

## A Study of Postsecondary Outcomes for Former MPS GEAR UP Students

As part of our evaluation of the MPS Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) grant, we analyzed the impact of GEAR UP participation on a key component of the grant: secondary and postsecondary outcomes. Data were provided by MPS, the University of Wisconsin in Milwaukee (UWM), and the Milwaukee Area Technical College (MATC) for students who graduated from GEAR UP schools between 2015 and 2018 and then attended either UWM or MATC. Overall, students in GEAR UP were more likely to graduate high school on-time but not more likely to enroll in a postsecondary institution. However, students who participated in more types of GEAR UP activities were much more likely to graduate high school and attend a postsecondary institution. GEAR UP students, overall, were not more likely to enroll in MATC or UWM. Again however, students who participated in more GEAR UP activities were. Even though GEAR UP students were not more likely to attend MATC full time, more attended UWM full time. Regarding the performance of GEAR UP students attending MATC or UWM, the findings were mixed. However, we did find some evidence of improved performance. Altogether, the results of this study are promising but not conclusive. GEAR UP students also participated in a number of other similar initiatives provided by MPS, UWM, and MATC. Considering this, the positive results found in this study at least suggest that GEAR UP likely contributed to the improved success of MPS students.

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## A Study of Postsecondary Outcomes for Former MPS GEAR UP Students

In 2011, Milwaukee Public Schools (MPS) was awarded a 7-year, \$14.87 million federal GEAR UP grant to promote college awareness and readiness in low-performing schools. The MPS GEAR UP initiative employed a school-family-community partnership strategy<sup>1</sup> to bring culturally relevant and effective supports to students, and to empower families and schools to better support students as they progressed through school and into college and careers. MPS TEAM GEAR UP started supporting the 2017 and 2018 graduating classes when students were still in 6<sup>th</sup> and 7<sup>th</sup> grade respectively, during the 2011-2012 school year. Each year, the initiative followed these classes and provided them, their parents, and their schools with a variety of supports designed to meet two objectives:

Objective 1 was to increase educational expectations for participating students and family knowledge of postsecondary education, options, preparation, and financing.

Objective 2 was to increase academic performance, high school graduation, and post-secondary readiness and enrollment.

The current report focuses on the extent MPS GEAR UP met Objective 2 by examining the relationships between participation in GEAR UP programming with high school graduation and college outcomes. For this, we compared outcomes of students who were part of the GEAR UP class (graduated from one of eight GEAR UP schools in 2017 or 2018) with those of students who attended the same schools but did not receive GEAR UP programming because they graduated before GEAR UP supports were available (graduated in 2015 or 2016). The outcomes examined in this study include:

- on-time high school graduation;
- enrollment into any postsecondary institution;
- enrollment into Milwaukee Area Technical College (MATC) or UW – Milwaukee (UWM);
- Fall-to-Spring and Fall-to-Fall retention for students enrolling MATC or UWM;
- first semester and first year college GPA;

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<sup>1</sup> Epstein, J. L., Sanders, M. G., Simon, B. S., Salinas, K. C., Jansorn, N. R., & Van Voorhis, F. L. (2002). *School, family, and community partnerships: Your handbook for action, 2nd ed.* Thousand Oaks, CA: Corwin Press.

- whether students completed a college-level math or English class during their freshman year.<sup>2</sup>

We also examine whether the intensity of GEAR UP programming students received related to these outcomes.

## Study Methods

### Data sharing, sources, and management

We worked closely with the MPS, UWM, and MATC in the design and execution of this report. MPS provided high school transcripts, GEAR UP student participation records, postsecondary enrollment, and demographic data for graduating students attending the eight schools engaged in the GEAR UP program, covering the 2015, 2016, 2017, and 2018 school years. Student postsecondary enrollment originated from National Student Clearinghouse (NSC), which tracks student enrollment in over 3,700 postsecondary institutions. Both MATC and UWM are among these 3,700 institutions.

UWM and MATC provided course performance data for freshman who graduated from the eight GEAR UP schools and enrolled between the Fall of 2015 and the Fall of 2018. The data included the number of credits attempted and earned, which high school they attended, fall to spring or fall to fall<sup>3</sup> retention, first term and first year GPA, and whether they took and/or completed remedial or credit bearing English and math courses.

MPS data were combined with UWM and MATC data to create the dataset used for the analysis. We used on-time four-year high school graduates from MPS as a baseline file for MPS records. Matching between MPS records and UWM and MATC records was done by student name, birthdate, and school. Afterwards, matching was completed manually. We also worked with the three institutions to clarify cases where college enrollment data provided by MPS did not match MATC or UWM data.

### Outcome Analysis

For each outcome analyzed in this report, we first explore possible trends by presenting descriptive longitudinal results from 2015 to 2018. We then use ANOVA to measure differences

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<sup>2</sup> Data definitions are included in in Appendix A.

<sup>3</sup> Fall-to-Fall data were not available for the 2018 graduating class.

of outcomes between students in the four graduating classes (2015, 2016, 2017, and 2018) or between groups of GEAR UP participants, according to their intensity of program participation (none, some, or high). Finally, we use generalized linear modeling with a logit link and binomial distribution to measure the adjusted odds (adjusted for high school, college, Individualized Education Program status, and free/reduced lunch eligibility) of GEAR UP participants realizing study outcomes.

### Participants, GEAR UP Schools, and Postsecondary Schools

Table 1 displays the demographic information for all students expected to graduate on-time from the 2015, 2016, 2017, and 2018 classes. There were few demographic differences between students prior to GEAR UP and GEAR UP students, except for Free/Reduce Lunch Eligibility. More GEAR UP students (84.9%) were eligible than students prior to GEAR UP (71.9%).

Table 1: Demographic information for all students expected to graduate from the 2015 through 2018 classes

		Students prior to GEAR UP (2015 & 2016)		Students in GEAR UP (2017 & 2018)	
		Students	Percent	Students	Percent
Gender	Female	1,719	47.5%	1,692	47.3%
Race	American Indian	30	0.8%	30	0.8%
	Asian	129	3.6%	153	4.3%
	African American	2,289	63.3%	2,273	63.6%
	Latinx	752	20.8%	707	19.8%
	Pacific Isle	Less than 5 students		Less than 5 students	
	Two or More	25	0.7%	57	1.6%
	White	391	10.8%	349	9.8%
English Language Learner (ELL) Status	ELL Students	143	4.0%	166	4.6%
	Former ELL Students	272	7.5%	233	6.4%
	Never ELL Students	3,201	88.5%	3,175	87.8%
Disability Status	Students with Disability	682	18.9%	758	21.2%
	Students without Disability	2,934	81.1%	2,816	78.8%
Free/Reduced Lunch Eligibility	Yes	2,601	71.9%	3,035	84.9%
	No	908	25.1%	464	13.0%
	Missing	107	3.0%	75	2.1%
Total		3,616	-	3,574	-



Table 2 displays the demographic information of all students from GEAR UP schools who graduated on-time between 2015 and 2018. The only demographic difference between students prior to GEAR UP and the GEAR UP students is the percentage of students eligible for Free/Reduce Lunch. Students in GEAR UP had a higher percentage (11.3%) of students being eligible for the program.

Table 2: Demographic information for on-time high school graduates in the 2015 through 2018 classes

		Students prior to GEAR UP (2015 & 2016)		Students in GEAR UP (2017 & 2018)	
		Students	Percent	Students	Percent
Gender	Female	1,206	53.8%	1,282	51.7%
Race	American Indian	21	0.9%	17	.07%
	Asian	101	4.5%	129	5.2%
	African American	1,401	62.5%	1,548	62.4%
	Latinx	458	20.4%	507	20.4%
	Pacific Isle	Less than 5 students		Less than 5 students	
	Two or More	12	0.5%	35	1.4%
	White	250	11.1%	243	9.8%
English Language Learner (ELL) Status	ELL Students	70	3.1%	107	4.3%
	Former ELL Students	209	9.3%	203	8.2%
	Never ELL Students	1,964	87.6%	2,172	87.5%
Disability Status	Students with Disability	242	10.8%	335	13.5%
	Students without Disability	2,001	89.2%	2,147	86.5%
Free/Reduced Lunch Eligibility	Yes	1,631	72.7%	2,084	84.0%
	No	589	26.3%	369	14.9%
	Missing	23	1.0%	29	1.2%
Total		2,243	-	2,482	-

Table 3 presents the average graduation rates, enrollment, percentage of students eligible for Free/Reduced Lunch, attendance rate, and ACT score for the eight GEAR UP schools between the 2014-2015 through 2017-2018 school year. All eight of these schools are low performing with a majority of students being eligible for Free/Reduced Lunch. The average ACT score of 15.4 across all eight schools over these four years is substantially lower than the state average of

20.7 over this same time.<sup>4</sup> Likewise, the on-time graduation rate of 65.7% between 2015 through 2018 across all eight schools is much lower than the state average of 89.3% over the same period of time.<sup>5</sup>

Table 3: Average on-time graduation rate, enrollment, percentage of students eligible for Free/Reduced Lunch, attendance rate, and ACT score for the eight GEAR UP schools

	<b>On-time Graduation Rate</b>	<b>Enrollment</b>	<b>Percentage Free/Reduced Lunch</b>	<b>Attendance Rate</b>	<b>ACT Score</b>
Audubon	77.2%	380	78.9%	90.9%	16.6
Bay View	55.0%	1,052	87.1%	79.4%	14.7
Bradley Tech.	57.7%	1,030	87.6%	73.4%	14.5
Hamilton	65.9%	1,919	75.1%	81.3%	15.4
James Madison	62.1%	1,025	95.2%	75.3%	14.1
Marshall	69.4%	1,214	76.5%	81.7%	16.0
Milw. HS of the Arts	87.1%	945	64.2%	89.8%	16.8
Vincent	58.4%	1,360	83.4%	74.1%	14.7
Overall	65.7%	1,115	80.4%	79.7%	15.4
State Average	89.3%	494	34.0%	93.1%	20.7

Further analysis on postsecondary outcomes followed students who graduated the eight GEAR UP schools and enrolled into MATC or UWM. MATC is a large public two-year technical college with a postsecondary enrollment of roughly 15,000 students. Likewise, UWM is a large public four-year university with roughly 26,000 students. Both MATC and UWM serve many Milwaukee area high school graduates. Historically, many high school graduates of MPS and the GEAR UP schools also enroll into these local postsecondary options and studying outcomes at these two locations allow for a convenient source on exploring how GEAR UP students performed after high school.

