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## Student Involvement & Leadership Center: Impact Report Spring 2015 to Fall 2018

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# Student Involvement & Leadership Center

IMPACT ANALYSIS

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May 2019

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# Student Involvement & Leadership Center (SILC) participation increases persistence

## Erik Dickamore

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Center for Student Analytics  
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Students who helped organize and run SILC programs experienced an increase in persistence to the next term compared to similar students who did not organize SILC programs (DID = 0.0326,  $p < 0.01$ ).

## Amanda Hagman

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### ABSTRACT:

Leadership and involvement programs are an integral part of the student experience on University campuses. Volunteers and scholars within leadership and involvement serve their peers by providing rewarding events that unify the student body. Volunteers and scholars also benefit through opportunities for personal exploration and growth. Working with SILC allows students to serve and lead in a unique way. This report explored the association between student participation in leadership and involvement programs, and student persistence to the next term at Utah State University.

**METHODS:** Students participation was captured by rosters across all SILC programs. Students who had a record of participation were compared to similar students who did not have a record of participation.

Similar students were identified through prediction-based propensity score matching. Students were matched based on their persistence prediction and their propensity to participate.

**FINDINGS:** Students were 99% similar following matching. Participating and comparison students were compared using difference-in-difference testing. Students who participated in SILC programs were significantly more likely to persist at USU than similar students who did not (DID = 0.0326,  $p < .001$ ). The unstandardized effect size can be estimated through student impact. It is estimated that SILC participation assisted in retaining 12 (CI: 6 – 18) students each year who were otherwise not expected to persist.

## Spencer Bitner

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# Does participating in student involvement & leadership influence persistence to the next term?

## **WHY PERSISTENCE?**

Student success can be defined in various ways. One valuable way to view student success is through progress towards graduation. Progress towards graduation reflects students acquiring the necessary knowledge and accumulating credentials that prepare them for graduation. Progress towards graduation can be measured through student persistence. Here, persistence is defined as term-to-term enrolment at Utah State University. As a measurement, persistence facilitates a quick feedback loop to identify what's working well and what can be better (Bear, Hagman, & Kil, 2020 & Colver, 2019).

## **WHY USE ANALYTICS?**

Higher education professionals labor to support student success, in all its various forms, not just through persistence. However, professionals now have access to far more data than they can feasibly interpret and utilize to support student success without the help of analytics. Fortunately, USU has access to professionals and tools that can process and organize data into insights that have historically been hidden from view (Appendix A). University professionals can leverage insights to directly influence student success (Baer, Kil, & Hagman, 2019). Indeed, analytics aligns with USU's mission to be a "premier student-centered land-grant institution" by allowing professionals to know what is going well and what could be better (see Appendix G for the evaluation cycle).

## **PERSISTENCE & SILC**

The primary objectives of student involvement is to promote leadership development, empower students, promote civic responsibility, and enhance academic success (Kuh, 2006).

At USU, the SILC has a mission to cultivate growth through student-led organizations that benefit the student body and larger USU community. SILC participation is also aligned to support academic success. Taken together, the mission is believed to support student persistence towards graduation.

This report explores the impact of SILC participation on student persistence.

# Impact Analysis Results

## SUMMARY STATISTICS

Overall Change in Persistence: ..... 3.26% (1.70% to 4.82%)  
 Overall Change in Students (per term): ..... 12 (CI: 6 to 18 Students)  
 Analysis Terms: ..... Sp15, Fa15, Sp16, Fa16, Sp17, Fa17, Sp18, Fa 18  
 Students Available for Analysis: ..... 2,019 Students  
 Percent of Students Participating: ..... 1.19%  
 Students Matched for Analysis: ..... 1,498 Students  
 Percent of Students Matched for Analysis ..... 74.20%

## PARTICIPANT

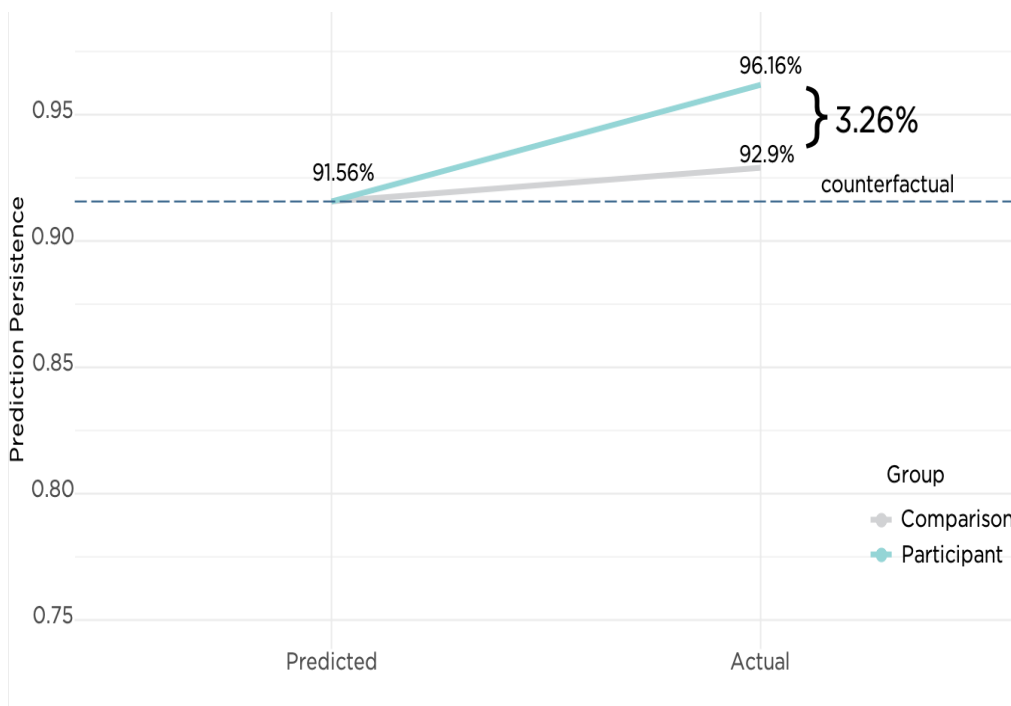
The sample utilized all USU students on the Logan Main campus. USU-E and Statewide campuses were excluded since they have their own leadership programs. Non-degree seeking students were also excluded from the analysis.

