

**Math and English Placement results and course recommendations for students completing the ACCUPLACER exam and Placement Assistant between 9/28/2016-9/27/2017**

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**Methodology**

Placement levels from 9/28/2016-9/27/2017 were exported from Accuplacer database and merged with all placement levels from the Placement Assistant (7/17/2017-9/27/2017). If a student completed both the Accuplacer and the Placement Assistant (PA), the highest placement level was kept and that source was identified as the source of their placement. If the 2 placement levels were equal the source was identified as “Both”. Students assessed after the Placement Assistant went live were categorized as such (“After PA”) regardless of whether they received a previous placement. For English ACCUPLACER results, a composite score was created that included both Reading and Writing. Since English 101 currently has both R5 and W5 as requirements for entry, similar course levels were created for the remaining levels. Students were assigned at their lowest level between Reading and Writing (e.g. a student with R4/W3 was assigned to level 3). Placement information was merged with Fall 2017 enrollment data to establish enrollment rates.

**Key Findings**

**Math**

Overall, 61% of students placed since PA went live have been placed into transfer level math coursework (M45 or M50) compared to 25% prior to PA going live. A significant aspect of this change may be due to the addition of the M45 level in the placement process, which does not currently exist in Accuplacer. Additionally, all other non-transfer level placement groups decreased since the PA went live, with the most significant decrease occurring at the M20 level which reduced by 12% after PA went live (see Table 1.1). After PA went live, approximately 47% or 620 students still received placement via Accuplacer. Of these, just over 100 were directed to Accuplacer after completing the placement assistant and the remaining were directed to Accuplacer prior to using PA or opted to complete Accuplacer rather than PA (See Table 1.2 and 1.4). Since PA went live, 95% of those who received placement via PA were placed in M45 or M50 compared to 19% of those who received placement via Accuplacer. This aligns with expectations as the students with the highest GPA’s and math course completion histories were placed via PA and did not need to complete Accuplacer (see Table 1.2). Overall, every ethnic group saw an increase in Transfer-level placement after PA went live with the largest gains experienced by African Americans who saw an increase of 54%, Pacific Islanders who saw a 50% increase (although this was a very small sample), and Latino Students who saw an increase of 43%. Moreover, gaps across ethnic groups substantially decreased. Before PA went live, 3 different

ethnic groups were at least 10% below average, after PA no group with 10 or more placements on record was 10% or more below average (See Table 1.3 and figure 1.1).

In the Placement Assistant, course recommendation and placement level are distinct categories. Placement Level allows students to enroll in any course at or above that level and clears the pre-requisites necessary for registration. Course recommendations are made based on the student reported major area. Course recommendations may be 1 level lower than their placement level if they indicate a major that requires the Algebra pathway. For instance, students who indicate an Engineering major and receive an M45 placement Level will be recommended to Math 96 (M40) as M45 is statistics and does not meet their major preparation needs. Of the 711 students who received a valid course recommendation from the PA, 72% were recommended for Math 104 or Higher, 24% were recommended for Math 96 and 5% were recommended for Math 46 or 92. Overall about 13% of Students who completed the PA were then directed to Accuplacer. Five percent or less of each Ethnic group was directed to pre-transfer coursework. African American students had the highest placement into M45 (53%) with one of the lowest placement rates into M50 (33%), while Asian students had the highest placement rates into M50 (64%) (See Table 1.5 and Figure 1.2). Regarding gender, 7% of females were directed to Accuplacer compared to 16% of males. Additionally, females were placed at M50, 57% of the time compared to males at 39% (See Table 6).

Of the 1,329 students who have been assessed since PA went live, 893 have an admit term of Fall 2017. Of those, 43% are currently enrolled in a math class in Fall 2017. The students who were placed via PA, appear to subsequently enroll in Math at higher rates (52%) compared to those who were placed via Accuplacer (32%). Moreover, 37% of students placed via PA enrolled in transfer level math courses, while, only 10% of those placed via Accuplacer did (See Table 1.7). Additionally, it appears that students are more likely to enroll in courses the earlier they complete the placement process (see Table 1.8). For those placed via PA, the most common enrollments are in Math 96, 104, and 119 (see Table 1.9).