<sup>4</sup> The state-wide ACT average was pulled from WISEDash (<https://wisedash.dpi.wi.gov/Dashboard/>) and averaged across the 2014-15 and the 2017-2018 school year.

<sup>5</sup> The state-wide on-time high school graduation rate average was pulled from WISEDash (<https://wisedash.dpi.wi.gov/Dashboard/>) and averaged across the 2014-15 and the 2017-2018 school year.

## GEAR UP participation

GEAR UP participation data were used to calculate the number of times students who graduated GEAR UP schools in either 2017 or 2018 who attended each GEAR UP activity. GEAR UP activities were coded by the evaluation team into one of the following:

- ACT Preparation,
- College Advising,
- College Preparation,
- College Visits,
- Comprehensive Mentoring,
- FAFSA,
- Pre-College Programs,
- Senior Bridge,
- Transition Program, and
- Tutoring.

Definitions of GEAR UP activities are included in Appendix B. Students were only counted once for each type of activity they participated in over their entire time in the program. For example, a student could attend multiple College Advising activities but were only counted once as a College Advising participant. Please refer to our previous report of GEAR UP for a more detailed analysis of GEAR UP participation.<sup>6</sup> Based on how many types of activities each student participated in we categorized students into three levels of participation: Zero types of activities (no participation), one to two types of activities (some participation), or three or more types of activities (high participation) (Figure 1).

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<sup>6</sup> Jones, C. J. & Gilman, L. (2019). Paving the Way to Post-Secondary Success: Student Participation in the Milwaukee Team GEAR UP Initiative. Available online at: <https://uwm.edu/sreed/wp-content/uploads/sites/502/2020/05/GEAR-UP-Participation-and-Impact.pdf>

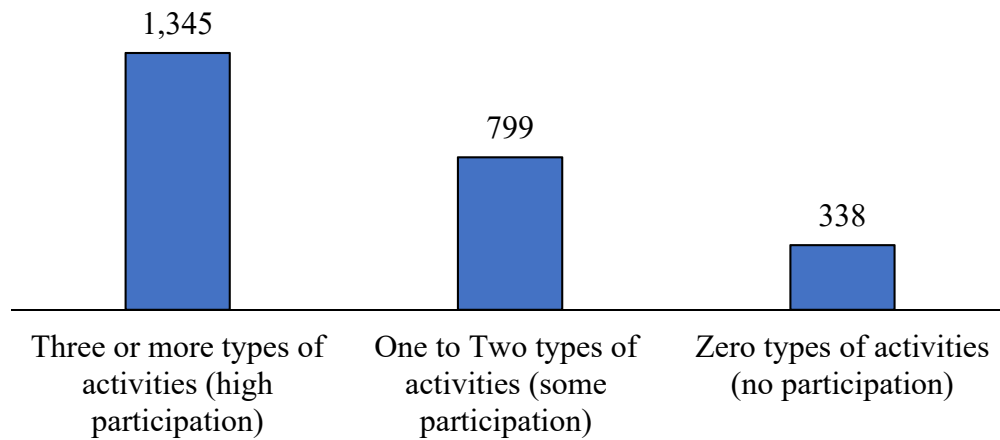


Figure 1: Number of GEAR UP graduates who attended zero, one to two, or three or more types of GEAR UP activities

### Results

#### Were GEAR UP students more likely to graduate high school on-time?

Of the 3,574 students in the two GEAR UP classes, 2,482 (69.5%) graduated on-time. This was significantly higher than the two classes prior which only had 2,243 of the 3,616 students (62.0%) graduate on-time ( $t = 6.64, df = 7,188, p < .001$ ). Figure 2 displays the on-time graduation rates for students, by race/ethnicity, in the 2015 through 2018 classes. These differences suggest students in the different graduating classes had significantly different graduation rates ( $F = 19.90, p < .001$ ). In addition, all racial groups had improved graduation rates at roughly the same rate over these four years.

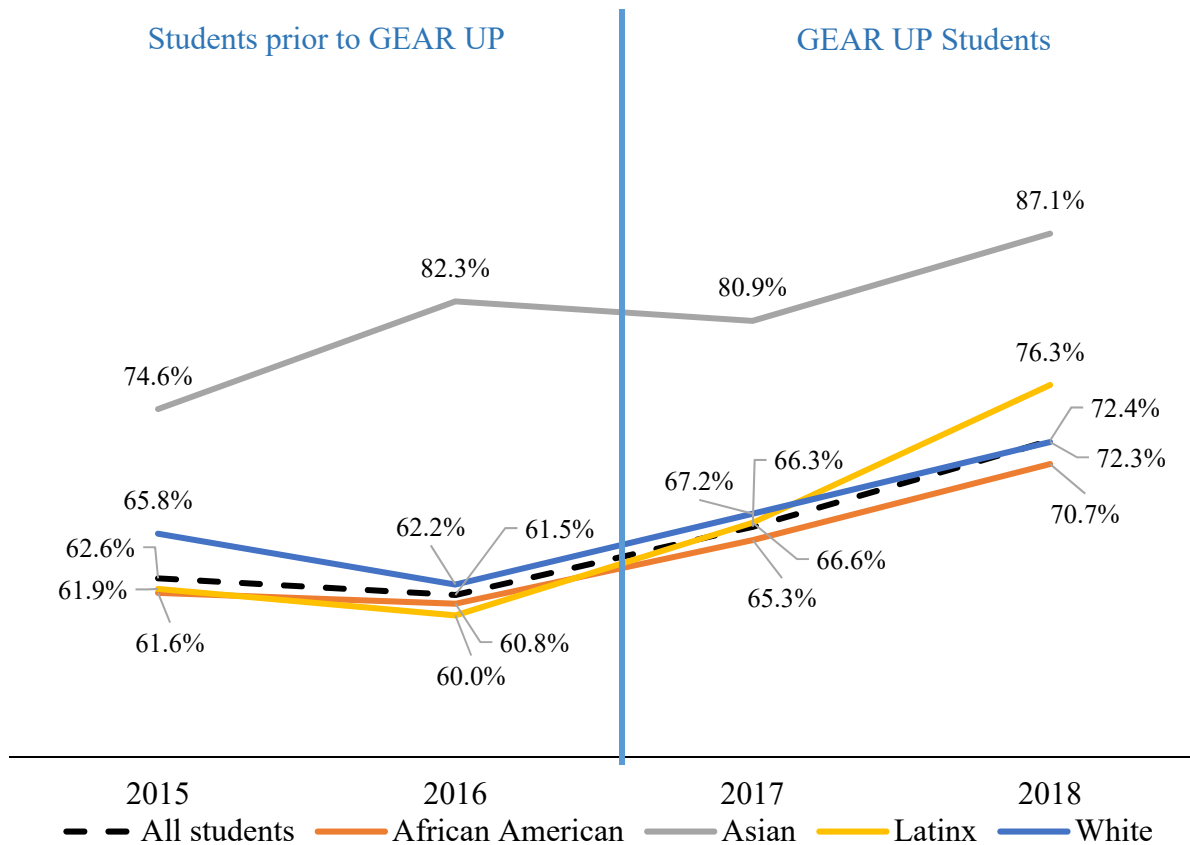


Figure 2: Graduation rates for students in GEAR UP schools before and during GEAR UP

Our previous study of GEAR UP participation,<sup>7</sup> found evidence that school graduation rates were potentially connected to how well GEAR UP was implemented within a school. Schools with the highest improvement in graduation rates tended to have more intensive GEAR UP participation. These schools had more students participating in more activities over a longer period. Relatedly, in the current study we examined differences in high school graduation between students who participated in different amounts of GEAR UP as categorized previously in Figure 1.

Figure 3 presents graduation rates by the three levels of participation for the two GEAR UP classes. Students in either GEAR UP class who participated in at least three types of GEAR UP activities were much more likely to graduate on time than students who participated one or two

<sup>7</sup> Jones, C. J. & Gilman, L. (2019). Paving the Way to Post-Secondary Success: Student Participation in the Milwaukee Team GEAR UP Initiative. Available online at: <https://uwm.edu/sreed/wp-content/uploads/sites/502/2020/05/GEAR-UP-Participation-and-Impact.pdf>

types of activities or who did not participate at all. This was true for both the 2017 class ( $F = 148.03, p < .001$ ) and the 2018 class ( $F = 171.08, p < .001$ ).

