Student Success Agency Evaluation of Impact: South Texas Pilot Study

Report Prepared for:

STUDENT SUCCESS AGENCY

Report Prepared by:

Vela INSTITUTE
Illuminating Education

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Table of Contents

EXECUTIVE SUMMARY ......................................................................................................................... 3
PROJECT BACKGROUND .......................................................................................................................... 4
PROJECT DATA ......................................................................................................................................... 5
SSA USAGE ............................................................................................................................................... 6
   Table 1: SSA Engagement by Contact Type and Activity Category ......................................................... 6
   Figure 1: Average Monthly Contacts by Type and Activity Category ...................................................... 7
SSA USAGE AND POST-SECONDARY ENROLLMENT ............................................................................. 8
   Table 2: PSE Categories for Total Sample ............................................................................................... 8
   Table 3: PSE: Breakdown by PSE Categories ............................................................................................ 8
   Figure 2: SSA Participation by PSE ......................................................................................................... 9
   Table 4: SSA Participation by PSE ......................................................................................................... 10
   Table 5: Additional SSA Engagement and PSE: Engaged Students ....................................................... 11
CONCLUSIONS AND NEXT STEPS ......................................................................................................... 12
EXECUTIVE SUMMARY

This project examined a convenience sample of 788 students in two South Texas High Schools who had shown an initial interest in engaging with the Student Success Agency (SSA), graduated in 2017, and for whom SSA had information about the students’ post-secondary enrollment (PSE). The overall goal of the project was to describe SSA program usage and determine the relationship between SSA engagement and PSE.

Students in the sample were categorized into three groups:
1. **Non-Participant**: students who initially showed interest in engaging with SSA, but never engaged or interacted with an SSA agent.
2. **Engaged**: students who initially showed interest in engaging with SSA, signed up with an agent, and interacted with their SSA agent through the performance period (September 2015-January 2017).
3. **Disengaged**: students who initially showed interest in engaging with SSA, signed up with an agent, had some interactions with their SSA agent, but ultimately stopped their engagement with their SSA agent prior to the end of the performance period.

Examination of SSA usage revealed that text messaging was the most prevalent means of communication between students and their agents. Results also indicated some student-agent contact via telephone calls and virtually no communication through email. An examination of the usage for the engaged and disengaged SSA students revealed that the average number of text messages exchanged between engaged students and their agents steadily increased between September 2015 and November 2016, while the average number of text messages for disengaged students steadily declined during that same period.

In examining the relationship between SSA program usage and PSE, it was found that both engaged and disengaged students were more likely to have PSE compared with students who did not participate in SSA. Results also revealed that engaged SSA students were more likely to have PSE compared with disengaged students. These effects were strongest for students enrolling within the first year of graduation from high school, at 4-year institutions, and at public institutions.

When examining if more interactions between engaged SSA students and their agents lead to PSE, results revealed that additional engagement was generally related to higher PSE. Specifically additional text message and telephone contacts were associated with higher PSE in the fall semester immediately after high school graduation, enrollment in 4-year institutions, and enrollment in public institutions. Additionally, higher levels of student-initiated text exchanges were associated with higher PSE, specifically enrollment in 4-year and public institutions.

It is important to note, that these analyses are correlational and additional analyses are needed before implying causation. However, data from the current project provide encouraging results for the SSA program and student engagement with SSA agents. Together, these results suggest that continued interaction and engagement with SSA agents can lead to positive PSE outcomes.
PROJECT BACKGROUND

Each year thousands of dollars and countless hours are directed toward college access outcomes and specifically enrollment in post-secondary education (PSE). With the significant amount of energy and resources supporting access initiatives, it is important to understand what is contributing to PSE.

This project examined a convenience sample of 788 students in two South Texas High Schools who had shown an initial interest in engaging with the Student Success Agency (SSA), graduated in 2017, and for whom SSA had information about the students’ post-secondary enrollment (PSE). The overall goal of the project was to describe SSA program usage and determine the relationship between SSA engagement and PSE.

