

Momentum Absorbers: Measuring the Impact of Part-time, Course Failure, Basic Skills, Stopping Out, and Moot Courses

Nathan Dickmeyer
Erez Lenchner
Institutional Research & Assessment
December 8, 2016

If all first-time students took 15 college-level credits required for their major degree each semester, most of them could graduate in two years. The rule isn't hard and fast. Students who enroll in College Now in high school can take fewer semester to graduate, while those in a handful of majors would need an extra semester to complete their 60 plus credit programs. Still other programs have hidden pre-requisites that can add a semester.

The reasons why they do all take 15 credits each semester have to do with commitments outside the college and the need for some of them to take non-college-level developmental courses. Still others do not achieve 15 credits because of course failure, while some take course that are not required for their major.

In this paper we show the size of the shortfalls to that 15 credit ideal by the ways in which many students' credits fall short.

Findings

- LaGuardia students, on average, achieve only about 45% of the goal of 15 college-level, degree-satisfying credits per semester.
- Three reasons each constitute between 24% and 32% of the loss: part-time attendance, developmental education, and course failure.
- One-semester stop outs constitute almost 10% of the shortfall.
- CUNYStart (which might be added to the developmental shortfall) and moot credits each constitute nearly 5% of the shortfall.
- In fall semesters, developmental education appears to be the cause of the largest portion of the shortfall. In spring, developmental education drops below part-time attendance as the largest piece of the shortfall.

At whom are we looking?

We looked at all degree students enrolled in fall 2015 and spring 2016. We decided to eliminate those students who graduated in those semesters because they often only need one or two courses to graduate. We decided to also include those students enrolled in CUNYStart because they should have been part of our new student population, but were diverted into CUNYstart. Finally, we also included those students who were enrolled in both the semester previous to one of our target semesters and the semester following, but not in the target semester of

either fall 2015 or spring 2016. These students did not earn 15 credits because they took a semester off. (There were other students who were also stopping out for longer periods, including the two target semesters, but detecting them is challenging and the one-semester stop-out group is the largest.)

Once we found the group that we called “active,” meaning non-graduating plus CUNYStart plus one-semester stop outs, we multiplied this number by 15 to find our total 15-credit goal. Table 1 shows the calculation. Fall had 15,309 “active” students and spring had 14,160. These numbers resulted in goals for each semester of over 200,000 degree credits to be earned.

Active students	Fall 15 Students	Fall 15 Credits	Spring 16 Students	Spring 16 Credits
Degree enrollment @ 15 crs.	15,161	227,415	14,679	220,185
Less those who graduated @ 15 crs.	956	14,340	1,660	24,900
Net degree enrollment @ 15 crs.	14,205	213,075	13,019	195,285
<i>Adjusted net for degree duplicates</i>	<i>14,215</i>	<i>213,225</i>	<i>13,036</i>	<i>195,540</i>
One-semester stop outs @ 15 crs.	727	10,905	798	11,970
CUNY Start @ 15 crs.	367	5,505	326	4,890
<i>Total active enrollment @ 15 crs.</i>	<i>15,309</i>	<i>229,635</i>	<i>14,160</i>	<i>212,400</i>

Table 1

Enumerating the shortfall

Table 2 shows how we calculated the actual number of credits earned. The credits had to be college-level in courses with passing grades. Then we deducted credits earned in excess of 15 by the approximately 10% of the students who did. We did not want these extra credits to count against our goal of 15 credits for each student. These eager students could not sell these credits to those with fewer than 15.

We also deducted moot credits, i.e., credits not required in a major. These would not help a student graduate in four semesters.

The resulting number of credits that count toward the 15 credit goal is over 100,000 for fall and over 90,000 for spring.

Counting actual passed college-level credits	Fall 15 Students	Fall 15 Credits	Spring 16 Students	Spring 16 Credits
Passed credits	12,866	112,451	11,605	98,629
Passed credits > 15	1,185	21,549	854	15,488
Countable at 15		17,775		12,810
Excess credits to deduct		(3,774)		(2,678)
<i>Passed credits held at 15</i>		<i>108,677</i>		<i>95,951</i>
Less Moot credits passed		(5,487)		(5,334)
<i>Net passed degree credits held at 15</i>		<i>103,190</i>		<i>90,617</i>

Table 2

Table 3 shows the ways that the shortfall between the goal and actual occurs. For fall 2015, we need an explanation of how to fill the gap between the actual of 103,190 and the goal of 229,635.