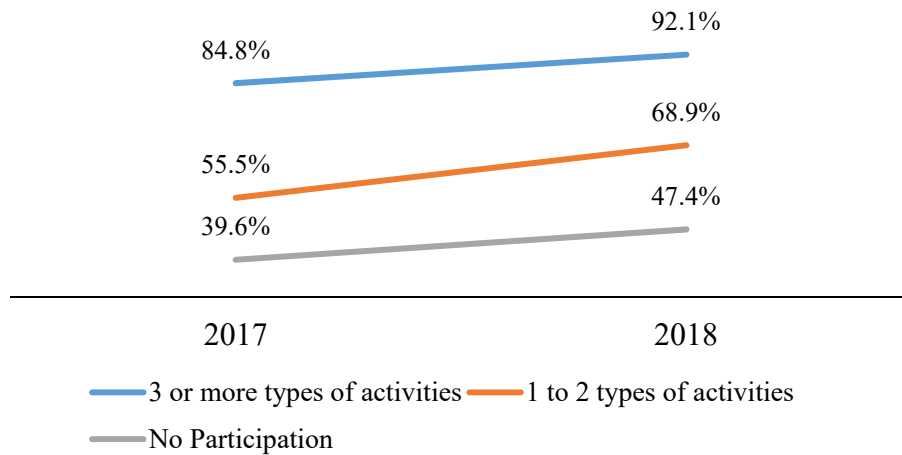


Figure 3: Graduation rates for students in the GEAR UP classes by the number of GEAR UP activities participated in.

Across both GEAR UP classes (Figure 4), students that participated in more types of activities had statistically significant higher graduation rates ( $F = 299.62, p < .001$ ). After accounting for high school attended, GEAR UP class, and demographic variables these higher graduation rates remained. The odds of a student graduating who participated in three or more types of activities were 8.95 times higher than the odds of a student that did not participate in any GEAR UP. In addition, the odds of a student graduating who participated in one or two activities were 2.22 times higher than students that did not participate.

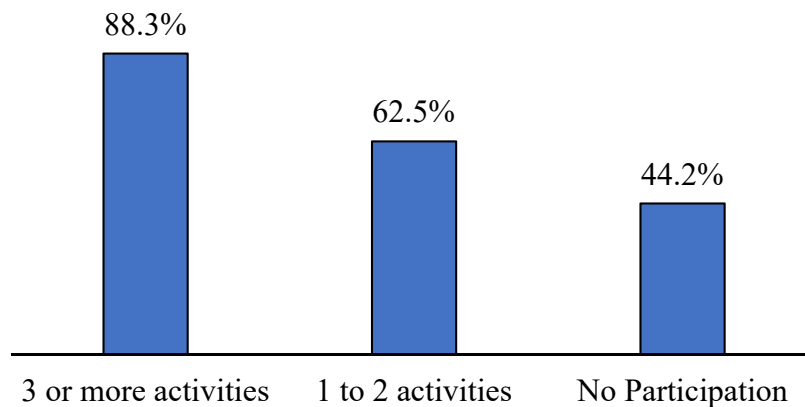


Figure 4: Graduation rates for students in both GEAR UP classes by the number of GEAR UP activities participated in.

**Were GEAR UP students more likely to enroll in college in the fall after high school graduation?**

Figure 5 displays the percentage of high school graduates who enrolled in any postsecondary institution in the fall after high school graduation. These patterns suggest changes in postsecondary enrollment rates were not likely related to GEAR UP.

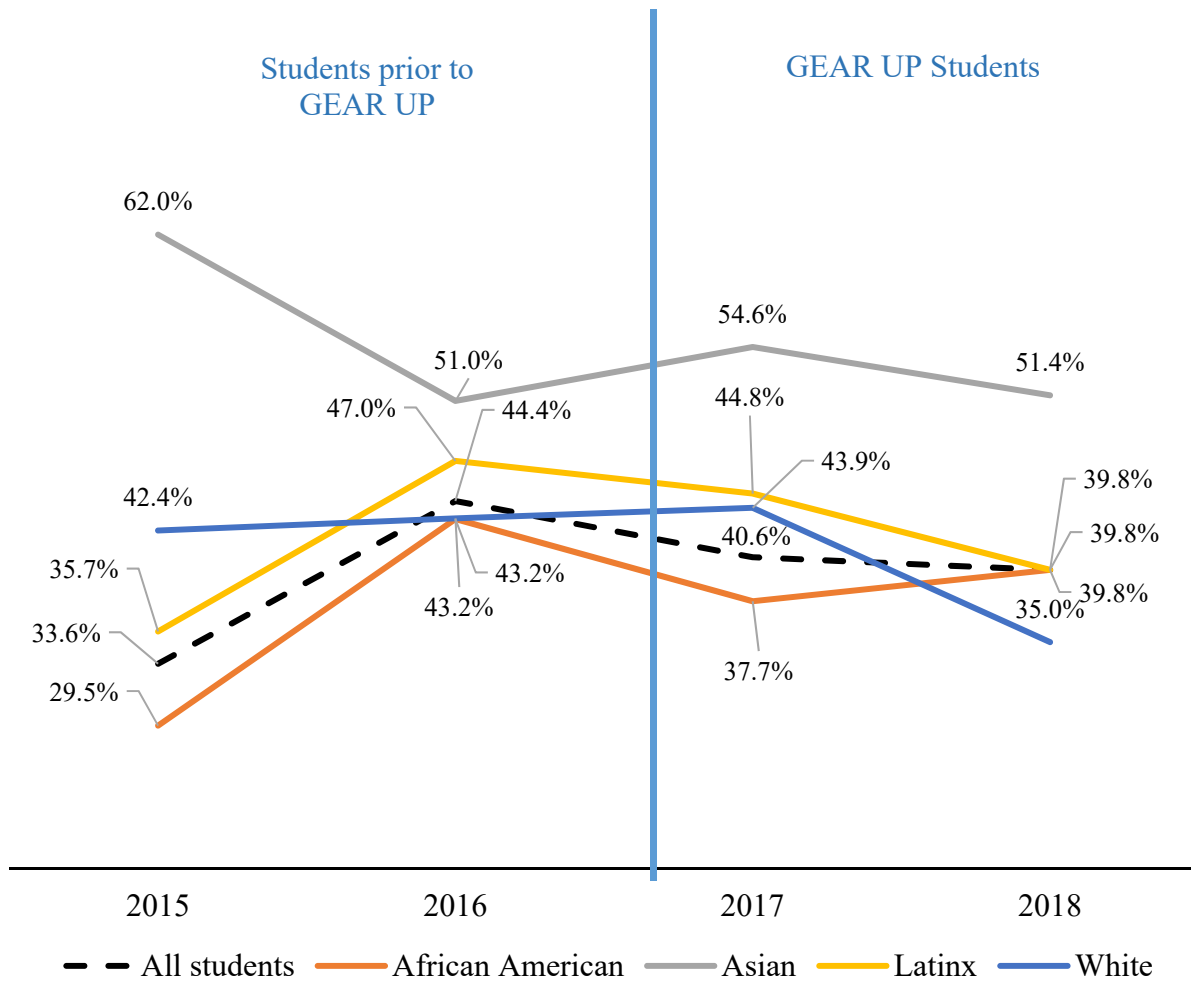


Figure 5: Percentage of high school graduates who enrolled in any postsecondary institution in the fall after high school graduation

Figure 6 presents the percentage of high school graduates who enrolled in any postsecondary institution in the fall after high school graduation by the three levels of participation for the two GEAR UP classes. As was the case regarding high school graduation, students in either GEAR UP class who participated in at least three types of GEAR UP activities were much more likely to enroll in college the fall after high school graduation than students who participated one or two types of activities or who did not participate at all. This was true for both the 2017 class ( $F = 39.29, p < .001$ ) and the 2018 class ( $F = 31.23, p < .001$ ).

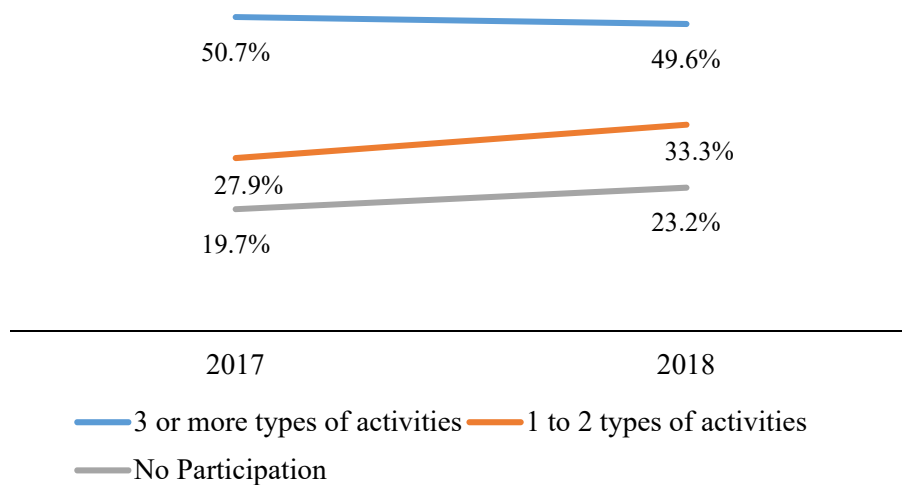


Figure 6: Percentage of high school graduates who enrolled in any postsecondary institution in the fall after high school graduation by the number of GEAR UP activities participated in

When combining both GEAR UP classes (Figure 7), students who participated in more types of activities were more likely to enroll in any postsecondary institution after graduation ( $F = 68.98, p < .001$ ). After accounting for high school, GEAR UP class, and demographic variables these higher postsecondary enrollment rates remained. The odds of a student enrolling in college that participated in three or more types of activities were 3.43 times higher than the odds of a student who did not participate. In addition, the odds of a student enrolling in college who participated in one or two types of activities were 1.61 times higher than the odds of a student who did not participate.