Given the observation nature of the data, the lack of demographic student data to use as control, and the correlational methods used to generate the results, the results presented demonstrate the nature and strength of the relationship between SSA program usage and PSE but do not demonstrate causation. However, the association between SSA program usage and PSE can begin to be established using the current project’s data and will provide empirical support for the potential link between SSA engagement and PSE.
PROJECT DATA

SSA provided Vela with a sample of 788 students in Harlandale High School and McCollum High School who had initially shown interest in engaging with the SSA.

SSA also provided Vela with information regarding the student's engagement with an SSA agent through text message, telephone calls, and emails. More specifically, SSA provided Vela with monthly counts of student-agent contacts from September 2015 to January 2017 for these three mediums.

The extent to which the students in the current sample interacted with an SSA agent varied. Thus, SSA provided Vela with information that categorized the student sample into the following activity categories:

1. **Non-Participant**: 158 students who initially showed interest in engaging with SSA, but never engaged or interacted with an SSA agent.
2. **Engaged**: 526 students who initially showed interest in engaging with SSA, signed up with an agent, and interacted with their SSA agent through the performance period (September 2015-January 2017).
3. **Disengaged**: 104 students who initially showed interest in engaging with SSA, signed up with an agent, had some interactions with their SSA agent, but ultimately stopped their engagement with their SSA agent prior to the end of the performance period.

Finally, SSA provided Vela the raw PSE data, which they obtained from the National Student Clearinghouse. The data allowed Vela to create several categories of PSE that were used as the criteria for the impact analysis. These categories were:

1. **Enrolled Fall**: students who enrolled in any post-secondary (PS) institution in the fall semester immediately after high school graduation.
2. **Enrolled First Year**: students who enrolled in any PS institution in either the fall or the spring semesters immediately after high school graduation.
3. **2-Year Enrollment**: students who enrolled in a 2-year PS institution in either the fall or the spring semesters immediately after high school graduation.
4. **4-Year Enrollment**: students who enrolled in a 4-year PS institution in either the fall or the spring semesters immediately after high school graduation.
5. **Public Enrollment**: students who enrolled in a public PS institution in either the fall or the spring semesters immediately after high school graduation.
6. **Private Enrollment**: students who enrolled in a private PS institution in either the fall or the spring semesters immediately after high school graduation.
SSA USAGE

The first priority of the project was to describe program SSA usage, aggregated by interaction type, and who initiated those interactions. The engaged and disengaged activity categories were used to disaggregate the usage patterns (see Table 1 and Figure 1).

Table 1: SSA Engagement by Contact Type and Activity Category

<table>
<thead>
<tr>
<th></th>
<th>Text</th>
<th>Calls</th>
<th>Emails</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent</td>
<td>Average</td>
<td>Percent</td>
</tr>
<tr>
<td>Engaged</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept 15 - Jan 17</td>
<td>99.8%</td>
<td>294.5</td>
<td>82.1%</td>
</tr>
<tr>
<td>Mentor Initiated</td>
<td>64.4%</td>
<td>189.7</td>
<td>70.7%</td>
</tr>
<tr>
<td>Disengaged</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept 15 - Jan 17</td>
<td>100.0%</td>
<td>93.6</td>
<td>70.2%</td>
</tr>
<tr>
<td>Mentor Initiated</td>
<td>78.1%</td>
<td>73.1</td>
<td>87.4%</td>
</tr>
</tbody>
</table>

Notes: Contacts between students and SSA agents during the entire performance period (i.e., September 2015 to January 2017).

Percent: represents the percentage of student contacts using a specific medium (i.e., text, phone call, or email) during the performance period.

Average: represents the average number of student contacts using a specific medium (i.e., text, phone call, or email) during the performance period.

Mentor Initiated: represents the average percent of contacts that were initiated by SSA agent for a specific medium (i.e., text, phone call, or email) during the performance period.