### **English**

Overall, 59% of students assessed since PA went live placed directly into R5/W5 and were recommended to English 101 or English 105 compared to 25% prior to PA. Since PA (and during the reporting period) went live there were 1,325 English Assessments (see table 2.1). Of these, 791 (60%) were placed via PA and the remaining 525 (40%) were placed via Accuplacer. Of those placed via PA, 83% were placed directly into stand-alone English 101 or English 105 (R5/W5) with the remaining 17% begin directed to English 47A or English 101x (R3/W3). It is important to note that the PA only places students into 2 levels (R5/W5 or R3/W3) and that R3/W3 comes with the recommendation for the students to choose between ENGL 47A or ENGL101x. For those placed via Accuplacer, 23% were placed into R5/W5, 65% at R3/W3 or higher and the remaining 11% at lower levels (see table 2.2).

**Institutional Research**

Since PA went live, equity gaps have decreased and every group saw a significant increase in transfer level placement with African American students seeing the largest gains (+48%) followed by Latinx students (+40%) and Asian students (+38%) (see table 2.3). Unlike math assessments in the PA, nearly every student (99.6%) who completed the PA received a valid English placement. Within the PA, every ethnic group and each gender had a transfer level placement rate of 77% or higher (See tables 2.4, 2.5, and 2.6).

For students who have been assessed since PA went live and had an admit term of Fall 2017, 57% of those placed via PA are currently enrolled in any English course in Fall 2017 and 53% are enrolled in transfer-level English (n= 299). This compares to the overall English enrollment of 41% and transfer level English enrollment of 29% for those placed via Accuplacer (n=86) indicating students placed via PA may be more likely to subsequently enroll in English courses and specifically in transfer level English courses (see table 2.7). Additionally, the timing of the placement has a significant impact. The group with the highest level of enrollments are those placed via PA prior to the first day of open registration (64%) (see table 2.8).

**Math Tables**

Table 1.1. Math Placement Levels before and after PA went live

Math Placement Level	Before PA		After PA		Total	
10	402	15%	110	8%	512	13%
20	679	26%	188	14%	867	22%
30	498	19%	154	12%	652	16%
40	412	16%	77	6%	489	12%
45	0	0%	300	23%	300	8%
50	648	25%	500	38%	1,148	29%
Total	2,639	100%	1,329	100%	3,968	100%

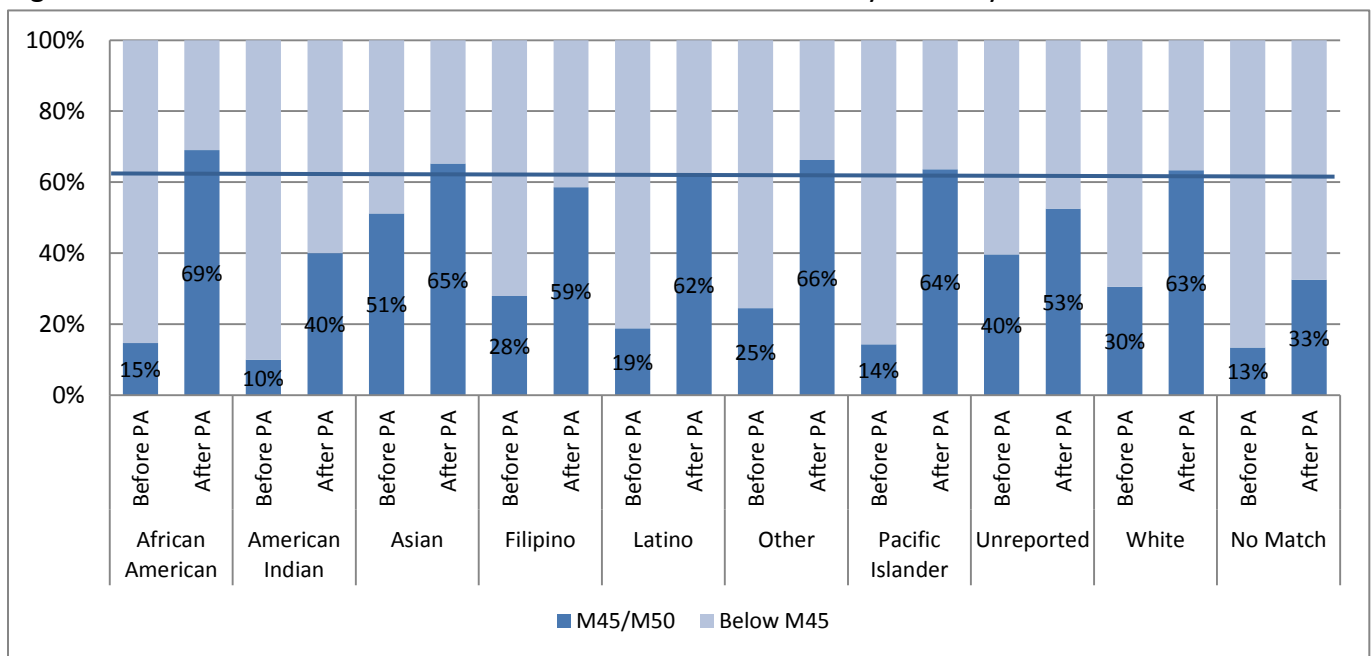
Table 1.2. Math Placement Levels before and after PA went live by Placement Tool

