian worked with the Vice Chancellor for Academic Affairs to implement a staggered testing schedule,

- instructors opened their online tests over the weekend and shut down their tests on specific dates,
- CTC conducted a small PR campaign to warn students to take tests early and to ask faculty to restrict their student testing periods, and
- CTC banned all make-up tests and semester tests during finals week.

2. To increase capacity:

Space: ITT Found space for about 33 additional PC test seats and 10 paper test seats. CTC

- rearranged Lama 101 for more online testing,
- reserved Lama 111A for paper testers,
- reserved and arranged Lama 116 for online testers, and
- reserved Lama 201 for paper testers.

Technology: The ITT workgroup

- borrowed and prepared 33 laptops and thin clients for online testing and
- made network changes in 3 rooms to accommodate additional testing seats.

Hours: The Library and CTC

- opened the Testing Center on Saturday and Sunday and
- kept the Testing Center open longer hours for a total of 59.5 hours.

Personnel: CTC

- scheduled student help to accommodate student help's need to take time off, for their exams and increased student staffing behind the check-in desk and
- organized a faculty and staff volunteer team to proctor paper tests and escort test takers to overflow rooms.

3. Improved the check-in, test eligibility verification, and check-out processes: CTC

- increased the check-in stations to two PCs,
- instituted a pre-screening process,
- doubled capacity for check-out processes, and
- purchased a number sign that could handle over 99 students.

Preparations for Next Fall 2011 Finals Week

WE HAVE MADE SIGNIFICANT IMPROVEMENTS in testing capacity. In Fall 2010 if we had 300 tests in a day students waited 30 minutes. In Spring 2011 the count went up to 341 before we saw waits of 30 minutes.

Fall final exam weeks historically see many more tests than Spring final exam weeks. If Fall 2011 daily numbers go over 400 (see Table 1) and we do not increase the current number of testing seats, even with the new systems in place we expect waiting times of well over 150 minutes (see chart 2).

In other words, we can handle 1,501 tests during a finals week. We cannot handle what we anticipate to be at least 2,200 tests during Fall 2011 finals week. There is no way we can guarantee an even spread of testing demand (314+ per day) over the seven days and our test demand estimate of 2,200 at this point is conservative.

		Tests per day	Worst wait time-minutes
Fri	Finals Day 1	195	0
Sat	Finals Day 2	106	0
Sun	Finals Day 3	95	0
Mon	Finals Day 4	370	75
Tue	Finals Day 5	420	150
Wed	Finals Day 6	500	+240
Thu	Finals Day 7	513	+240
	Total	2200	

Table 1. Projected Number of Tests per Day During Fall 2011 Finals Week

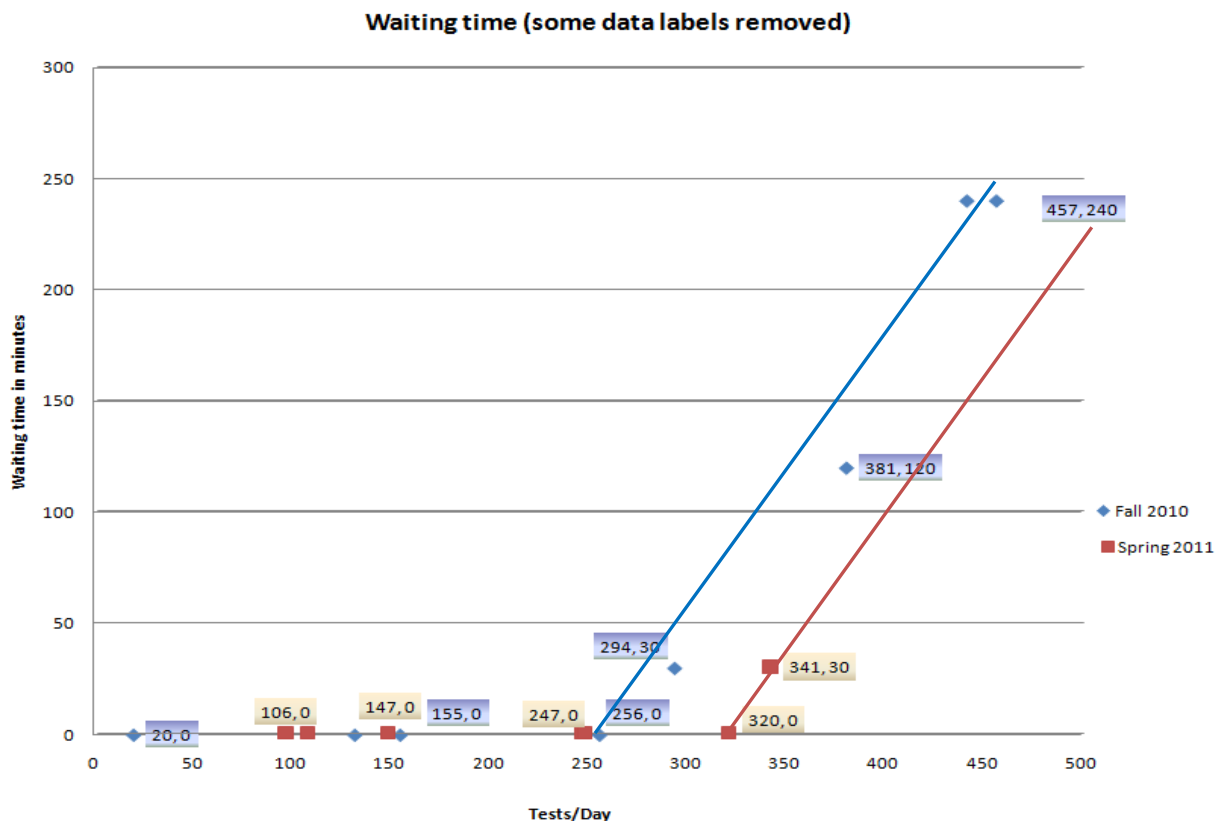


Chart 2: Very rough projection of waiting times with new procedures in place.

Our plans to prepare for Fall 2011's finals period are:

1. Continue to enhance all our policies and procedures.
2. Continue advertising our policies to push the redistribution of tests across all testing days. We saw a marked increase in tests taken over the weekend (20 in Fall 2010, 171 in Spring 2011).
3. Get more testing seats. With a possible increase in demand of 46% we will work to increase total testing seats from 69 to approximately 101 (see Table 2).
4. Monitor demand for both online and paper testing from F2F classes. Unfortunately, because of our success in Spring 2011, we may see a return of demand for services from F2F classes. We may consider encouraging F2F instructors to proctor their own tests.
5. For the long term future, plan to renovate and make Lama 118 a testing area. We will also continue to look for alternate distance testing technologies that can provide rigorous proctored testing outside the testing center.

	FY12 Spring 2011	FY12 Fall 2011
Seats:		We will need
Online/Paper/DSSO	57/10/2	66/33/2
Total	69	101

Table 2. Available testing seats were sufficient for Spring 2011. Fall 2011 testing season will see at least a 46% increase in demand.

Submitted by Sunny Pai
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