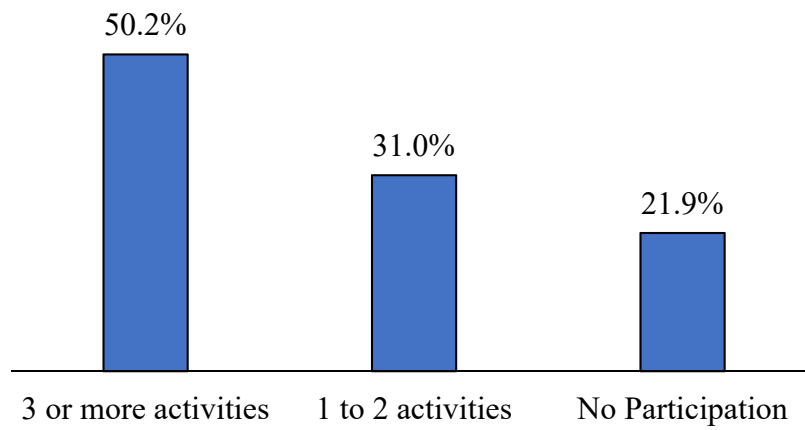


Figure 7: Percentage of high school graduates who enrolled in any postsecondary institution in the fall after high school graduation across both GEAR UP classes by the number of GEAR UP activities participated in

**Did more GEAR UP students enroll in MATC or UWM in the fall after high school graduation?**

Of the 4,725 students who graduated from the GEAR UP schools between 2015 and 2018, 760 directly entered MATC (16.1%). Figure 8 presents the percentage of graduates who directly enrolled in MATC in the fall after high school graduation by each class year and race/ethnicity. Considering the increase in MATC enrolment occurred before the GEAR UP classes, these results do not suggest GEAR UP resulted in more students enrolling in MATC.

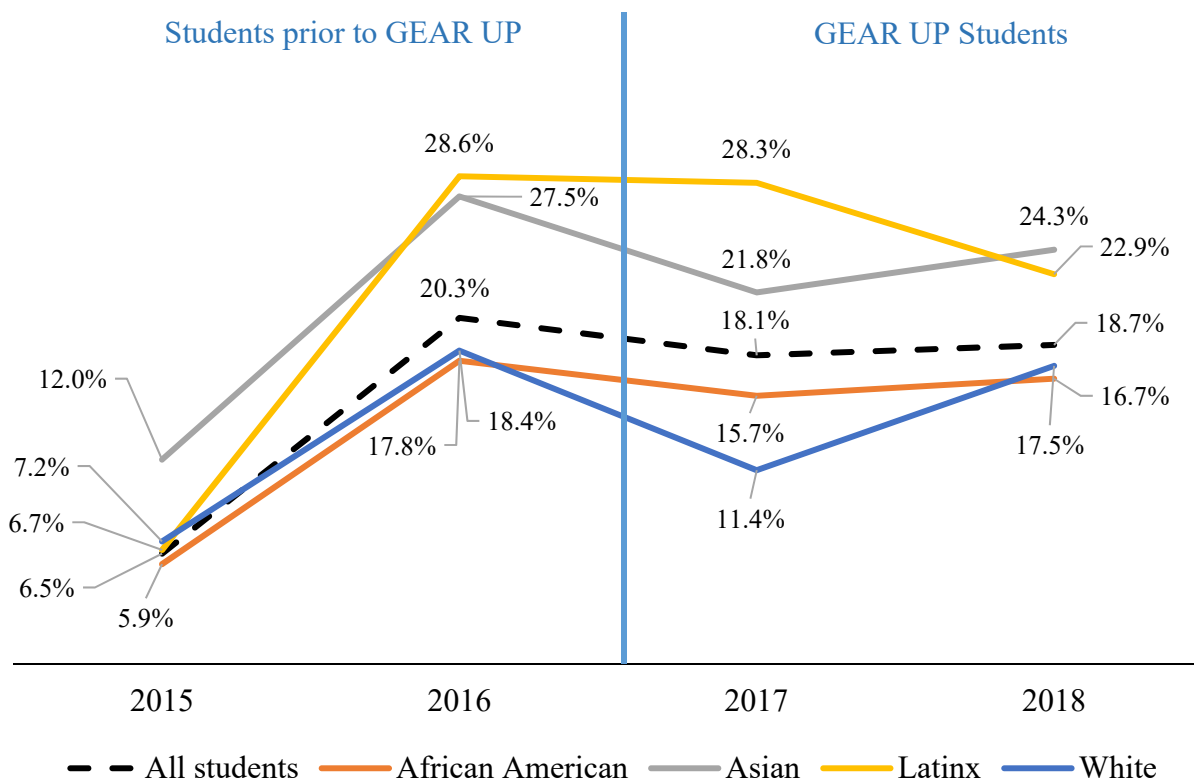


Figure 8: Percentage of graduates who enrolled at MATC in the fall after high school graduation 179 of 4,725 students who graduated between 2015 and 2018 from GEAR UP schools enrolled into UWM (3.8%) in the fall after high school graduation. Figure 9 displays the percentage of graduates who enrolled in UWM by graduating class and race/ethnicity. Considering the percentage of graduates enrolling into UWM steadily dropped over the four years, these results do not suggest GEAR UP resulted in more students enrolling in UWM.

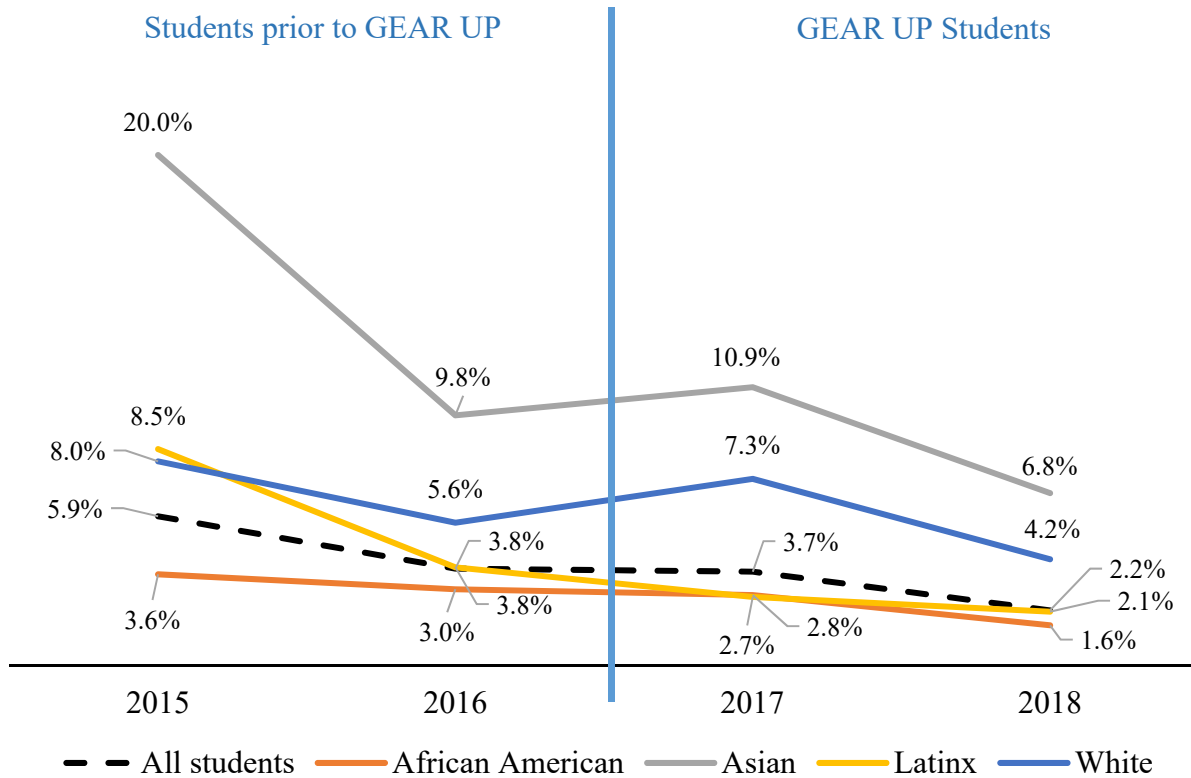


Figure 9: Percentage of graduates who enrolled at UWM in the fall after high school graduation

Figure 10 presents percentage of graduates who enrolled at MATC by the three levels of participation for the two GEAR UP classes. As was the case for college enrollment more generally, students in either GEAR UP class who participated in at least three types of GEAR UP activities were much more likely to enroll in MATC in the fall after graduation than students who participated one or two types of activities or who did not participate at all. This was true for both the 2017 class ( $F = 12.41, p < .001$ ) and the 2018 class ( $F = 6.64, p = .001$ ).