Math Placement Level	Before PA		After PA				Total			
	Accuplacer		Accuplacer	Both	Placement Assistant					
10	402	15%	110	18%	0	0%	0	0%	512	13%
20	679	26%	188	30%	0	0%	0	0%	867	22%
30	498	19%	122	20%	0	0%	32	5%	652	16%
40	412	16%	77	12%	0	0%	0	0%	489	12%
45	0	0%	3	0%	0	0%	297	42%	300	8%
50	648	25%	120	19%	3	100%	377	53%	1,148	29%
Total	2,639	100%	620	100%	3	100%	706	100%	3,968	100%

Table 1.3. Math Placement Levels before and after PA went live by Ethnicity

Ethnicity	Placement Date	M10		M20		M30		M40		M45		M50		Total	
		Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
African American	Before PA	48	26%	60	33%	23	13%	26	14%			27	15%	184	100%
	After PA	10	10%	7	7%	11	11%	2	2%	40	41%	27	28%	97	100%
American Indian	Before PA	2	20%	2	20%	4	40%	1	10%			1	10%	10	100%
	After PA			2	40%	1	20%			2	40%			5	100%
Asian	Before PA	16	7%	32	15%	26	12%	31	14%			110	51%	215	100%
	After PA	10	11%	9	10%	5	5%	8	9%	9	10%	51	55%	92	100%
Filipino	Before PA	9	13%	9	13%	10	15%	21	31%			19	28%	68	100%
	After PA	4	10%	8	20%	4	10%	1	2%	6	15%	18	44%	41	100%
Latino	Before PA	175	18%	287	29%	167	17%	162	17%			183	19%	974	100%
	After PA	43	9%	69	14%	53	11%	22	4%	134	27%	172	35%	493	100%
Other	Before PA	21	14%	34	23%	35	23%	24	16%			37	25%	151	100%
	After PA	5	6%	11	13%	10	12%	2	2%	17	20%	38	46%	83	100%
Pacific Islander	Before PA			6	43%	4	29%	2	14%			2	14%	14	100%
	After PA	1	9%	1	9%	0	0%	2	18%	4	36%	3	27%	11	100%
Un-reported	Before PA	8	14%	8	14%	9	16%	10	17%			23	40%	58	100%
	After PA	0	0%	7	18%	5	13%	7	18%	1	3%	20	50%	40	100%
White	Before PA	53	8%	151	22%	162	24%	108	16%			208	30%	682	100%
	After PA	14	4%	41	12%	47	14%	24	7%	68	20%	150	44%	344	100%
No Match	Before PA	70	25%	90	32%	58	20%	27	10%			38	13%	283	100%
	After PA	23	19%	33	27%	18	15%	9	7%	19	15%	21	17%	123	100%

Figure 1.1. Math Placement Levels before and after PA went live by Ethnicity



Note: The reference line indicates the overall transfer-level (M45/M50) placement After PA (61%)

**Institutional Research**

Table 1.4. Math Course Recommendations for those placed via Placement Assistant

Course	Count	Percent of All	Percent of Valid
Undefined	1	0%	--
Directed to Assessment	102	13%	--
MATH 046	19	2%	3%
MATH 092	13	2%	2%
MATH 096	174	21%	24%
MATH 104	240	29%	34%
MATH 119/116 or PSYC 25 or BUSE115	253	31%	36%
MATH 210	12	1%	2%
<b>Total</b>	<b>814</b>	<b>100%</b>	<b>711</b>

Table 1.5. Math Placement Levels for those placed via Placement Assistant by Ethnicity