Notable results presented in Table 1:

- Text messaging was the preferred method of contact
  - Almost all SSA students received at least one text message
    - Engaged: 99.8% exchanged at least one text message
    - Disengaged: 100% exchanged at least one text message
  - The average number of text messages sent was much higher for engaged students
    - Engaged: 294.5 text messages
    - Disengaged: 93.6 text messages

- While most students had at least one phone call from their agent, SSA students tended to use texting instead of interacting with the agent through phone calls
  - The majority of SSA students had at least one phone call with their agent
    - Engaged: 82.1%
    - Disengaged: 70.2%
  - The average number of phone calls over the performance period was relative low with but engaged students have a higher average number of phone calls.
    - Engaged: 6.2
    - Disengaged: 3.3

- Email was not the preferred method of contact for students or SSA agents
  - 3.2% of engaged and 0% of disengaged communicated via email

- SSA agents were fairly consistent in being proactive with contacting their students
  - Agents tended to be a little more proactive when calling their students
  - Agents also initiated the majority of text message communications

- Students who remained engaged were more likely to initiate conversation with their agents
  - Lower average percentage of mentor-initiated text contacts for engaged students (64.4%) compared with mentor-initiated text contacts for disengaged students (78.1%)
Notable results presented in Figure 1:

- The average number of text messages exchanged between engaged students and their agents generally increased between September 2015 and November 2016
  - The average number of text messages exchanged between disengaged students and their agents steadily declined over this same period
- Telephone contacts between engaged and disengaged students remained low and relatively steady over the performance period
SSA USAGE AND POST-SECONDARY ENROLLMENT

The second priority of the project was to determine relationship between SSA engagement and PSE. Analyses also explored if additional engagement with SSA agents, type of engagement, and who initiated the contact for engaged students was related to PSE.

Table 2: PSE Categories for Total Sample

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled Fall</td>
<td>459</td>
<td>58.2%</td>
</tr>
<tr>
<td>Enrolled First Year</td>
<td>475</td>
<td>60.3%</td>
</tr>
<tr>
<td>2-Year Enrollment</td>
<td>302</td>
<td>38.3%</td>
</tr>
<tr>
<td>4-Year Enrollment</td>
<td>173</td>
<td>22.0%</td>
</tr>
<tr>
<td>Public Enrollment</td>
<td>433</td>
<td>54.9%</td>
</tr>
<tr>
<td>Private Enrollment</td>
<td>42</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

Note: Results above are the overall PSE categories for the student in the overall sample (regardless of activity category).

Notable results presented in Table 2:
- Most students (58.2%) had PSE in the fall semester after high school graduation
  - Only 16 students waited to enroll in PS until the spring semester after high school
- More students attended 2-year PSE institutions (38.3%) compared with 4-year PSE institutions (22.0%)
- Most student attending PSE attended public institutions (54.9%) compared to private (5.3%)

Table 3: PSE: Breakdown by PSE Categories

<table>
<thead>
<tr>
<th></th>
<th>Enrolled Fall</th>
<th>Enrolled First Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Year Enrollment</td>
<td>287</td>
<td>302</td>
</tr>
<tr>
<td>4-Year Enrollment</td>
<td>172</td>
<td>173</td>
</tr>
<tr>
<td>Public Enrollment</td>
<td>418</td>
<td>433</td>
</tr>
<tr>
<td>Private Enrollment</td>
<td>41</td>
<td>42</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Year Enrollment</td>
<td>302</td>
</tr>
<tr>
<td>4-Year Enrollment</td>
<td>131</td>
</tr>
</tbody>
</table>

Note: Results above are a breakdown of the number of students in the overall sample (regardless of activity category) subdivided by the various PSE categories.

Notable results presented in Table 3:
- Most students who waited to enroll in the spring semester after high school graduation went to 2-year (15 students) and public (15 students) PSE institutions
- All 42 students attended private PSE institutions attended a 4-year PSE institution
Figure 2: SSA Participation by PSE²

Notes: results in figure represents the percentage of students that had PSE in the respective PSE category for the respective SSA activity category.

