Journal of College Access

Volume 4 | Issue 1 Article 5

6-7-2018

Lessons Learned from a Summer Melt Prevention Program

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Best Practice:
Lessons Learned from a Summer Melt Prevention Program

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The Center for Education Policy Research at Harvard University explained, "Across the country, 10–40% of seemingly college-intending students, particularly those from low-income backgrounds, fail to enroll in college the fall after graduation. This phenomenon is known as summer melt"(Castleman, Page, and Snowdon, 2013). In order to minimize the number of students that enroll in college their senior year but do not matriculate in the fall, the College and Career Action Network, with the support of The Learning Network of Greater Kalamazoo and in partnership with nine school districts throughout Kalamazoo County, piloted a summer melt program experience in summer 2016. The authors seek to explain how to design a summer melt prevention program, how to set up an evaluation plan related to the program, the key findings from the summer 2016 pilot in Kalamazoo County, and lessons learned for those wanting to replicate the program.

Background

Over the years, various programs have been implemented to help students in high school with college applications, financial aid forms, etc., but students still typically had tasks to complete over the summer (e.g., placement tests, housing forms) with no support. Those summer tasks have been shown to be especially difficult for first-generation and low-income college-bound students who do not have family members versed in the college application process (Castleman, Page, & Schooley, 2014). Racial and ethnic minority students also experience more challenges in the summer before college (Rall, 2016). "Summer melt" is defined as the experience where students who planned to attend college were unable to navigate the additional summer obstacles thereby not actually attend their intended college the fall after high school graduation. Data from the Education Longitudinal Study of 2002, mined and analyzed from the perspective of summer melt, determined that approximately 10% of students who intend to go to college the fall immediately after high school fail to do so, with students living in high poverty not transitioning 15% of the time. While higher education offered some bridge programs beginning in the early 1990s for students entering college, it really was not until 2008-2009 that researchers, policymakers, and secondary educators began to seriously consider the summer before college as something that affects college success.

(Castleman & Page, 2013). The most well-studied summer melt program was piloted in Providence, RI and was replicated in 2011 in Boston, MA and Fulton County, GA, using two specific interventions: automated text messages and trained financial advisors. The automated text messages sent to students and parents cost approximately $7 per student, reminded them of important tasks to be completed, and increased college enrollment up to 7.1% in schools where little to no other support was provided (Castleman & Page, 2014). The trained financial advisors who met with students for 2-3 hours of support during the summer cost between $100-200 per students and resulted in an increase of on-time enrollment by 5%. The inclusion of a $25 gift card incentive for students who were willing to financial advisors who met with students for 2-3 hours of support during the summer cost between $100-200 per students and resulted in an increase of on-time enrollment by 5%. The inclusion of a $25 gift card incentive for students who were willing to meet with the financial advisor in some schools participating in the program may have had an additional positive impact. This same study also found that not only did the summer advising program have a statistically significant impact on college enrollment, it also increased persistence rates between the freshman and sophomore years of college (Castleman et al, 2014). Supplemental qualitative studies on the same cohort of students have begun to examine how things happening in the students' lives, the affordability of college, and student feelings about the summer interventions with advisors impacts students' feelings about enrolling in college (Arnold, Chewning, Castleman, & Page, 2015).

Program Design

Building on the work previously done with success using financial aid advisors, a partnership in Kalamazoo County, MI decided to involve high school counselors in the summer melt prevention. A strategic plan guided the pilot program and was developed by members of the College and Career Action Network (CACAN), including partners from Kalamazoo Valley Community College (KVCC), Western Michigan University (WMU), iEval, the W.E. Upjohn Institute for Employment Research, the Kalamazoo Regional Educational Service Agency (KRESA), the Learning Network of Greater Kalamazoo (LNGK), and a number of high school counselors from districts within KRESA. The overarching goal of CACAN is to increase college enrollment, with an emphasis on closing the existing gap between economically disadvantaged and non-economically disadvantaged students. The summer melt prevention program was designed to help accomplish that, on a small scale during the pilot year of the program in 2016. The planning team took into consideration the research around summer melt, including the potential value of advisors and texting students over the summer, but also wanted to allow for local personalization of services to students. The local counselors were seen as experts in how to best interact

with their students over the summer. Because of the variations in implementing the summer melt program, the CACAN partnership sought to explore the following questions:

1. Does a summer melt prevention program help encourage students to go to college?

2. Do students who participate in summer melt prevention attend college the fall following their high school graduation at a higher rate than a matched comparison group of college intending students?