Table 3 and Figure 1 show that LaGuardia students did not reach 45% of the goal. Note how developmental education decreases in proportion in the spring from the fall, and part-time attendance increases. Many new students finish their developmental requirements in the fall, but around 30% of first-time students change from full-time to part-time in the spring.

Distribution of Credits	Fall 2015		Spring 2016	
	Credits	Percentage	Credits	Percentage
Moot courses	5,487	2.4%	5,334	2.5%
CUNYStart	5,505	2.4%	4,890	2.3%
One-semester stop outs	10,905	4.7%	11,970	5.6%
Failed credit-level courses	32,983	14.4%	31,509	14.8%
Non-college-level credits	37,643	16.4%	29,561	13.9%
Not full-time	33,922	14.8%	38,519	18.1%
Passed major degree courses (up to 15)	103,190	44.9%	90,617	42.7%
<i>Total ("active" enrollment X 15)</i>	<i>229,635</i>	<i>100.0%</i>	<i>212,400</i>	<i>100.0%</i>

Table 3

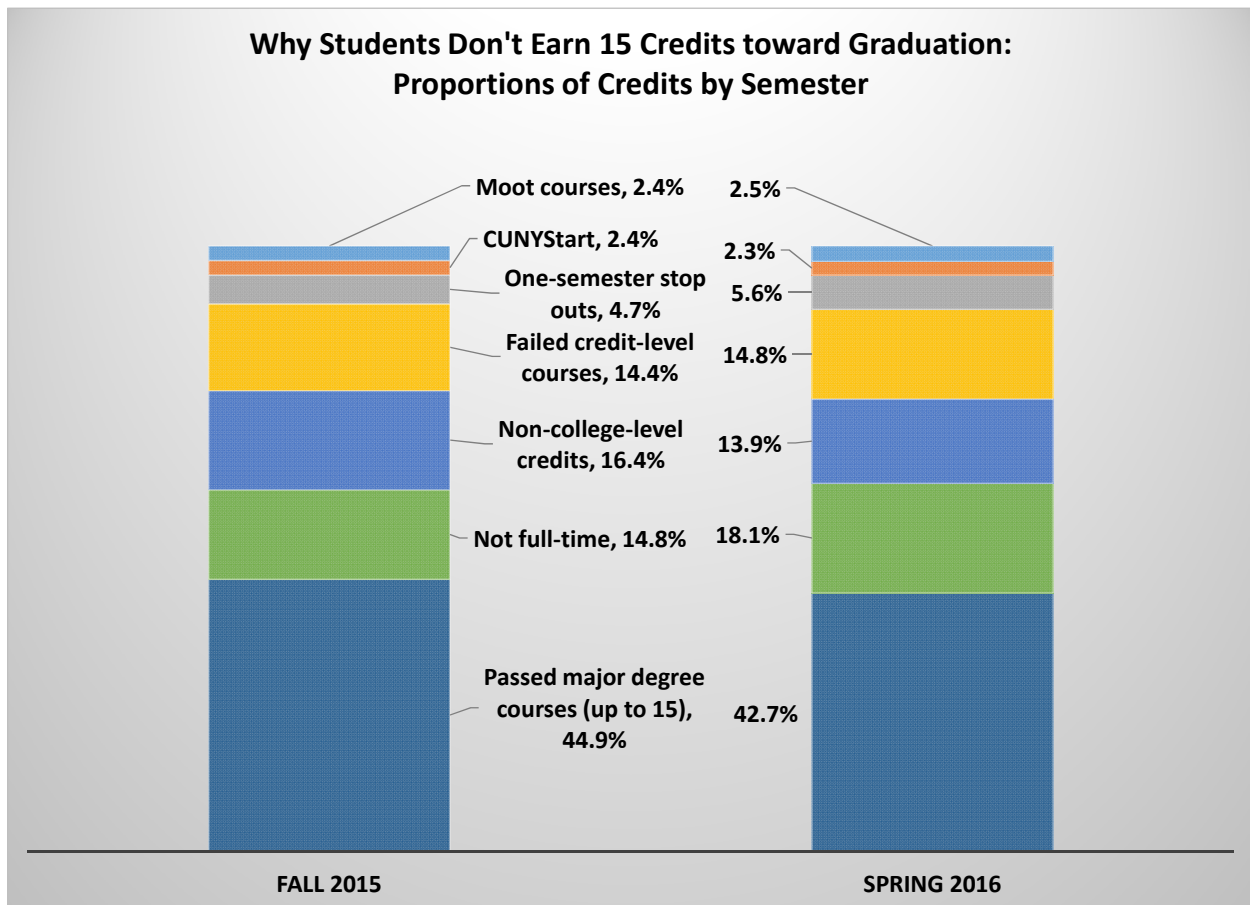


Figure 1

Figure 2 is the same as Figure 1, except the chart has been built using credits, not percentages of the goal. Spring had fewer active students and a lower goal. Note that more credits were lost due to part-time, developmental and course failure together than were earned toward the target.