Ethnicity	M30		M45		M50		Assessment		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
African American	2	3%	40	53%	25	33%	8	11%	75	100%
American Indian	--	--	2	67%	--	--	1	33%	3	100%
Asian	1	2%	9	16%	36	64%	10	18%	56	100%
Filipino	--	--	6	27%	13	59%	3	14%	22	100%
Latino	16	5%	134	40%	145	44%	38	11%	333	100%
Other	1	2%	17	32%	32	60%	3	6%	53	100%
Pacific Islander	--	--	4	57%	2	29%	1	14%	7	100%
Unreported	1	11%	1	11%	5	56%	2	22%	9	100%
White	9	4%	68	32%	109	52%	25	12%	211	100%
No Match	2	4%	19	42%	13	29%	11	24%	45	100%
<b>Total</b>	<b>32</b>	<b>4%</b>	<b>300</b>	<b>37%</b>	<b>380</b>	<b>47%</b>	<b>102</b>	<b>13%</b>	<b>814</b>	<b>100%</b>

Figure 1.2. Math Placement Levels for those placed via Placement Assistant by Ethnicity

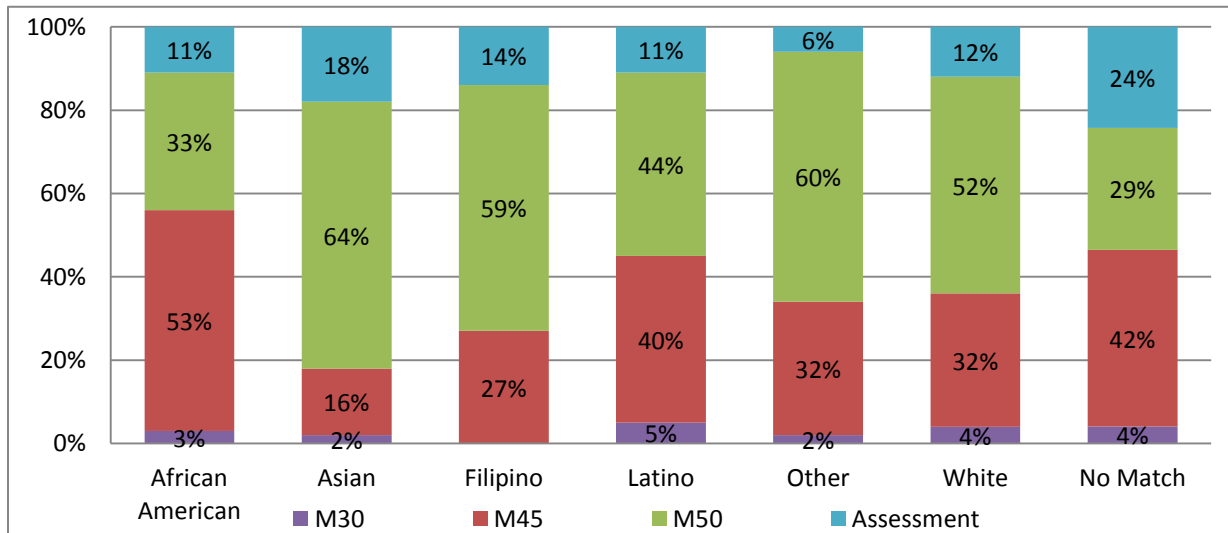


Table 1.6. Math Placement Levels for those placed via Placement Assistant by Gender

Gender	M30		M45		M50		Assessment		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%
Female	10	3%	130	34%	219	57%	28	7%	387	100%
Male	20	5%	151	40%	148	39%	63	16%	382	100%
No Match	2	4%	19	42%	13	29%	11	24%	45	100%
Total	32	4%	300	37%	380	47%	102	13%	814	100%

Table 1.7. Math Enrollment Rates by Enrollment level and Placement Source

Enrollment Level	Accuplacer		Both		Placement Assist		Total	
	Placed	% of Placed	Placed	% of Placed	Placed	% of Placed	Placed	% of Placed
No Math Enrollment	268	68%			240	48%	508	57%
Pre-Transfer	86	22%			73	15%	159	18%
Transfer	40	10%	1	100%	185	37%	226	25%
Total	394	100%	1	100%	498	100%	893	100%

\* Only includes those placed after PA went live with Fall 2017 Admit Term (Unduplicated count)