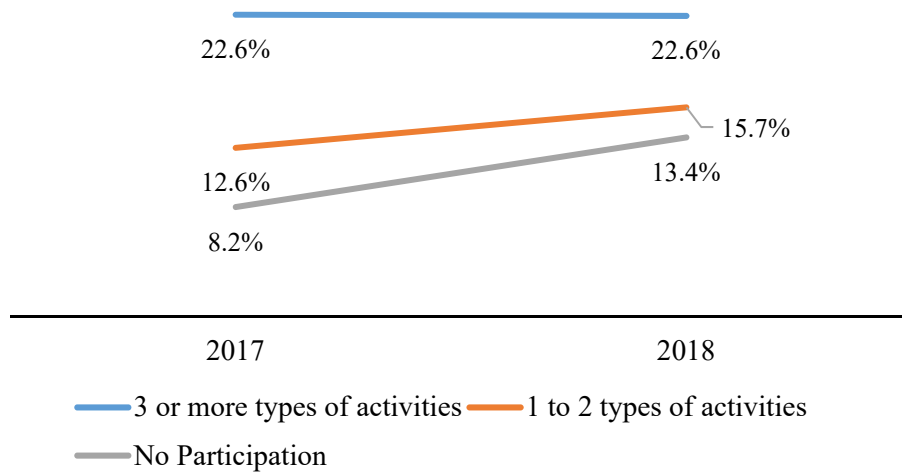


Figure 10: Percentage of graduates who enrolled at MATC by the number of GEAR UP activities participated in

Similarly and seen in Figure 11, students in the 2017 GEAR UP class who participated in at least three types of GEAR UP activities were much more likely to enroll in UWM the fall after graduation than students who participated in one or two types of activities or who did not participate at all ( $F = 8.77, p < .001$ ). This was not the case however regarding students in the 2018 class ( $F = 1.94, p = .144$ ).

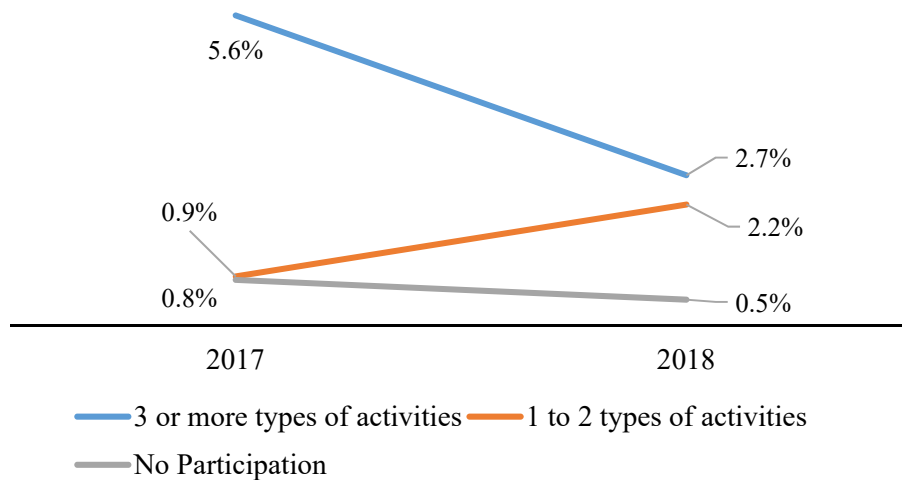


Figure 11: Percentage of graduates who enrolled at UWM by the number of GEAR UP activities participated in

**Were GEAR UP students who enrolled in MATC or UWM more likely to attend full-time?**

For this set of analyses, we examine the percentage of enrolled students who attended MATC and UWM after high school graduation as full-time students. A full-time student was defined as attempting 12 or more credits in the fall after high school graduation.

Figure 12 displays the percentage of students who attended MATC as a full-time student.

Considering students from the two GEAR UP classes who enrolled in MATC were less likely to attend full time, there is no evidence GEAR UP students who enrolled in MATC were more likely to attend as a full-time student.

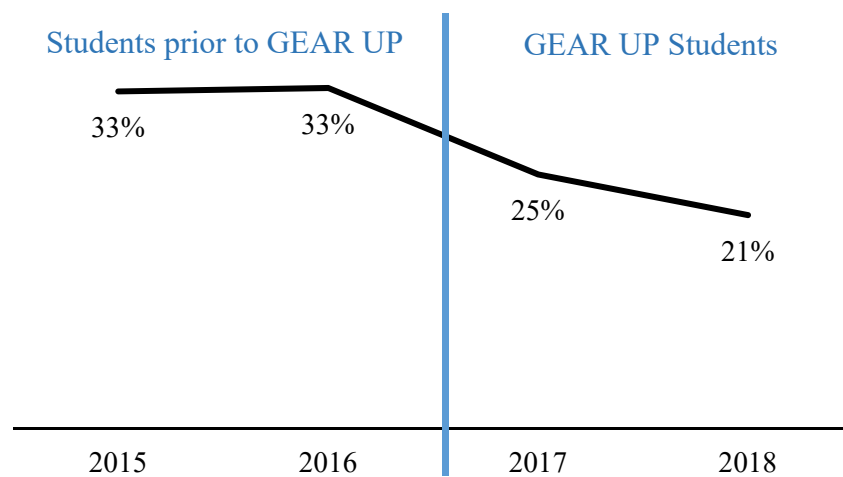


Figure 12: Percentage of enrolled students who attended MATC as a full-time student after high school graduation

Figure 13 displays the percentage of enrolled students who attended UWM as a full-time student. These results show students in the different graduating classes who enrolled in UWM attend as a full-time student at different rates ( $F = 5.58, p = .001$ ). When combining across years, GEAR UP students at UWM had a significantly higher percentage of students enroll full-time than students prior to GEAR UP ( $t = 4.10, df = 177, p = <.001$ ).

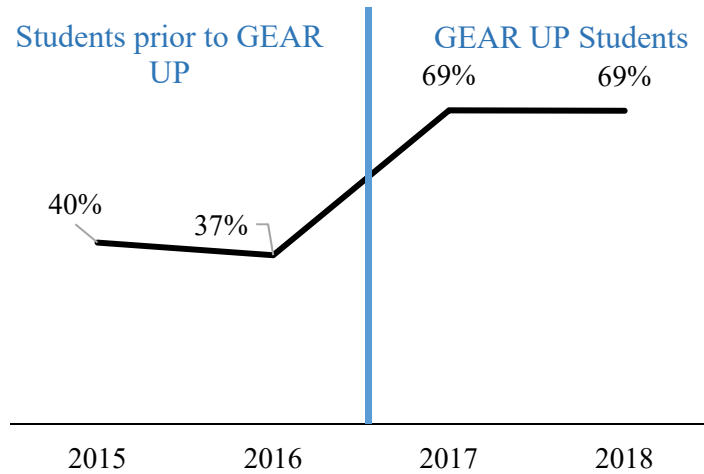


Figure 13: Percentage of enrolled students who attended UWM as a full-time student after high school graduation

Since the full-time attendance rate for enrolled students decreased when combined across both the UWM and MATC campuses (Figure 14), there was no evidence that GEAR UP students were more likely to attend college as a full-time student in the fall after graduation.

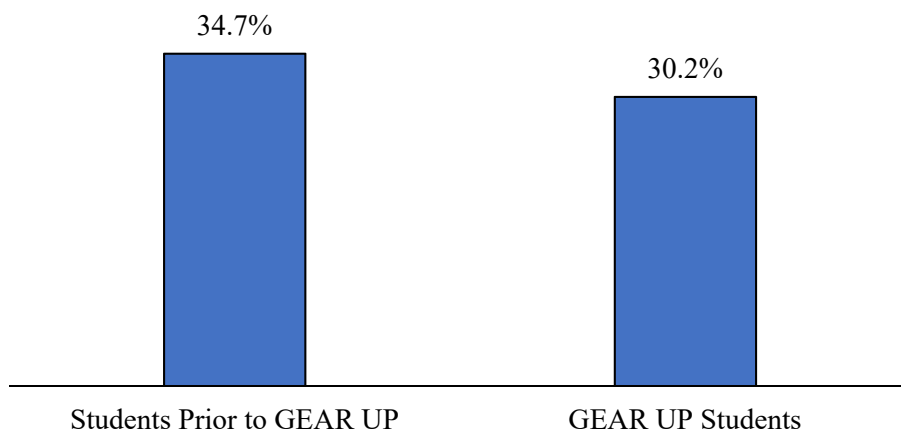


Figure 14: Percentage of enrolled students who attended MATC or UWM as a full-time student after high school graduation

**Were GEAR UP students who attended MATC or UWM more likely to be retained from fall to spring and fall to fall?**

These analyses explored the retention rate from fall to spring and fall to fall for the students who attended MATC or UWM in the fall after high school graduation as a full-time student.<sup>8</sup>