Participants were Logan campus SILC leaders or volunteers. Fraternity and Sorority Life (FSL) participants, while technically part of SILC, were not included in this analysis (for FSL impacts see Dickamore, Hagman, & Eidenschink, 2020). Comparison students were Logan Main Campus students who did not serve in SILC programs during a given semester.

## STUDENT IMPACT

Change in persistence is measured using a difference-in-difference statistics. The difference-in-difference measure compares the change in predicted persistence and actual persistence between participating and comparison students. Comparisons are made between matched pairs, matching is optimized through prediction-based propensity score matching (see Appendix B for analytic details).

Students who serve within the SILC during a semester experienced a significant increase in persistence to the next term; 96.2% compared to 92.9%. The estimated increase in persistence is equivalent to retaining 12 (CI: 6 - 18) students each year who were otherwise not expected to persist. This represents an estimated \$54,530.52 (CI: \$27,265.26 - \$81,795.78) in retained tuition per year, assuming an adjusted tuition of \$4,544.21 (see Appendix C for estimated tuition table).



**FIGURE 1**

Participant and comparison students began with highly similar persistence predictions. Actual persistence was significantly different between groups.

## PARTICIPANT DEMOGRAPHICS

Matching procedures for this analysis resulted in the inclusion of 84% of available participants. Students were 43.92% male identifying, 87.8% Euro-American, and 69.11% first-time college students. Students are 96.73% undergraduate.

Prior to matching, participating and comparison students were 77% similar based on propensity score and 65% based on student predicted persistence. Following matching, the participating and comparison students were 98% and 99% similar in their propensity and predicted persistence respectively.

## CHANGE IN PERSISTENCE

Illume Impact utilized historical data to predict student persistence to the next term. Serving in SILC programs significantly influenced students in the top and second persistence quartiles. Students in the top persistence quartile are considered to highly likely to persistence. In fact, they are so likely to persist it is very difficult to make an impact with this group of students, yet, SILC makes an impact with these students.

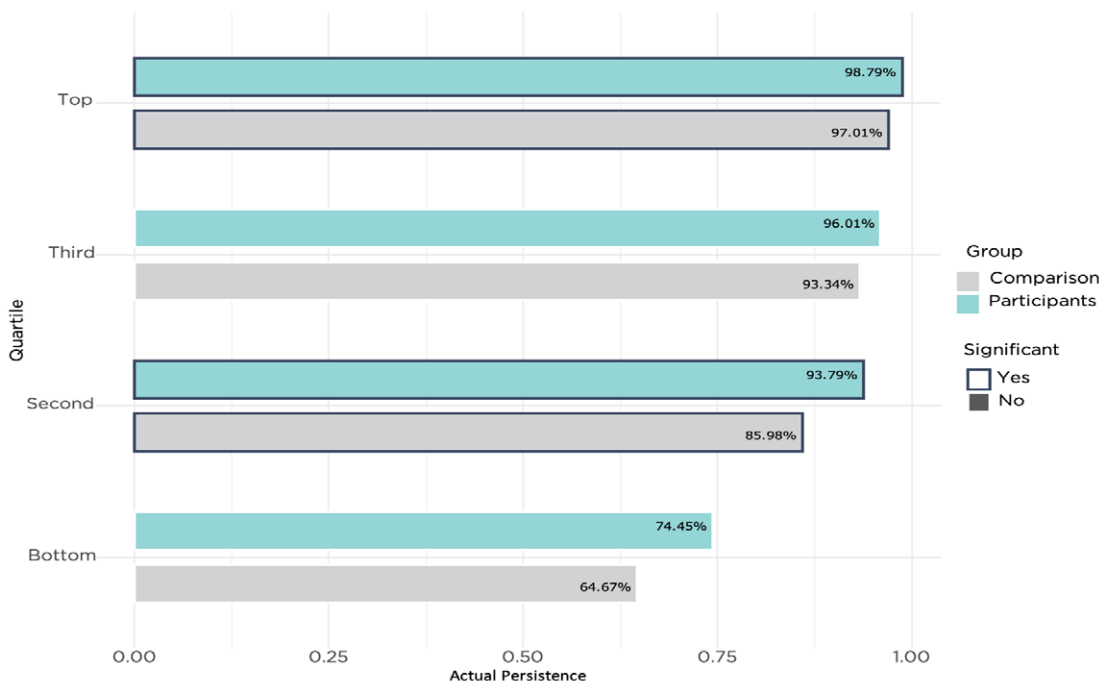
Volunteering with SILC also impacts students in the second persistence quartile. These students are considered to be less likely to persist compared to peers with an average predicted persistence of 85%. Volunteering with SILC has a large, 7.79% (CI: 2.16% to 13.42%) impact on students in the second persistence quartile. This subgroup has a smaller

## DIFFERENCES BETWEEN PARTICIPANTS AND GENERAL USU POPULATION

Compared to the USU general population, which is roughly 49% female, there were significantly more female students serving in SILC than would be expected, 56% ( $\chi^2(1) = 47.77, p < .001$ ).

sample size, to be conservative, consider the impact to be closer to the lower end of the confidence interval (2.16%).

The distribution of participation in SILC is not equally distributed between persistence quartiles. For example, if SILC participants were selected at random from the USU general population, it would be expected that each quartile would account for 25% of participants. This is not the case with SILC. The majority of the students who serve were in the top and third quartiles (81%). Given that SILC significantly benefited students in the second persistence quartile, SILC leadership could explore recruitment processes that would encourage greater participation from lower quartiles.



**FIGURE 2**

Actual persistence by predicted persistence quartiles for participating and comparison students



# Impacted Student Segments

Illume Impact provided analyses that look at various student segments to identify how the program influenced students by specific characteristics. Please note that the student segments were not mutually exclusive. Table 1 shows all student groups who experienced a significant change from taking a community-engaged learning course. Appendix D lists all subgroups with non-significant findings.