Table 1.8. Math Enrollment Rates by Placement Date and Placement Source

Placement Date	Accuplacer		Both		Placement Assist		Total	
	Placed	% Enrolled	Placed	% Enrolled	Placed	% Enrolled	Placed	% Enrolled
PA Day 1 until Open Reg. Day 1	254	39%	1	100%	328	62%	583	52%
Open Reg. Day 1 until Fall Day 1	109	23%	0	0%	125	36%	234	30%
Fall Day 1 and Beyond	31	3%	0	0%	45	22%	76	15%
Total	394	32%	1	100%	498	52%	893	43%

\* Only includes those placed after PA went live with Fall 2017 Admit Term (Unduplicated count)

**Institutional Research**

Table 1.9. Fall 2017 Math Course Enrollments by Placement source

Subject	Course Number	Accuplacer	Both	Placement Assist	Total
		Enroll	Enroll	Enroll	Enroll
BUSE	115	3		8	11
MATH	38	409		3	412
	46	235		17	252
	92	130		8	138
	96	260		71	331
	104	180	1	79	260
	116	116	1	41	158
	118	9		13	22
	119	119	1	97	217
	121	17			17
	141	48		4	52
	150	21		3	24
	151	7		1	8
	210A	6		5	11
	212	2			2
	252	5			5
	254	5			5
PSYC	258	37		23	60
<b>Total</b>	<b>Total</b>	<b>1,609</b>	<b>3</b>	<b>373</b>	<b>1,985</b>

\* Only includes those placed after PA went (Duplicated count)

**English Tables**

Table 2.1. English Placement Levels before and after PA went live

Composite Read/Writing	Before PA		After PA		Total	
	Count	Percentage	Count	Percentage	Count	Percentage
1	79	3%	21	2%	100	3%
2	169	7%	38	3%	207	5%
3	688	28%	280	21%	968	26%
4	884	36%	199	15%	1,083	29%
5	620	25%	787	59%	1,407	37%
Total	2,440	100%	1,325	100%	3,765	100%

Figure 2.1 English Placement Levels before and after PA went live

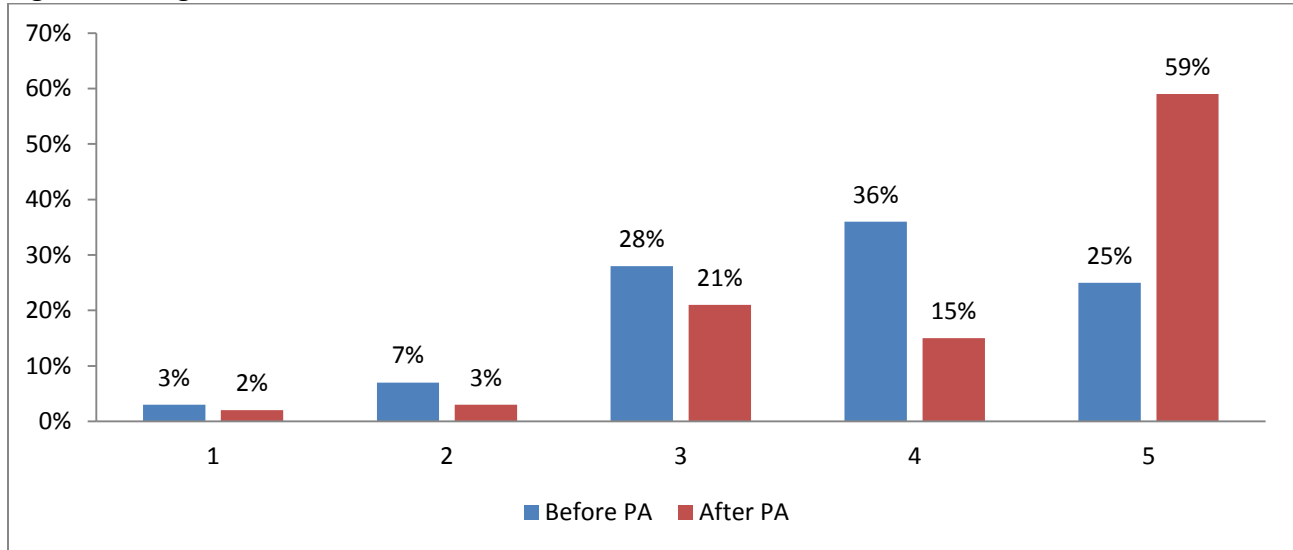


Table 2.2. English Placement Levels before and after PA went live by Placement Tool