Regarding MATC, higher rates of students in the GEAR UP classes were retained for the spring semester than was the case regarding students in the classes prior to GEAR UP ( $F = 3.06, p = .03$ ) (Figure 15). However, fewer students who were part of GEAR UP and attended MATC were retained the following fall.<sup>9</sup>

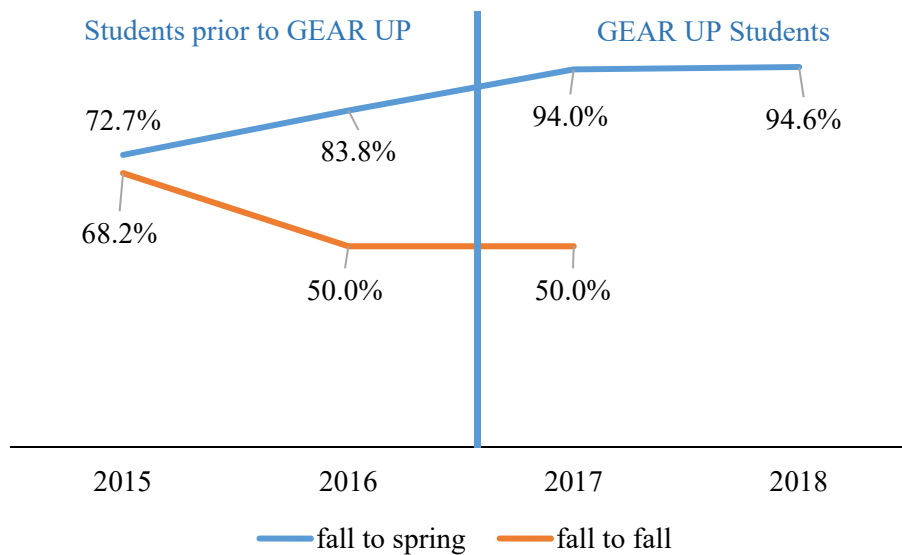


Figure 15: Fall to spring and fall to fall retention rates of students who attended MATC as full-time students

Regarding UWM, there is no evidence that students in the GEAR UP classes who attended UWM were more likely to be retained for the spring semester (Figure 16). While the trend suggests improved fall to fall retention for students from the 2017 GEAR UP class, these differences did not suggest statistically significant differences between classes. ( $F = .66, p = .521$ ).

<sup>8</sup> The fall to fall retention rates for students who enrolled at MATC or UWM in fall of 2018 were not available.

<sup>9</sup> Further analyses using the National Student Clearinghouse data showed few students who were not retained transferring to another institution. Most students left MATC altogether or took a break for a semester, a year, or a couple of years and returned to MATC.

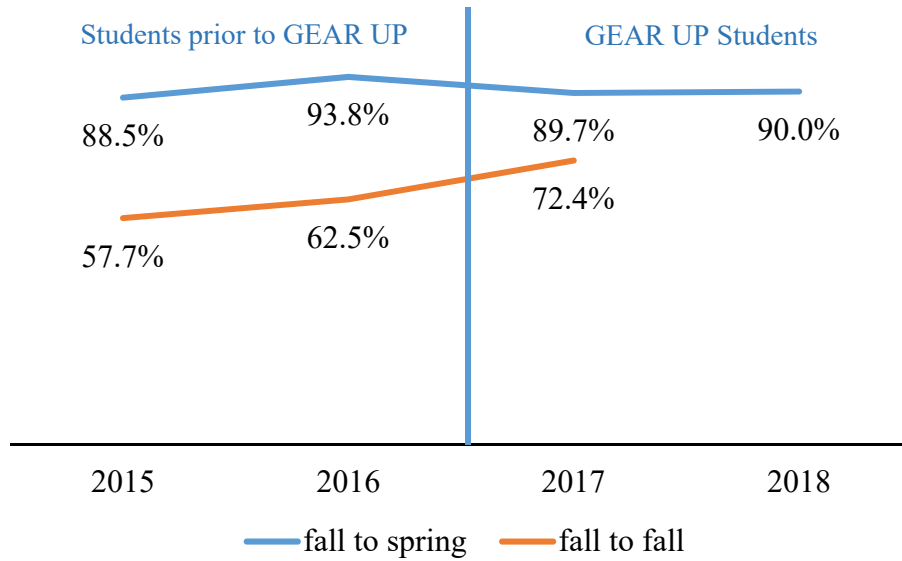


Figure 16: Fall to spring and fall to fall retention rates of students who enrolled at UWM as full-time students

Across both campuses, GEAR UP students who attended MATC or UWM full-time were more likely to be retained the following spring semester ( $t = 2.23, df = 272, p = .027$ ) but less likely to be retained the following fall ( $t = -3.60, df = 272, p < .001$ ) (Figure 17). After accounting for high school, campus, and demographic variables, the odds of a GEAR UP student being retained for the spring semester were 3.08 times higher than the odds of students prior to GEAR UP.

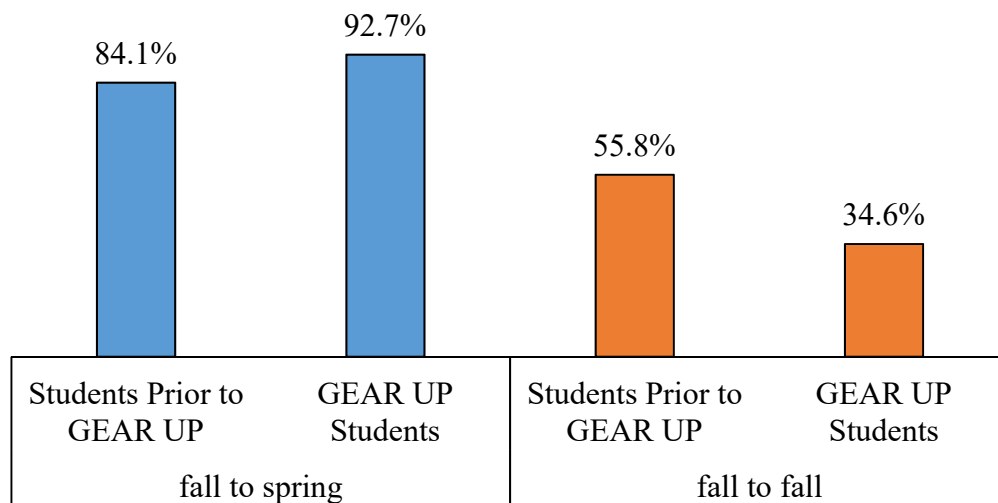


Figure 17: Fall to spring and fall to fall retention rates of students who attended MATC or UWM after high school graduation as full-time students



**Did GEAR UP students who attended MATC or UWM earn better grades in college?**

The analyses on college GPA focused on students that attempted at least 12 credits in their first year in college.

Regarding MATC, Figure 18 presents the first semester and first year GPA of students who attempted at least 12 credits. Considering both first semester and first year GPAs were higher in 2015, there is no evidence that students from GEAR UP classes earned better grades at MATC.

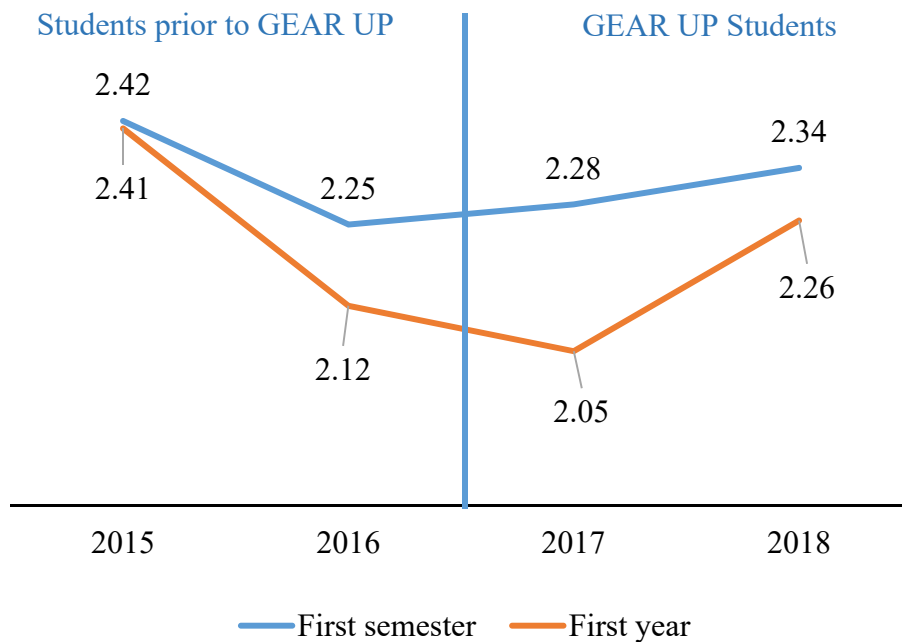


Figure 18: Average first semester and first year GPA for students who attended MATC that attempted at least 12 credits in their first year

Regarding UWM, Figure 19 presents the first semester and first year GPA of students who attempted at least 12 credits. While the trend seems to suggest GPAs improved, there were no statistically significant differences for first semester GPA over these four years ( $F = 2.12, p = .100$ ) while the differences for first year GPA barely met the threshold of being statistically significant ( $F = 2.69, p = .049$ ). When combining across years, GEAR UP students at UWM had a significantly higher first semester and first year GPAs than students prior to GEAR UP (First semester:  $t = 2.06, df = 139, p = <.041$ ; First year:  $t = 2.46, df = 139, p = .015$ ).