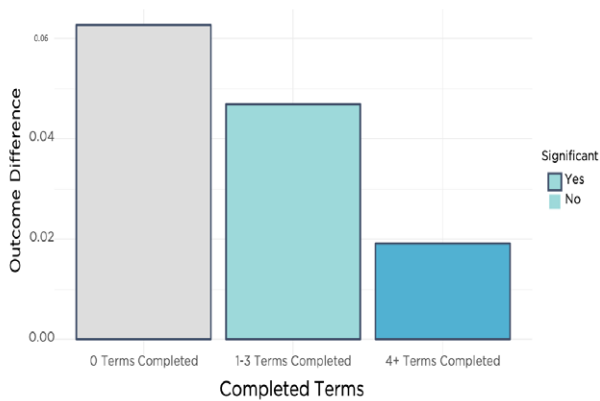
**Impact by Gender:** Both males and females experienced a significant increase in persistence from serving in SILC programs. Males experience a near 4% increase and females about a 2.66% increase in persistence.

**Impact by Term Completion [Figure 3]:** Students at all levels of term completion experienced a significant change in persistence. The largest change appears to be with first-term students, who experienced a near 6% change in persistence. The impact of serving in SILC on persistence decreases with terms completed at the University.

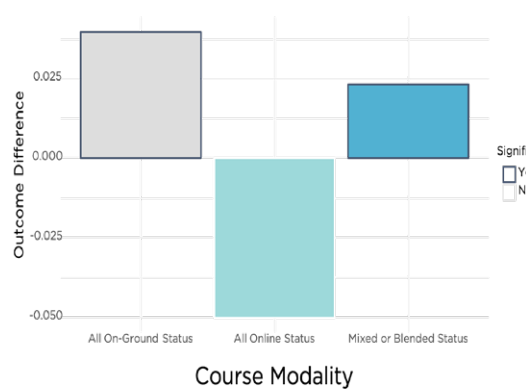
**Impact by Course Modality [Figure 4]:** Students who were all on-ground or had a mixed course modality experienced a significant increase in persistence to the next term from serving in SILC programs. The largest increase was seen for on-ground students. The analysis was unable to identify impact for all online students. This group was extremely small, with only 4 students who are all online serving in SILC programs.

**Impact by Student Type [Figure 5]:** Students who were first-time in college experienced a significant increase in persistence from serving in SILC programs. The analysis was unable to detect a change in persistence for transfer and readmitted students who served in SILC.

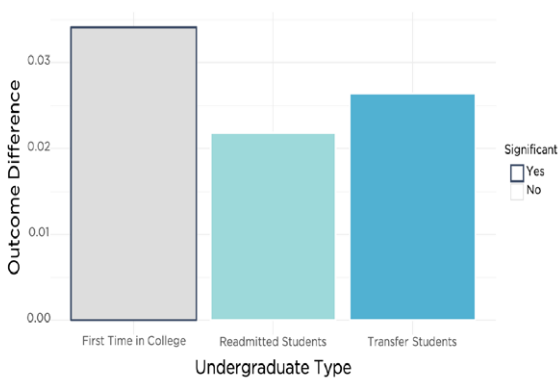
**Impact by Major Type [Figure 6]:** The analysis divided student type into STEM and non-STEM majors. Students from both major types who participated with the SILC experienced significant gains in persistence compared to similar students who did not serve with the SILC.



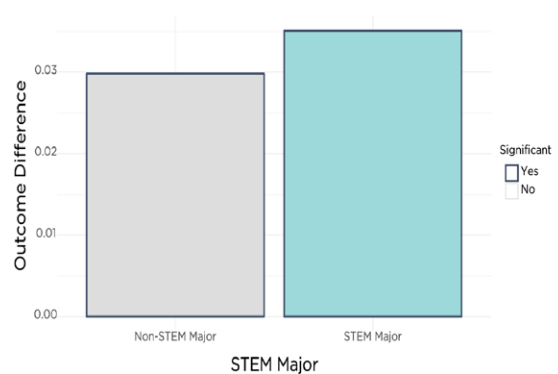
**FIGURE 3**  
Change in student persistence by terms completed



**FIGURE 4**  
Change in student persistence by course modality



**FIGURE 5**  
Change in student persistence by student type



**FIGURE 6**  
Change in student persistence by STEM major classification

# Student Segment Impact

**TABLE 1:**

*Student Subgroups Experiencing a Significant Change From Participating*

N	Student Segment**	Actual Persistence		Difference-in-Difference	CI	Lift in People
		Participant Persistence	Comparison Persistence			
1,498	Overall	96.16%	92.90%	3.26%	1.56%	49
1,449	Undergraduate Students	96.42%	93.31%	3.11%	1.55%	45
1,445	Not Hispanic or Latino	96.21%	92.93%	3.23%	1.58%	47
1,375	Full-Time Status	96.75%	94.13%	2.90%	1.50%	40
1,316	White or Caucasian	96.64%	92.97%	3.62%	1.62%	48
1,219	Non-STEM Major	95.95%	93.28%	2.98%	1.82%	36
1,029	First Time in College	96.93%	93.35%	3.41%	1.79%	35
912	4+ Terms Completed	96.75%	94.65%	1.91%	1.87%	17
864	All On-Ground Courses	95.86%	91.89%	3.97%	2.13%	34
835	Female Students	95.99%	93.83%	2.66%	2.02%	22
755	Top Persistence Prediction Quartile (75th - 100th Percentiles)	98.79%	97.01%	1.78%	1.45%	13
658	Male Students	96.35%	91.70%	4.02%	2.43%	26
624	Mixed or Blended Courses	96.62%	94.31%	2.32%	2.26%	14
444	1 - 3 Terms Completed	95.29%	91.41%	4.69%	2.99%	21
274	STEM Major	98.18%	93.16%	3.51%	2.70%	10
211*	Second Persistence Prediction Quartile (25st - 49th Percentiles)	93.79%	85.98%	7.79%	5.63%	16
141*	0 Terms Completed	94.97%	88.66%	6.27%	5.74%	9