Composite Read/Writing	Before PA		After PA						Total	
	Accuplacer	Percentage	Accuplacer	Percentage	Both	Percentage	PA	Percentage	Count	Percentage
1	79	3%	21	4%					100	3%
2	169	7%	38	7%					207	5%
3	688	28%	144	27%	2	22%	134	17%	968	26%
4	884	36%	199	38%					1,083	29%
5	620	25%	123	23%	7	78%	657	83%	1,407	37%
Total	2,440	100%	525	100%	9	100%	791	100%	3,765	100%

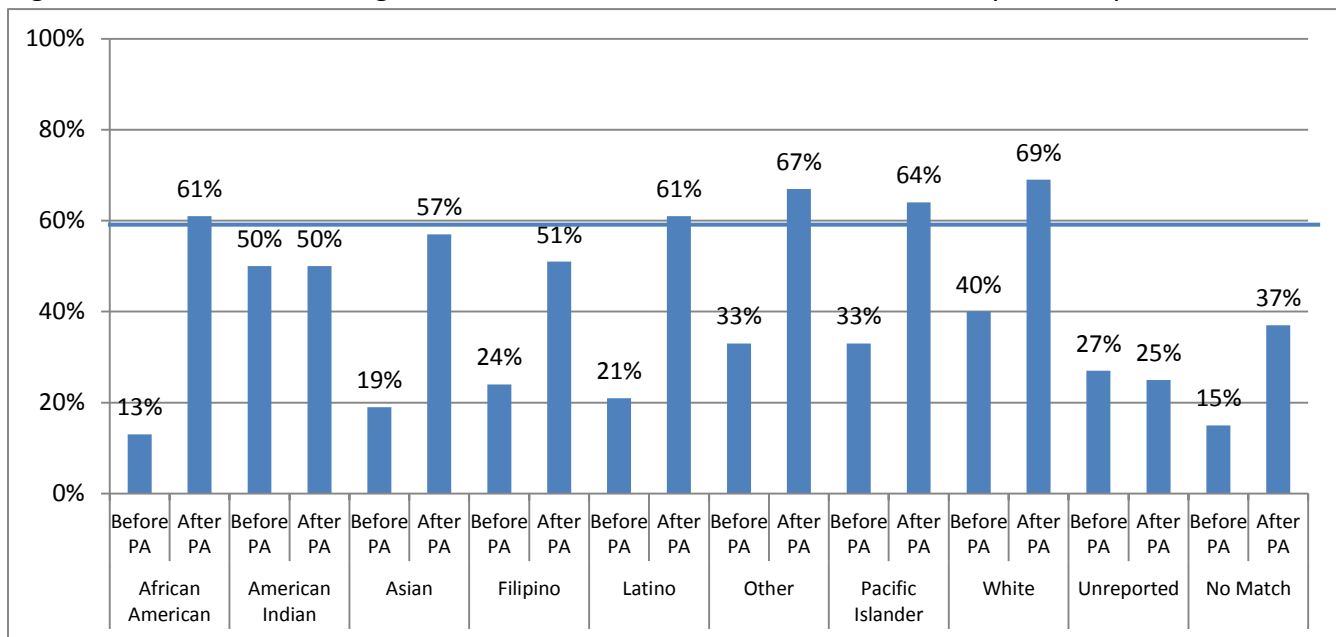


Institutional Research

Table 2.3. English Placement Levels before and after PA went live by Ethnicity

Ethnicity	Placement Date	1		2		3		4		5	R5/W5	Total	
		Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
African American	Before PA	5	3%	31	18%	55	33%	56	33%	21	13%	168	100%
	After PA			3	3%	24	24%	12	12%	60	61%	99	100%
American Indian	Before PA			1	13%	1	13%	2	25%	4	50%	8	100%
	After PA							3	50%	3	50%	6	100%
Asian	Before PA	26	14%	14	8%	55	30%	54	29%	36	19%	185	100%
	After PA	7	7%	5	5%	20	21%	9	9%	54	57%	95	100%
Filipino	Before PA	2	3%	7	11%	20	32%	19	30%	15	24%	63	100%
	After PA	1	3%	2	5%	9	23%	7	18%	20	51%	39	100%
Latino	Before PA	19	2%	46	5%	300	33%	361	39%	191	21%	917	100%
	After PA	2	0%	13	3%	115	23%	63	13%	300	61%	493	100%
Other	Before PA	1	1%	7	6%	25	20%	50	40%	41	33%	124	100%
	After PA					12	15%	15	18%	55	67%	82	100%
Pacific Islander	Before PA			1	7%	2	13%	7	47%	5	33%	15	100%
	After PA			0	0%	3	27%	1	9%	7	64%	11	100%
White	Before PA	10	2%	21	3%	122	20%	223	36%	249	40%	625	100%
	After PA	7	2%	6	2%	48	14%	42	13%	232	69%	335	100%
Unreported	Before PA	3	5%	3	5%	15	25%	22	37%	16	27%	59	100%
	After PA	1	3%	2	5%	14	35%	13	33%	10	25%	40	100%
No Match	Before PA	13	5%	38	14%	93	34%	90	33%	42	15%	276	100%
	After PA	3	2%	7	6%	35	28%	34	27%	46	37%	125	100%