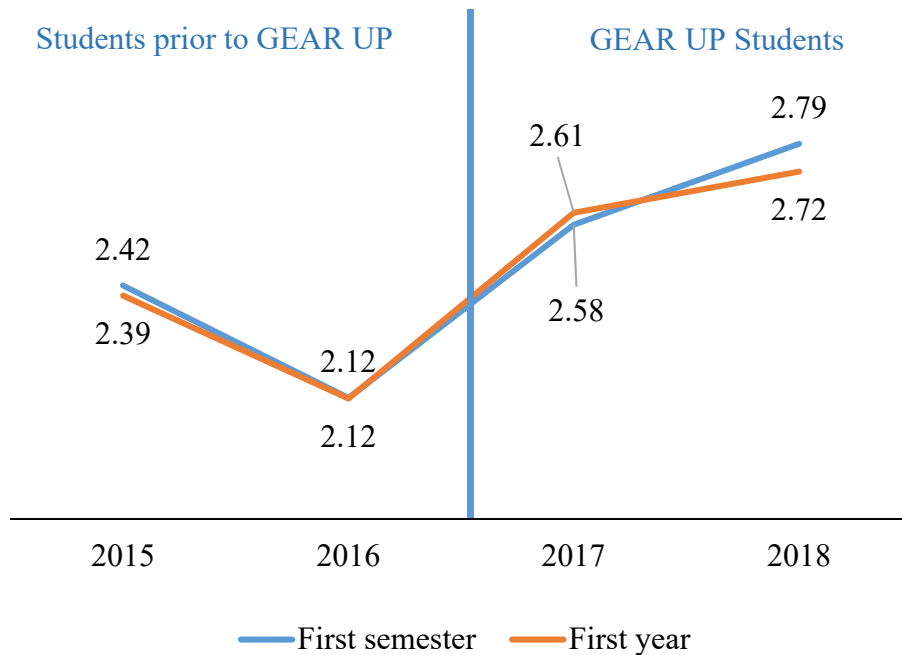


Figure 19: Average first semester and first year GPA for students who enrolled in UWM that attempted at least 12 credits in their first year

When combined across both MATC and UWM, GEAR UP students did not earn significantly higher first semester or first year GPAs than students prior to GEAR UP (First semester:  $t = 1.18$ ,  $df = 489$ ,  $p = .239$ ; First year:  $t = .64$ ,  $df = 491$ ,  $p = .521$ ) (Figure 20).

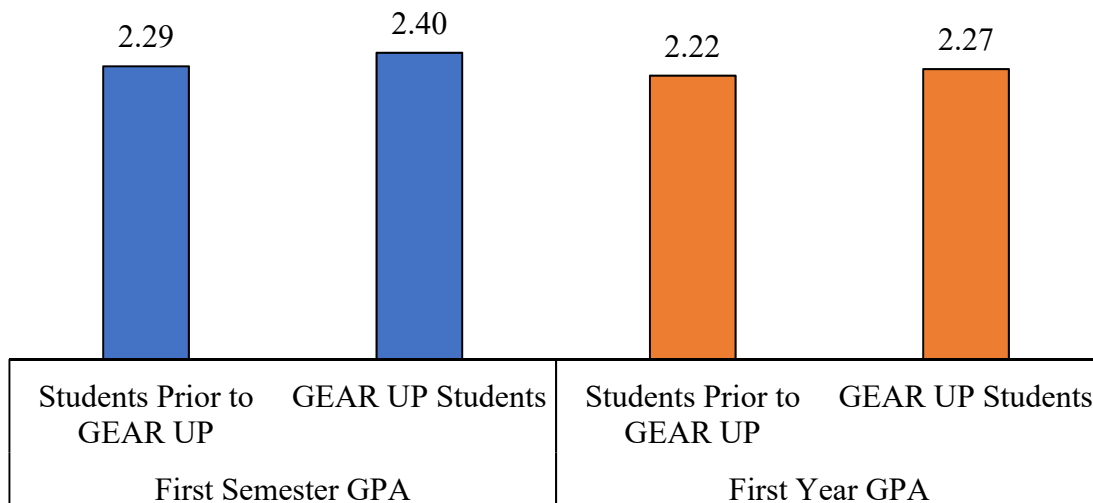


Figure 20: Average first semester and first year GPA for students who enrolled in MATC or UWM that attempted at least 12 credits in their first year

**Were GEAR UP students who enrolled in MATC or UWM more likely to pass college math or English classes?**

The analyses on the percentage of students that passed college math and English in their first year only included students who attempted at least 12 credits in their first year.

Regarding MATC, Figure 21 presents the percentage of students who attended MATC and completed college-level math and English courses. The percentage of GEAR UP students who passed college math actually decreased from 2016. However, higher percentages of GEAR UP students passed college English ( $F = 3.97, p = .008$ ).

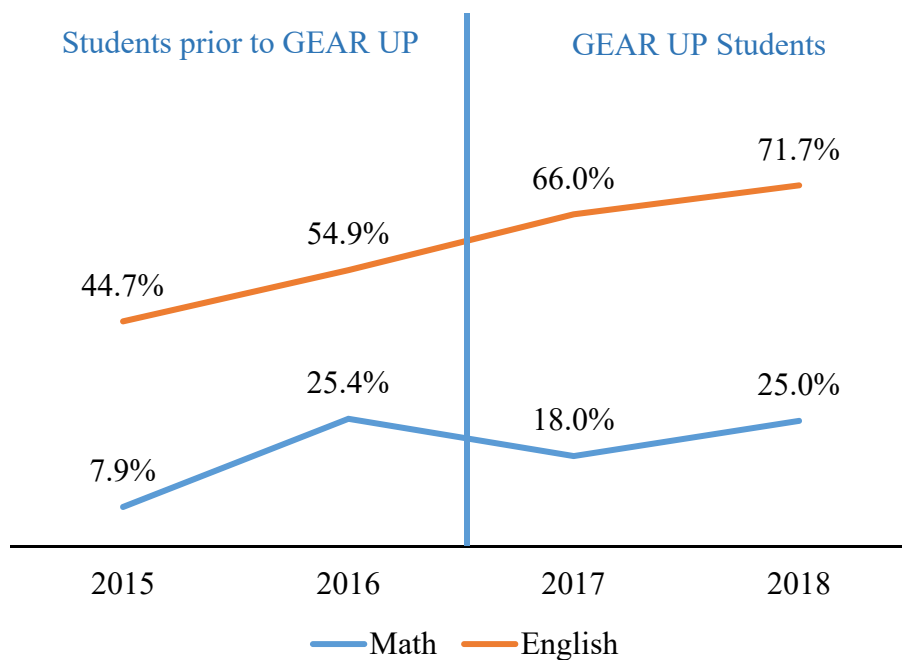


Figure 21: Percentage of students who attempted at least 12 credits in their first year passing college Math and English at MATC

Regarding UWM, as presented in Figure 22, more students in the GEAR UP classes passed college math. However, it was not statistically significant across the four classes ( $F = 1.26, p = .290$ ) or between GEAR UP students and students prior to GEAR UP ( $t = 1.86, df = 139, p = .065$ ). In addition, GEAR UP students were not more likely to complete college English ( $F = .59, p = .620$ ).

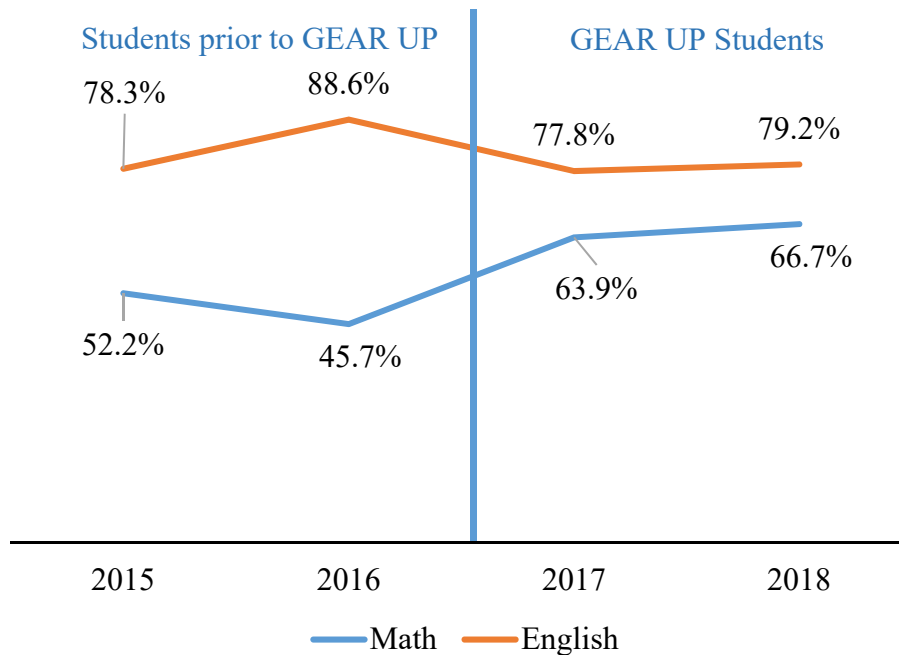


Figure 22: Percentage of students who attempted at least 12 credits in their first year passing college Math and English at UWM

Across both campuses (Figure 23), GEAR UP students were not more likely to pass college math ( $t = .25$ ,  $df = 491$ ,  $p = .804$ ). However, GEAR UP students were more likely to pass college English ( $t = 1.98$ ,  $df = 491$ ,  $p = .048$ ).