Non-Participant: Non-participant students who initially showed interest in engaging with SSA, but never engaged or interacted with an SSA agent.

Disengage: Disengaged students who initially showed interest in engaging with SSA, signed up with an agent, had some interactions with their SSA agent, but ultimately stopped their engagement with their SSA agent prior to the end of the performance period.

Engaged: Engaged students who initially showed interest in engaging with SSA, signed up with an agent, and interacted with their SSA agent through the performance period.

Notable results presented in Figure 2:

- Engaged SSA students tended to have higher PSE rates compared with disengaged and students that did not participate in SSA
  - These differences were largest for PSE the fall after HS graduation, PSE during the first year following HS graduation, and enrollment in public PSE institutions
- Disengaged students were slightly more likely to enroll in private PSE institutions compared with engaged students, but this difference was negligible.

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²The PSE Breakdown by Sub-Categories (e.g., enrolled fall in 4-year public institution) could not be used in this analysis due to the sample size limitations.
Table 4: SSA Participation by PSE\(^2\)

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>NP vs NP</td>
</tr>
<tr>
<td>Enrolled Fall</td>
<td>58.2%</td>
<td>1.5</td>
</tr>
<tr>
<td>Enrolled First Year</td>
<td>60.3%</td>
<td>1.4</td>
</tr>
<tr>
<td>2-Year Enrollment</td>
<td>38.3%</td>
<td>1.4</td>
</tr>
<tr>
<td>4-Year Enrollment</td>
<td>22.0%</td>
<td>1.1</td>
</tr>
<tr>
<td>Public Enrollment</td>
<td>54.9%</td>
<td>1.2</td>
</tr>
<tr>
<td>Private Enrollment</td>
<td>5.3%</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Notes:
- **Percent**: represents the percentage of students that had PSE in the respective PSE category for the respective SSA activity category.
- **Odds Ratio**: represents the odds that students in one SSA activity category enrolled in one of the respective PSE categories relative to students in the other specified SSA activity category.
- **Total**: percentage of students form the overall sample (regardless of SSA activity category) that had PSE in the respective PSE category.
- **NP**: Non-participant students who initially showed interest in engaging with SSA, but never engaged or interacted with an SSA agent.
- **Disengage**: Disengaged students who initially showed interest in engaging with SSA, signed up with an agent, had some interactions with their SSA agent, but ultimately stopped their engagement with their SSA agent prior to the end of the performance period.
- **Engage**: Engaged students who initially showed interest in engaging with SSA, signed up with an agent, and interacted with their SSA agent through the performance period.

Notable results presented in Table 4:

- Students who engaged with an agent were more likely to have PSE compared with students who did not participate in SSA:
  - Engaged SSA students compared with non-participant students were:
    - 3.6 times more likely to have PSE in the fall semester
    - 2.0 times more likely to enroll in 2-year PSE institutions
    - 2.7 times more likely to enroll in 4-year PSE institutions
    - 3.0 times more likely to enroll in public PSE institutions
  - Disengaged SSA students compared with non-participant students were:
    - 1.5 times more likely to have PSE in the fall semester
    - 1.4 times more likely to enroll in 2-year PSE institutions
    - 1.1 times more likely to enroll in 4-year PSE institutions
    - 1.2 times more likely to enroll in public PSE institutions
- Engaged students were more likely to have PSE compared with disengaged SSA students:
  - Engaged SSA students compared with disengaged SSA students were:
    - 2.4 times more likely to have PSE in the fall semester
    - 1.5 times more likely to enroll in 2-year PSE institutions
    - 2.3 times more likely to enroll in 4-year PSE institutions
    - 2.5 times more likely to enroll in public PSE institutions

\(^2\)The PSE Breakdown by Sub-Categories (e.g., enrolled fall in 4-year public institution) could not be used in this analysis due to the sample size limitations.
Table 5 presents the result of the analyses that were used to examine if additional engagement with SSA agents, type of engagement, and who initiated the contact for engaged students was related to PSE.