Figure 2.2. Transfer Level English Placement before and after PA went live by Ethnicity



Note: The reference line indicates the overall transfer-level (R5/W5) placement After PA (59%)

**Institutional Research**

Table 2.4. English Course Recommendations for those placed via Placement Assistant

Course	Count	Percent
Assessment	3	0%
ENGL47A or 101x	147	18%
ENGL101 or 105	664	82%
Total	814	100%

Table 2.5. English Placement Levels for those placed via Placement Assistant by Ethnicity

Ethnicity	R3/W3		R5/W5		Assessment		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
African American	17	23%	58	77%			75	100%
American Indian			3	100%			3	100%
Asian	10	18%	46	82%			56	100%
Filipino	4	18%	18	82%			22	100%
Latino	66	20%	267	80%			333	100%
Other	7	13%	46	87%			53	100%
Pacific Islander	1	14%	6	86%			7	100%
Unreported	2	22%	7	78%			9	100%
White	25	12%	185	88%	1	0%	211	100%
No Match	15	33%	28	62%	2	4%	45	100%
Total	147	18%	664	82%	3	0%	814	100%

Table 2.6. Placement Levels for those placed via Placement Assistant by Gender

Gender	R3/W3		R5/W5		Assessment		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Female	47	12%	340	88%			387	100%
Male	85	22%	296	77%	1	0%	382	100%
No Match	15	33%	28	62%	2	4%	45	100%
Total	147	18%	664	82%	3	0%	814	100%

Table 2.7. English Enrollment Rates by Placement Source

Highest Enrollment Level	ACCU		BOTH		PA		Total	
	Count	% of Placed	Count	% of Placed	Count	% of Placed	Count	% of Placed
No Enrollment	171	59%	2	33%	241	43%	414	48%
Pre-Transfer Enrollment	35	12%			20	4%	55	6%
Transfer Level Enrollment	86	29%	4	67%	299	53%	389	45%
Total	292	100%	6	100%	560	100%	858	100%

Note: Only includes those placed after PA went live with Fall 2017 Admit Term (Unduplicated count)

**Institutional Research**

**Table 2.8. English Enrollment Rates by Placement Date and Placement**

Placement Date	ACCU		BOTH		PA		Total	
	Count	% Enrolled	Count	% Enrolled	Count	% Enrolled	Count	% Enrolled
PA Day 1- Open Reg. Day 1	189	51%	5	80%	369	64%	563	60%
Open Reg. Day 1- Fall Opening Day	82	26%			141	46%	223	39%
Fall Opening Day and Beyond	21	14%	1	0%	50	36%	72	29%
<b>Total</b>	<b>292</b>	<b>41%</b>	<b>6</b>	<b>67%</b>	<b>560</b>	<b>57%</b>	<b>858</b>	<b>52%</b>

Note: Only includes those placed after PA went live with Fall 2017 Admit Term (Unduplicated count)

**Table 2.9. Fall 2017 English Course Enrollments by Placement source**

	Course	ACCU	BOTH	MMAP	Total
ENGL	31	238		21	259
	43	13			13
	47A	289		21	310
	48	34			34
	49	133		2	135
	101	664	5	305	974
	105	86		86	172
	202	2			2
	205	89	1	28	118
	208	2		1	3
	209	1		2	3
	210	1			1
	221	2			2
	245A	3			3
	249	1			1
<b>Total</b>	<b>1,558</b>	<b>6</b>	<b>466</b>	<b>2,030</b>	

Note: Only includes those placed after PA went live (duplicated count)