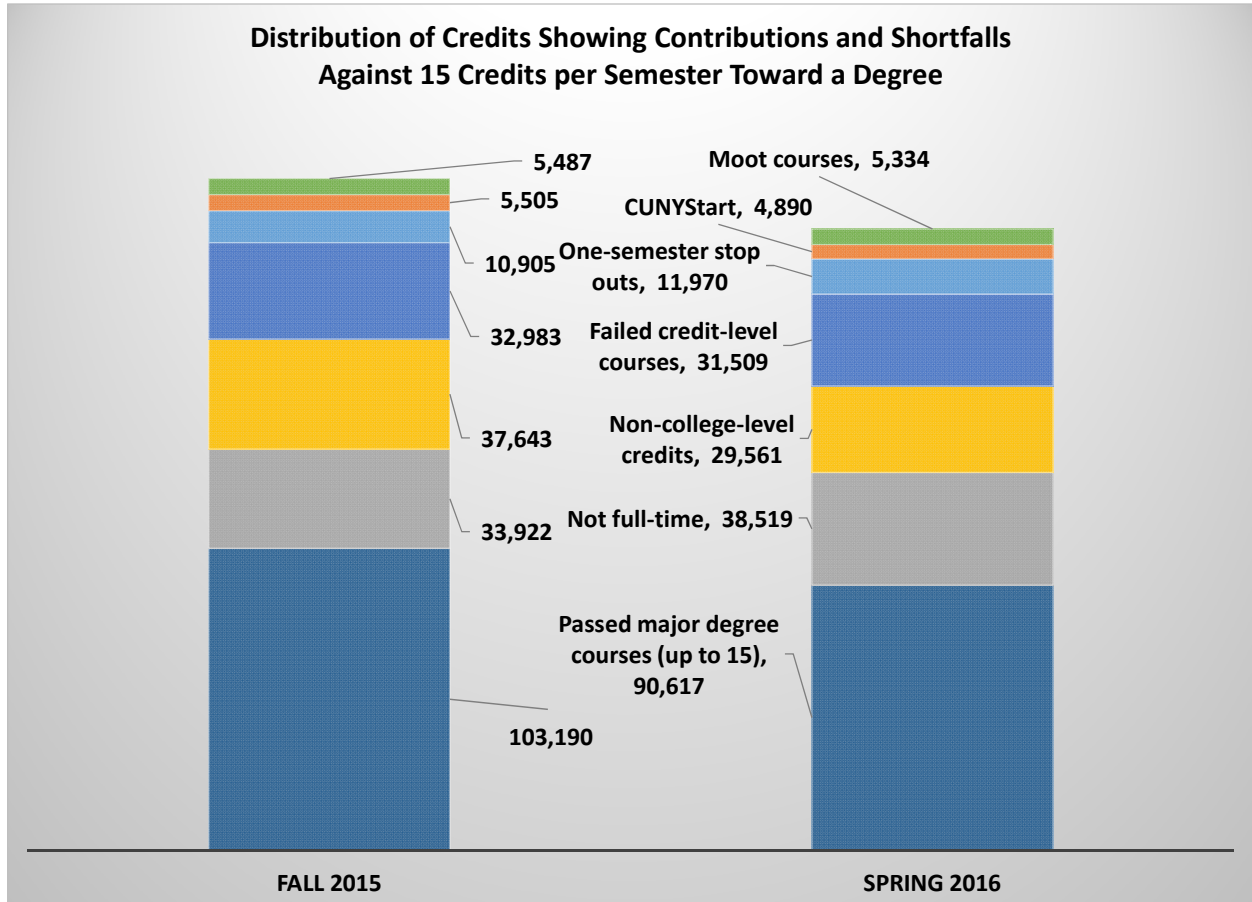


Figure 2

Table 4 and Figure 3 show the distribution of losses, giving their relative size as contributors to the shortfall.

Distribution of Losses Only	Fall 2015	Spring 2016
Moot courses	4.3%	4.4%
CUNYStart	4.4%	4.0%
One-semester stop outs	8.6%	9.8%
Failed credit-level courses	26.1%	25.9%
Non-college-level credits	29.8%	24.3%
Not full-time	26.8%	31.6%
	100.0%	100.0%