\*Subgroups with fewer than 250 students are considered too small for reliable analysis

\*\*Student group definitions available in appendix F

**FIGURE 7**  
Change in persistence across multiple analyses.



## Additional Analyses

### OVERALL ANALYSIS

The results reported above combined students who were volunteers and leadership with SILC. In this section, the data was split to look at different populations within SILC. The following groups were also analyzed:

- Including FSL
- Volunteers only
- Students receiving scholarships
- Comparing student with scholarships to volunteers

**FRATERNITY AND SORORITY LIFE:** When FSL students were included the analysis showed a significant increase in persistence for students who served with SILC. This analysis included the largest number of students, 4,381, and resulted in an estimated 3.79% increase in persistence. This is equivalent retaining an estimated 30 (CI: 18 to 24) students a year who were not otherwise expected to persist. This reflects an estimated \$136,326.30 (CI: \$81,795.78 to \$109,061.04) in retained tuition dollars. A separate FSL analysis is available in a different report (Dickamore, Hagman, & Eidenschink, 2020).

**VOLUNTEERS WITH SILC:** Students who volunteered were significantly more likely to persist to the next term compared to similar students who did not volunteer with SILC. The change in persistence is approximated at 2.88% (CI: 1.08% to 4.68%). This change is equivalent

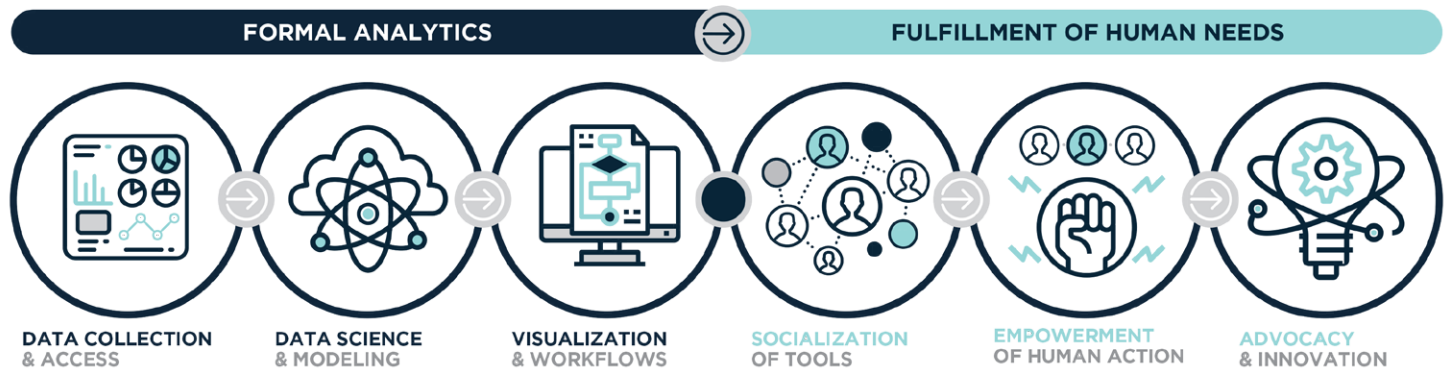
to retaining 7 (CI: 2 to 10) students a year who were otherwise not expected to persist to the next semester. This reflects an estimated \$31,809.47 (CI: \$9,088.42 to \$45,442.10) in retained tuition.

**SCHOLARSHIP WITH SILC:** This analysis isolated the impact of scholarshiped SILC members on student persistence. The analysis failed to identify an impact for scholarshiped SILC members compared to similar students who did not serve within the SILC.

Interestingly, a significant difference was seen between the number of men and women with scholarshiped positions within the SILC. In the initial analysis that combined all volunteers and scholarshiped members, there were significantly more females serving in the SILC. When considering only scholarshiped SILC participants, there were significantly more males in the sample than would be expected. The discrepancy between female volunteers and female scholarshiped participants should be explored.

**SCHOLARSHIPS V. VOLUNTEERS:** This analysis compared students who volunteered in SILC programs to students who received a scholarship for their participation in SILC. This analysis did not detect a statistically significant difference between these two groups of students.

# The Lifecycle of sustainable analytics



**FIGURE 13**  
The Lifecycle of Sustainable Analytics.

## Insights & Next Steps

A major goal of analytics is to identify areas for improvement and innovation. To be successful, all initiatives must consider the role of formal analytics and role of the humans needs. The Lifecycle for Sustainable Analytics presents the major domains within any successful analytics initiatives. It requires sound data science practices on the left-hand and proactive human relations on the right. Together the 6-domains support the development and utilization of analytics insights for improvement and innovation.

### Student Segments for Possilbe Intervent

After considering the impacts of SILC on student persistence, two student segments emerged as interesting possible targets; (1) First term students and (2) Students in the second and bottom persistence quartile.

**First Term Student.** Across the nation, there is a student retention problem. The retention problem, often referred to as summer melt, is driven mostly by freshmen who do not return for their sophomore year. This analysis found that first-term freshmen experienced a near 3% increase in persistence from helping organize student activities through SILC. Given this large impact and the importance of this population to USU,

SILC will seek out avenues to recruit first-term freshmen. It is expected that as students volunteer, they will gain a sense of community at USU that will help them persist towards their degree.

**Students in the Bottom Persistence Quartile.** Trends suggested that students who were less likely to persist, those in the bottom and second persistence quartiles, benefitted from volunteering with SILC. There are low barriers to serving with SILC. Furthermore, SILC provides diverse activities that could appeal to many types of students. SILC will increase efforts to recruit students from lower persistence quartiles to support their integration into campus life.