### Table 5: Additional SSA Engagement and PSE: Engaged Students

<table>
<thead>
<tr>
<th></th>
<th>Text Total Contacts</th>
<th>Text Student Initiated</th>
<th>Call Total Contacts</th>
<th>Call Student Initiated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled Fall</td>
<td>0.20</td>
<td>0.13</td>
<td>0.10</td>
<td>0.05</td>
</tr>
<tr>
<td>Enrolled First Year</td>
<td>0.18</td>
<td>0.13</td>
<td>0.12</td>
<td>0.03</td>
</tr>
<tr>
<td>2-Year Enrollment</td>
<td>0.03</td>
<td>0.03</td>
<td>0.01</td>
<td>0.07</td>
</tr>
<tr>
<td>4-Year Enrollment</td>
<td>0.16</td>
<td>0.10</td>
<td>0.11</td>
<td>-0.04</td>
</tr>
<tr>
<td>Public Enrollment</td>
<td>0.16</td>
<td>0.12</td>
<td>0.06</td>
<td>0.04</td>
</tr>
<tr>
<td>Private Enrollment</td>
<td>0.02</td>
<td>0.01</td>
<td>0.11</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Notes:** results are for SSA Engaged Students only. Figures presented above are Spearman correlations. Positive correlations indicate that the additional SSA engagement lead to higher PSE. Correlations lower than .10 should be considered non-significant, negligible, and are in italics.

**Total Contacts:** the total number of contacts between engaged SSA students and SSAs agent during the performance period for the respective contact method (i.e., text or telephone call).

**Student Initiated:** the ratio of student initiated contacts to the total number of contacts for the respective contact method (i.e., text or telephone call) during the performance period.

Notable results presented in Table 5:

- The number of text and telephone contacts between SSA agents and students was positively related to higher:
  - Fall semester PSE
  - First year PSE
  - Enrollment in 4-year PSE institutions
- Additional engagement between students and SSA agents was generally related to higher PSE
  - Additional text message contacts between engaged SSA student and agents had a stronger relationship with PSE outcomes compared with additional telephone contacts
- Higher levels of student initiated text exchanges were associated with higher:
  - PSE in the fall semester
  - First year PSE
  - Enrollment in 4-year PES institutions
  - Enrollment in public PSE institutions
CONCLUSIONS AND NEXT STEPS

Overall, the results suggest that engagement with an SSA agent were positively related to PSE outcomes. While both disengaged and engaged SSA students generally had higher enrollment rates compared with non-participants, one of the most encouraging finds was that engaged SSA students had higher PSE rates compared with disengaged SSA students. A further encouraging finding is that additional engagement with SSA agents was positively related to 4-year PSE for engaged SSA students. Together, these results suggest that continued interaction and engagement with SSA agents can lead to positive outcomes.

As noted in the project background, these analyses were correlational and additional analyses are needed before implying causation. The next steps to providing stronger empirical evidence for the positive effects of engagement with SSA and SSA agents would be to plan a study that uses a randomized-control trail (RCT) to randomly assign groups of students to engage or not engage with an SSA agent. This type of RCT study with proper controls would provide the strongest level of empirical evidence for the positive impact that SSA engagement has on student outcomes. However, these types of studies are often difficult to design, so a quasi-experimental design employing some type of statistical control group (e.g., using propensity score matching) would provide enhanced evidence of the positive effects on student outcomes of engagement with an SSA agent.

Despite these potential limitations, the results of the current project do provide some encouraging results for SSA engagement and student interactions with SSA agents. The findings that engaged students had higher PSE rates compared to non-participants and disengaged SSA students is encouraging. Further, the finding that additional interactions with SSA agents for engaged SSA students generally lead to higher PSE enrollment provides evidence that SSA agents are helping to guide their mentee to positive PSE outcomes.