Table 4

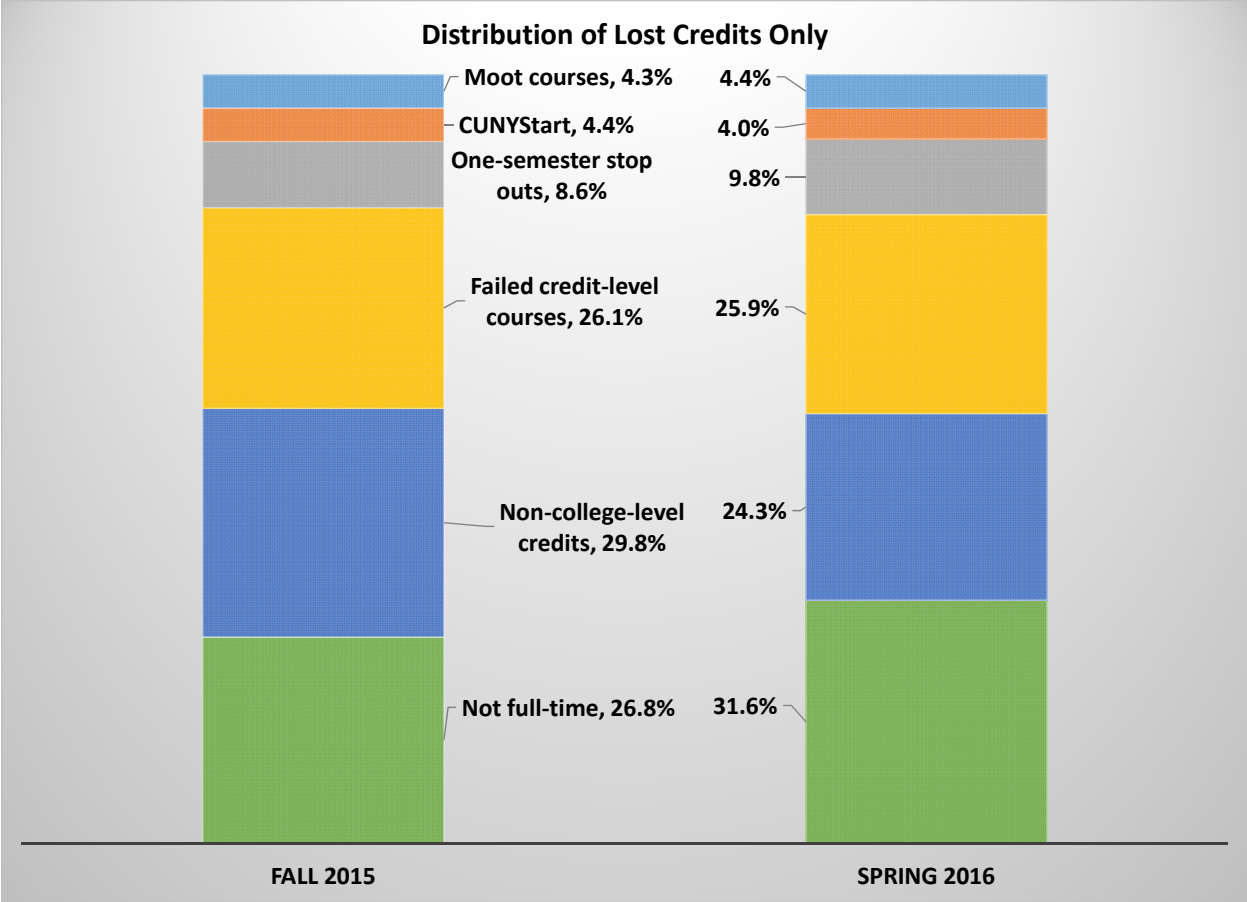


Figure 3

Details of each shortfall

As will become evident in further detail tables, we included drops and failures of developmental courses under the developmental shortfall as shown in Table 5. This is arbitrary. About one-third of all developmental credits were failed. This means that six to seven percentage points of the developmental shortfall could have been allocated to the “failed courses” shortfall, making course failure the largest contributor to the shortfall.

Included in the developmental category were a small number of non-college-level credit freshman seminar courses and two or three college-level courses that had higher numbers of equated credits than college-level credits as shown in Table 5.

(Note: in many of the following tables the numbers of students cannot be added because the same student may appear in multiple categories.)

Loss because of not-college-level credits	Fall 15 Students	Fall 15 Non-College-level Credits	Spring 16 Students	Spring 16 Non-College-level Credits
FSM Pass	341	341	202	202
FSM Fail	85	85	53	53
FSM Drop	39	39	25	25
Extra hours pass	187	745	516	1,983
Extra hours fail	195	777	170	662
Extra hours drop	56	392	63	243
Developmental pass	4,046	21,354	2,868	15,244
Developmental fail	2,184	11,778	1,789	9,584
Developmental drop	414	2,133	303	1,566
<i>Credit totals</i>		<i>37,643</i>		<i>29,561</i>

Table 5

Table 6 shows more detail on the kinds of students who did not achieve 15 credits by not attempting 15 credits. Not all of them were part-time. Although the loss was smaller per student, students who took 12 up to 15 credits (and were thus technically fulltime) also contributed to the shortfall.