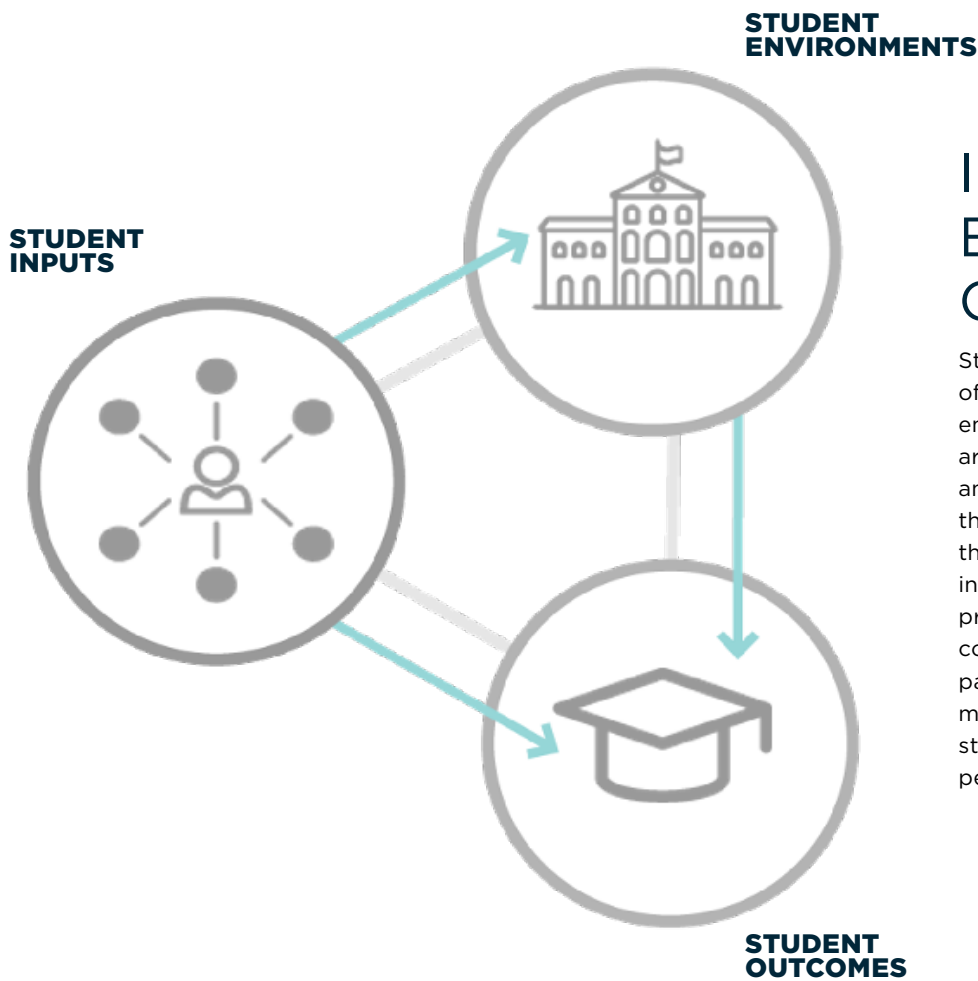
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\*Subgroups with fewer than 250 students are considered too small for reliable analysis

# Appendix A

## THEORETICAL FOUNDATION FOR IMPACT ANALYSES: INPUT, ENVIRONMENT, OUTPUT MODEL (ASTIN , 1993)



### Input - Environment - Outcomes

Student success is composed of both personal inputs and environments to which individuals are exposed (Astin, 1993). Impact analysis controls for student input though participant matching on their (1) likelihood to be involved in an environment and (2) their predicted persistence score. By controlling for student inputs, impact analyses can more accurately measure the influence of specific student environments on student persistence.

#### STUDENT INPUTS

Students bring different combinations of strengths to their university experience. Their inputs influence student life and success, but do not determine it.

#### STUDENT ENVIRONMENTS

The University provides a diverse array of curricular, co-curricular, and extra-curricular activities to enhance the student experience. Students selectively participate to varying degrees in activities. Student environments influence student life and success, but do not determine it.

#### STUDENT OUTCOMES

While student success can be defined in multiple ways, a good indicator of student success is persistence to the next term. It means that students are continuing on a path towards graduation. Persistence is influenced by student inputs and University environments.

#### IMPACT ANALYSIS

An impact analysis can effectively measure the influence of University initiatives on student persistence by accounting for student inputs through matching participants with similar students who chose not to participate.

# Appendix B

## **ANALYTIC DETAILS: ESTIMATING PROGRAMMATIC IMPACT THROUGH PREDICTION-BASED PROPENSITY SCORE MATCHING (PPSM)**

Impact analyses are quasi-experiments that compare students who participate in University initiatives to similar students who do not. Students who participate are called participants, students who do not have a record of participation are called comparison students. The analysis results in an estimation of the effect of the treatment on the treated (ETT). In other words, it estimates the effect of participating in University initiatives on student persistence for students who participated. This estimation is appropriate for observational studies with voluntary participation (Geneletti & Dawid, 2009).

**Accounting for bias.** While ETT is appropriate for observational studies with voluntary participation, voluntary participation adds bias. Specifically, voluntary participation results in self-selection bias, which refers to the fact that participants and comparison students may be innately different. For example, students who self-select into math tutoring (or intramurals or the Harry Potter Club) may be quantitatively and qualitatively different than students who do not use math tutoring (or intramurals or the Harry Potter Club). To account for these differences, reduce the effect of self-selection bias, and increase validity a matching technique called Prediction-Based Propensity Score Matching (PPSM) is used.

In PPSM, matching is achieved by pairing participating students with non-participating students who are similar in both their (a) predicted persistence and (b) their propensity to participate in an iterative, boot-strapped analysis (Milliron, Kil, Malcolm, & Gee, 2017).

**(A) Predicted Persistence.** Utah State University utilizes student data to create a persistence prediction for each student. The main benefit to students from the predictive system is an as early alert system; it identifies students in need of additional resources to support their success at USU. A secondary use of the predicted persistence scores are to evaluate the impact on student-facing programs on student success. This is an invaluable practice that fosters accountability, efficiency, and innovation for the benefit of students.

The predicted persistence scores are derived through a regularized ridge regression. This technique allows for the incorporation of numerous student data points, including:

- academic performance
- degree progress metrics
- socioeconomic status
- student engagement

The ridge regression rank orders the numerous covariates by their predictive power. This equation is then used to predict student persistence scores for students at USU. This score is utilized as one point for matching in PPSM.