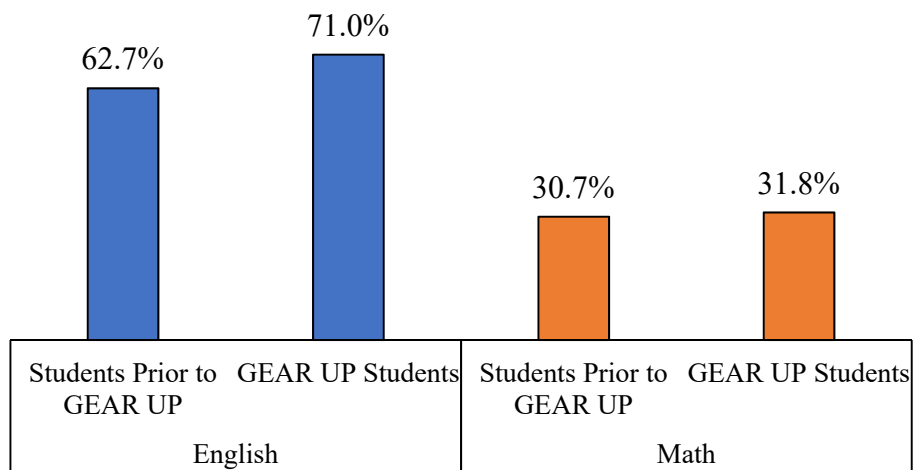


Figure 23: Percentage of students who attempted at least 12 credits in their first year passing college Math and English at MATC or UWM

## Findings and Limitations

The goal of GEAR UP is to help students graduate high school and prepare them for college or careers. This report focused on the extent MPS GEAR UP met the second objective of the program by examining evidence whether GEAR UP improved high school graduation, postsecondary enrollment, and postsecondary success. The main findings of our analyses showed:

- Students in GEAR UP were more likely to graduate high school on-time than were students attending the same schools prior to GEAR UP. This was true for all racial and ethnic groups. Further, across both GEAR UP classes, students who participated in more types of GEAR UP activities had significantly higher graduation rates. After accounting for high school, GEAR UP class, and demographic variables these higher graduation rates remained.
- Students in GEAR UP were not more likely to enroll in a postsecondary institution in the fall after high school graduation. However, when combining both GEAR UP classes, students who participated in more types of GEAR UP activities were more likely to enroll in a postsecondary institution in the fall after high school graduation.
- Students in GEAR UP were not more likely to enroll in MATC or UWM. However, students who participated in at least three types of GEAR UP activities were much more likely to enroll in MATC in the fall after high school graduation than students who participated in one or two types of activities or who did not participate at all. This was also true for students in the 2017 GEAR UP class at UWM.
- GEAR UP students who attended UWM were more likely to do so as a full-time student. However, this was not the case regarding GEAR UP students who attended MATC.
- GEAR UP students who attended MATC or UWM were more likely to stay for the spring semester but not the following fall semester.
- GEAR UP students who attended UWM earned better grades their first semester and first year. However, GEAR UP students who attended MATC did not.
- GEAR UP students who attended MATC or UWM were more likely to pass college English but not math.

Although many of the findings presented in this report are encouraging, it is difficult to causally attribute participation in GEAR UP to the outcomes presented here. One reason for this is MPS,

MATC, and UWM made many changes over the four study years that could have also impacted any of the outcomes measured in this report. Further conversations with MATC suggested several programs that could explain the enrollment changes over these four years. One type of program was MATC PROMISE<sup>10</sup>, which offers free tuition for eligible students and a continued path toward a four-year degree at partnering colleges and universities. There was also an increased emphasis on Dual Enrollment between MATC and MPS courses. Both MATC PROMISE and Dual Enrollment were also likely to have become more relevant through the M<sup>3</sup> Initiative<sup>11</sup>, a partnership between MATC, UWM, and MPS. Lastly, it is also possible programs and policies like these have a delayed effect and further complicate when it would have affected the outcomes studied in this report.

Another challenge for attributing the outcomes reported in this report to GEAR UP is students in the program were also likely to participate in other types of programs that are like GEAR UP. Thus, their participation in GEAR UP should not be viewed as the only support students would have received and relevant for any future success in college. For example, further conversations with UWM showed there were scholarships through the UWM Foundation that were specifically available for GEAR UP students. In addition, some GEAR UP students participated in summer bridge programs before attending UWM. These summer bridge programs could have influenced student performance in their first semester at UWM.

Even considering these limitations, the results of this study suggest GEAR UP was at least part of an array of opportunities provided to MPS students that together helped more students graduate high school and succeed in college.

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<sup>10</sup> <https://www.matc.edu/promise/>

<sup>11</sup> <https://uwm.edu/m-cubed/>

## Appendix A: Data Definitions

### **On-time High School Graduate**

Students needed to graduate high school in four years or less to be considered an on-time high school graduate. The class year that is used to define this is determined from when the student enters as a first-time high school freshman. For example, students who graduated on-time in the class of 2018 would have been a first-time freshman in the 2014-2015 school year. The class year a student is assigned to is permanent. The school a student is associated to can change depending on where the student is currently enrolled.

### **Food Service Status**

All demographic information was provided in the graduation class file except for student food service indicator. This was pulled from other MPS records and matched to the graduation class file. However, not all records on the graduation file could be matched and as a result there is some missing information for this field.

### **Immediate Postsecondary Enrollment**

Tracking whether a student immediately enrolled into any postsecondary institution was calculated by the research team. Data was provided from the National Student Clearinghouse (NSC), which tracks student enrollment in over 3,700 postsecondary institutions. Both MATC and UWM are among these institutions. These data included when students graduate and when students enrolled into a postsecondary institution. The cutoff date after graduation used to determine immediate enrollment in the following fall was November 1<sup>st</sup>. Students enrolling after November 1<sup>st</sup> were not counted as immediately enrolling.

### **College Grade Point Average (GPA)**

A student's college GPA was calculated by converting class grades to grade scores (4 = A; 3 = B; 2 = C; 1 = D; 0 = F) and then averaging scores across all classes. The data provided by MATC and UWM included first semester and first year GPA for all students from GEAR UP schools who enrolled in MATC or UWM between 2015 and 2018. First year GPA covered the summer, Fall, Winter, and Spring semesters.<sup>12</sup> First year and first semester GPA were provided by the MATC. However, UWM only provided GPA by each term and not overall. Thus, first

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<sup>12</sup> MATC has a three-semester format (Fall, Spring, and Summer) while UWM has a four-semester format (Summer, Fall, Winter, Spring)

year GPA for students enrolling in UWM was calculated by averaging GPA by the number of credits attempted each semester.<sup>13</sup>

### **Full-Time Student**

A full-time student was a student who attempted 12 or more credits in a semester at MATC or UWM.

### **Fall to Spring and Fall to Fall Retention**

Fall to Spring and Fall to Fall retention information on students were already calculated in the data that MATC and UWM provided. For MATC, a student was considered retained if they enrolled in a postsecondary course in the subsequent term. For UWM, a student was considered retained if they enrolled in the following Spring or following Fall semester.

### **College-level completion of English and Math**

The data provided by MATC and UWM indicated if a student completed, did not complete, or did not take any college-level English or math courses in their first year. Completion at MATC and UWM was defined as a student earning a D- or better in a course.

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<sup>13</sup> Although UWM provided Winter semester credits and GPA, zero students attempted any courses during this time.



## Appendix B: Description of Activity Types<sup>14</sup>

**ACT Prep:** Various activities that prepared students to take the ACT test. This included ACT preparation classes and ACT practice tests.

**College Advising:** Student advising to prepare students for college. This included check-up meetings with students or helping students select colleges.

**College Preparation:** An activity that assisted students in the transition to college.

**College Visit:** Any activity that involved visiting a college campus to help students decide what colleges to apply for.

**Comprehensive Mentoring:** Intensive and ongoing support for students.

**FAFSA:** An activity that helped students with understanding or completing their FAFSA applications

**Pre-College Programs:** Activities or programs that took place at colleges that are designed to give college experiences to students.

**Senior Bridge:** An activity in the Senior Bridge program, a unique transition program that was developed by GEAR UP for first time seniors.

**Transition Program:** An activity that prepared students for the transition before they entered high school and while they were freshman students.

**Tutoring:** An activity that involved academic tutoring such as afterschool homework assistance.

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<sup>14</sup> Activities that were in categorized as Academic Enrichment, AVID, Credit Recovery, Financial Literacy, Informational Meetings, Social and Cultural, Workshops, and Other activity types were removed from the analysis.