We only counted dropped credits that caused the student to go below 15. Dropping a course, but staying at or above 15, was not counted. Dropping a course, of course, is only a slight variation on not attempting it. To find “attempted (but not dropped)” we took all college-level attempted credits and subtracted that number from 15 and then deducted the applicable dropped course credits from that.

Loss because of not taking 15 credits	Fall 15 Students	Fall 15 Credits	Spring 16 Students	Spring 16 Credits
Part-time attempted loss	3,767	17,734	4,019	22,264
Lost due to drops PT	1,904	8,136	1,949	8,248
Full-time attempted loss	2,170	4,836	2,417	5,458
Lost due to drops FT	1,509	3,216	1,226	2,550
<i>Total not-15 credits lost</i>		<i>33,922</i>		<i>38,519</i>

Table 6

Table 7 gives more detail on course failure. About ¼ of all credit failures are noted by the WU grade. The table also shows the relative amounts lost of non-college-level and moot course failures.

Loss because of course failure	Fall 15 Students	Fall 15 Credits	Spring 16 Students	Spring 16 Credits
Credit courses failed-not WU	5,692	27,805	5,124	25,650
Credit courses failed-WUs	1,373	5,178	1,424	5,859
<i>Credit courses failed</i>	<i>7,065</i>	<i>32,983</i>	<i>6,548</i>	<i>31,509</i>
Not-college-level credits failed	2,464	12,640	2,012	10,299
Moot credits failed		946		774
<i>Total failed credits</i>		<i>46,569</i>		<i>42,582</i>

Table 7

Table 8 gives details on moot credits.

Moot credit analysis	Fall 15 Credits	Spring 16 Credits
Passed C- or higher	5,172	5,039
Passed D- or higher (including above)	5,487	5,334
Failed moot course	946	774
Withdrawn/dropped moot course	2,497	2,754
<i>Total moot credits</i>	<i>8,930</i>	<i>8,862</i>

Table 8

Conclusion

Getting students to pass courses and getting students prepared before entry (meaning avoiding developmental courses) are each nearly as important as getting them to go full-time and full-time means 15 credits, if our goal is two years and done.