**(B) Propensity to Participate.** The second point used for matching in PPSM is a propensity score. Propensity scores reflect a student's likelihood to participate in an initiative (Rosenbaum & Rubin, 1983). It is derived through logistic ridge regression that utilizes participation status as the outcome variable. Using the equation, each student is given a propensity score which reflects their likelihood to participate regardless of their actual participation status.

Matching is achieved through bootstrapped iterations that randomly selects a subset of participant and comparison students. Within each bootstrapped iteration, comparison students are paired using 1-to-1, nearest neighbor matching. Matches are created when student predicted persistence and propensity scores match within a 0.05 calliper width. Within the random bootstrapping iterations, all participants are included at least once. Students who do not find an adequate match are excluded from the analysis (for additional details see Louviere, 2020).

**Difference-in-Difference.** To measure the impact of University services on student persistence, a difference-in-difference analysis is used. A difference-in-difference analysis compares the calculated predicted means from the bootstrapped iteration distributions to the actual persistence rates of participating and comparison students. In other words, the analysis looks at the difference between predicted persistence and actual persistence between the two groups of well-matched students. Statistical significance is measured at the 0.05 alpha level and utilizes confidence intervals. The results reflect the ETT.

# Appendix C

## ADJUSTED RETAINED TUITION MULTIPLIER

Retained tuition is calculated by multiplying retained students by the USU average adjusted tuition. Average adjusted tuition was calculated in 2018/2019 dollars with support from the Budget and Planning Office. The amounts in the below table reflect net tuition which removes all tuition waivers from the overall gross tuition amounts. Utilizing net tuition provides a more accurate and conservative multiplier for understanding the impact of University initiatives on retained tuition. The table below parses the average adjusted tuition by campus and academic level. The highlighted cell represents the multiplier used in this analysis.

### RETAINED TUITION MULTIPLIER CALCULATION

Student Groups	Net Tuition	Number of Students	Average Annual Tuition & Fees
All USU Students	\$148,864,384	33,070	\$4,501.49
Undergraduates	\$131,932,035	29,033	\$4,544.21
Graduates	\$16,932,349	4,037	\$4,194.29
Logan Campus Students	\$119,051,003	25,106	\$4,741.93
Undergraduates	\$107,711,149	22,659	\$4,753.57
Graduates	\$11,339,854	2,447	\$4,634.19
<b>STATE-WIDE CAMPUS STUDENTS</b>	\$25,941,419	7,964	\$3,257.34
Undergraduates	\$20,303,215	3,864	\$5,254.46
Graduates	\$5,638,204	1,590	\$3,546.04
USU-E Price & Blanding Students	\$3,871,962	2,560	\$1,512.49



# Appendix D

## STUDENT SEGMENTS THAT DID NOT EXPERIENCE A SIGNIFICANT CHANGE IN PERSISTENCE

N	Student Segment**	Actual Persistence		Difference-in	CI	p-value
		Participants	Comparison Students			
461	Third Persistence Prediction Quartile (50th - 74th Percentiles)	96.01%	93.34%	2.67%	2.89%	0.0699
263	Readmitted Students	95.13%	92.82%	2.18%	3.99%	0.2846
153	Transfer Students	95.14%	94.03%	2.64%	4.83%	0.2837
117	Part-time Courses	89.27%	80.41%	6.37%	8.73%	0.1518
64	Bottom Persistence Prediction Quartile (1st - 24th Percentiles)	74.45%	64.67%	9.61%	15.52%	0.2224
53	Hispanic or Latino	95.03%	92.08%	4.27%	9.34%	0.3659
49	Graduate Students	88.37%	80.65%	7.75%	12.34%	0.2149
49	Two or More Racial Heritages	97.46%	94.61%	2.60%	7.72%	0.5048
42	Unknown Racial Heritage	90.63%	90.47%	0.47%	10.88%	0.931
38	Asian or Asian American	97.11%	94.75%	1.69%	11.41%	0.765
24	Black or African American	81.67%	87.18%	-0.85%	20.41%	0.9337
15	American Indian/Alaskan Native	100.00%	97.98%	2.44%	14.15%	0.6863
7	Pacific Islander	71.89%	90.08%	-22.03%	32.02%	0.1535
4	All Online Status	89.74%	94.73%	-5.02%	39.68%	0.7672

\*Subgroups with fewer than 250 students are considered too small for reliable analysis

\*\*Student group definitions available in appendix F

# Appendix E

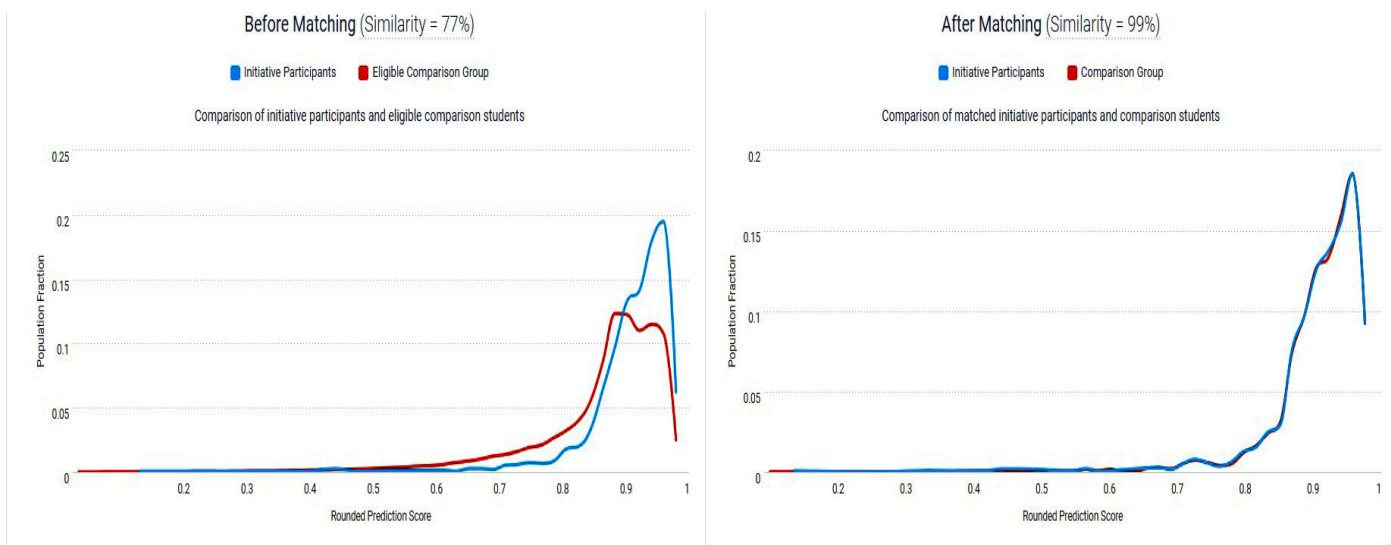
## MATCHING DETAILS

Matching for the analysis resulted in 74% of available participants, or 1498 students, being successfully matched for the analysis. Participating students who did not have an adequate match in the comparison group during the PPSM process were excluded from the analysis. While higher matching is preferred, a 74% match is adequate with a large sample size, like those seen in this analysis. Furthermore, upon reviewing the matching distributions for predicted persistence (Figure A) and propensity to participate (Figure B) the there

is substantial overlap between the red and blue lines. This means that the matching included a representative sample of available participants.

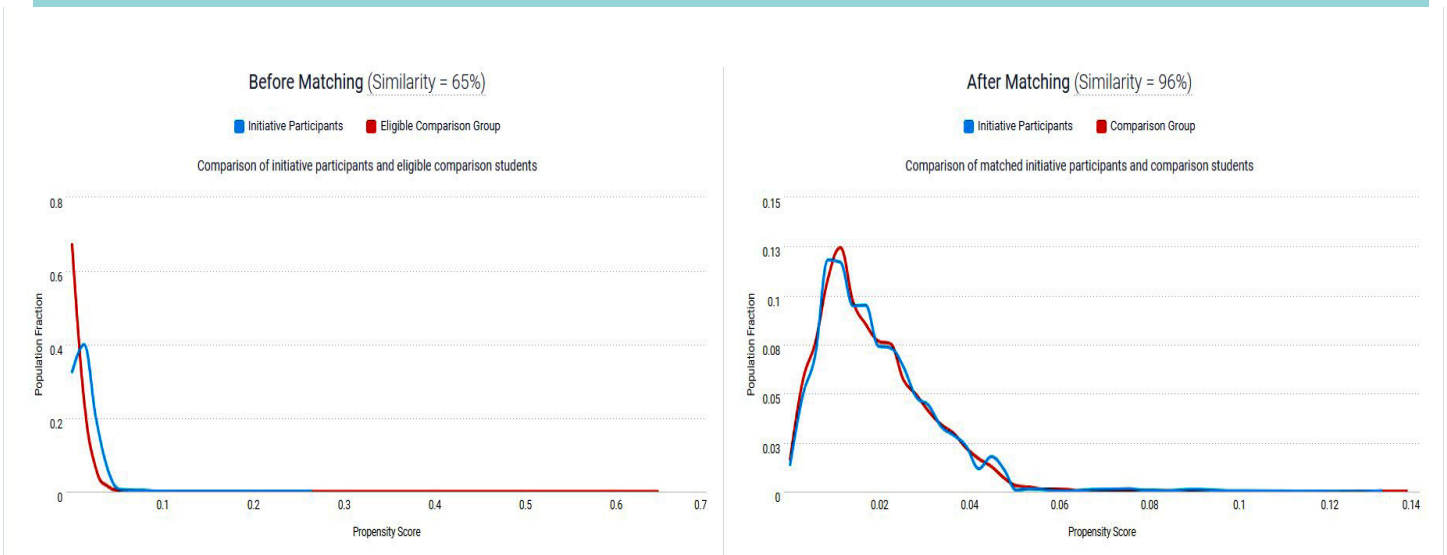
Prior to matching samples were 77% similar based on students' predicted persistence (Figure A). Following matching the samples were 99% similar.

Participating and comparison students were 65% similar based on propensity score prior to matching. Following matching, the similarity in propensity was 96%.



### PREDICTED PERSISTENCE: PARTICIPATING & COMPARISON STUDENTS

Participating and comparison students receive scores based on their predicted persistence to the next semester. This score is based on historic data from Utah State University Students



### PROPENSITY TO PARTICIPATE BETWEEN PARTICIPATING & COMPARISON STUDENTS

Participating and comparison students receive scores based on their likelihood to participate in the initiative.

# Appendix F

## STUDENT SEGMENT DEFINITIONS

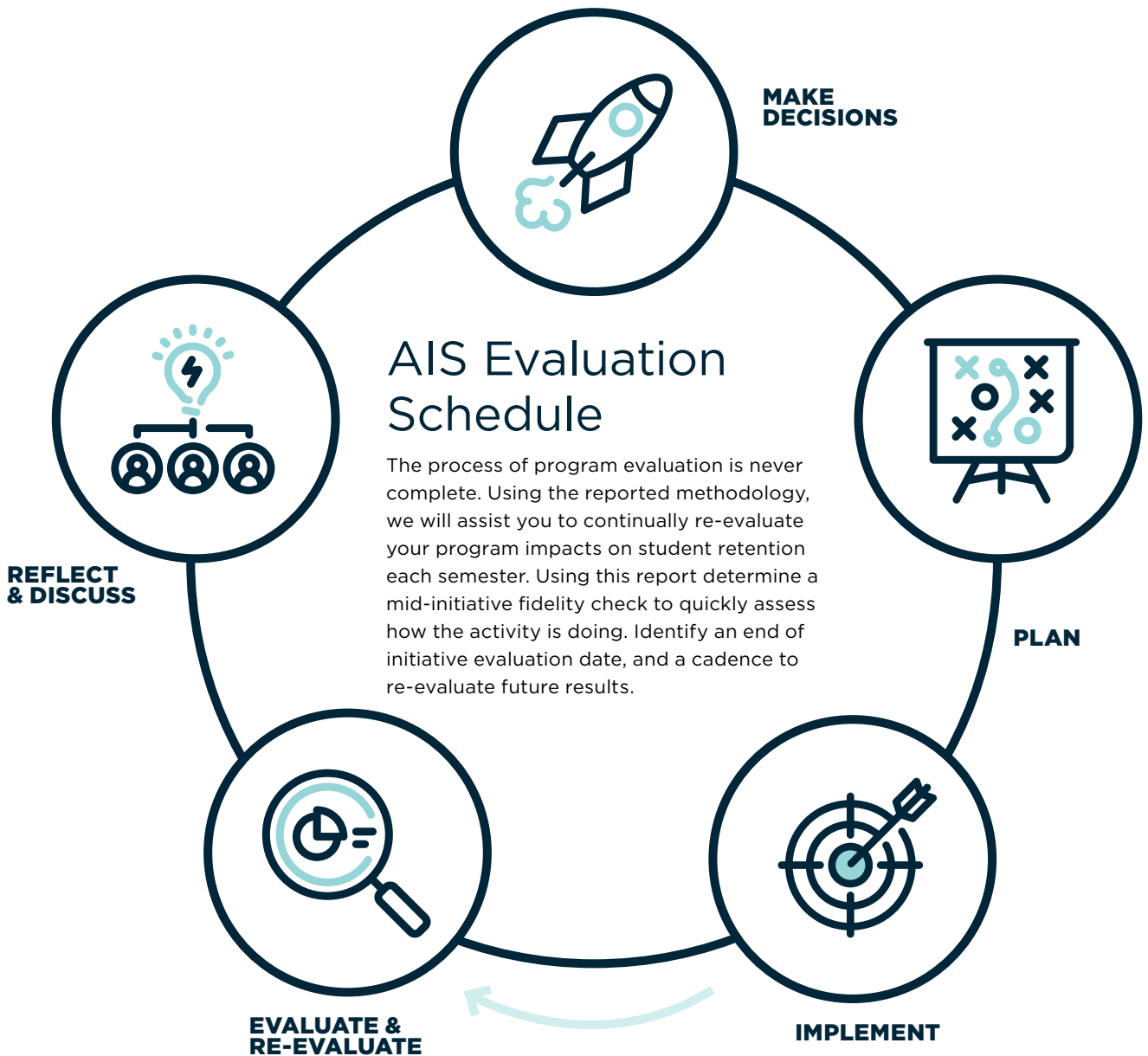
Student Subgroup	Definition
0 Terms Completed	Students with 0 terms in their collegiate career completed; incoming freshmen
1 - 3 Terms Completed	Students who have completed 1 to 3 terms in their collegiate career
4+ Terms Completed	Students with 4 or more terms in their collegiate career completed
All On-Campus	Students attending all courses face-to-face
Online or Broadcast	Students attending all courses online or via broadcast
Mixed or Blended Course Modality	Students attending both face-to-face and online or broadcast courses
Full-time Students	Undergraduate students enrolled in 12 or more credits; Graduate students enrolled in 9 or more credits
Part-time Students	Undergraduate students enrolled in less than 12 credits; Graduate students enrolled in less than 9 credits
First Time in College	Students who enter USU as new freshmen, who have maintained continuous enrollment or records of absences (i.e. LOA)
Transfer Students	Students who attended another university prior to attending USU
Readmitted Students	Students who attended USU, left for a time (without filing a LOA), and return after re-applying to USU
Unknown Undergraduate Type	Students with an unknown admitted type
High School Dual Enrollment	High school students simultaneously taking high school and college courses
STEM	Students with a primary major that in science, technology, engineering, or mathematics
Non-STEM	Students with a primary major that is not in science, technology, engineering, or mathematics
Top Persistence Prediction Quartile	The total USU student population is divided so that 25% of students fall in each quartile. The bottom quartile contains students with the lowest predicted persistence (75th - 100th percentile)
Third Persistence Prediction Quartile	The total USU student population is divided so that 25% of students fall in each quartile. The bottom quartile contains students with the lowest predicted persistence (50th - 74th percentiles)
Second Persistence Quartile	The total USU student population is divided so that 25% of students fall in each quartile. The bottom quartile contains students with the lowest predicted persistence (25th - 49th percentiles)
Bottom Persistence Quartile	The total USU student population is divided so that 25% of students fall in each quartile. The bottom quartile contains students with the lowest predicted persistence (1st - 24th percentile students)
Female	Students identifying as female
Male	Students identifying as male

## **STUDENT SEGMENT DEFINITIONS [CONTINUED]**

<b>Student Subgroup</b>	<b>Definition</b>
Non-Hispanic or Latino	Students who do not identify as Hispanic or Latino
Hispanic or Latino	Students who identify as Hispanic or Latino
Race: Two or More	Students who identify with two or more races
Race: Unknown	Students who did not provided race information
Race: Asian	Students who identify as Asian
Race: Black or African American	Students who identify as African American
Race: Pacific Islander	Students who identify as a Pacific Islander
Race: American Indian/ Alaskan Native	Students who identify as American Indian or Alaska Native
Race: White or Caucasian	Students who identify as White or Caucasian

# Appendix G

## UTAH STATE UNIVERSITY'S EVALUATION CYCLE



#### **EVALUATE & RE-EVALUATE**

Get the data to AIS and we can run an evaluation on persistence. For goals that don't include persistence AIS can assist you in finding resources to measure your improvement.

#### **REFLECT & DISCUSS**

Consider the report and the evaluators insights to produce discussion within your department.

#### **MAKE DECISIONS**

Formulate possible actions to improve your program. Select actions that align with your program goals.

#### **PLAN**

Make concrete plans to apply your decisions. Determine the who, where, and when of your actions.

#### **IMPLEMENT**

Put your plans into actions. Remember to periodically check the progress of your plans as they are being implemented.