3. What specific communication type or dosage level of communication from the counselors (e.g., text messages, face-to-face meetings, college visit) helps contribute more to the participants going to college?

The pool of mentors was comprised of nine high school counselors, two of whom worked alongside a college adviser. Participation as a mentor was voluntary. High school counselors at the local districts identified the students for participation in the program. The targeted population included economically disadvantaged students and potential first-generation college students, but those categories were not used to exclude others from participation. It was required that program participants be selected prior to high school graduation, and interventions were scheduled to begin after the end of the school year. The process for selecting and informing students included:

- Counselors established an internal list of potential participants based on the following criteria: applied and accepted to either Kalamazoo Community College or Western Michigan University in fall 2016, completed the FAFSA and/or applied for scholarships, and had indicated their intention on their school's senior exit survey to attend KVCC or WMU.
- Counselors held group or individual face-to-face meetings where they outlined the details of the program with the students where an important step was also ensuring students under the age of 18 were given parental consent to participate in the program.
- Students received an informational letter that required a student or parent signature in order to confirm their participation in the program. Counselors felt strongly that requiring the return of this form would increase buy-in from potential participants.

To control counselor to student ratios, there was a cap of no more than ten student participants per high school. Recommended communication included at least two face-to-face meetings, one of which had to occur on the campus of KVCC or WMU, and subsequent electronic communications as needed. It was encouraged that counselors utilize a variety of communication methods throughout the duration of the program. Additionally, counselors were expected to extend communication throughout the entire summer, tailoring the amount to each student.

Beyond this, counselors were not limited to the dosage or type of communication. Because high schools were limited to no more than ten participants, a comparison group of students with similar demographics was identified across the county from students who would also have qualified but did not participate. Students in the comparison group were graduates from the high schools participating in the pilot program. Counselors used student exit survey results to determine the students that met the selection criteria but would not be receiving the interventions.

- Recommended program participation on the part of the school counselors involved:
- Participating in training in March 2016 that covered program goals and requirements;
- Identifying low-income students for participation in the pilot program, as well as students to serve in a comparison group to determine potential program impact;
- Posting at least one response to prompts on an online discussion board;
- Mentoring of students, including college access, success strategies, and on-campus activities;
- Tracking student intervention data during the summer melt program (dosage and type); and
- Assisting with student matriculation.
- Counselors received a stipend for their participation, which was based on the number of hours they spent communicating with and providing support to their students.

Evaluation Methodology

Because of the variation in implementation of the summer melt interventions across the nine participating schools, it was important to design an evaluation that would be flexible enough to take into consideration the changing local needs and rigorous enough to analyze differences in processes and outcomes. The development and implementation of the evaluation followed these basic steps:

1. Develop the evaluation questions
2. Clarify the data needed to answer those questions
3. Create data sharing agreements between necessary partners to access data
4. Identify students – participants and comparison group members
5. Ensure valid and reliable data collection
6. Analyze data and create a report on the impact of the program including recommendations for the future.

STEP 1.

The evaluation team developed a set of questions, based on national research and local context, and then reviewed the questions with the CACAN team. The evaluation was then designed around answering the following questions:

A. To what extent does summer communication with a high school counselor impact fall 2016 college attendance for Kalamazoo County students planning to attend KVCC or WMU?

B. What communication interventions (e.g., text, email, face-to-face) result in the biggest impact on preventing summer melt?.

C. What topics covered during the summer communications (e.g., financial aid, housing, registering for classes) result in the biggest impact on preventing summer melt?

STEP 2.
Discussions between the CACAN team and the evaluation team helped identify what data would be available to access to help answer the evaluation questions. The brainstormed list of data came from sources such as the summer mentors (i.e., counselors), students, National Student Clearinghouse, local school districts, and partnering institutions of higher education. The activities/data points used in the evaluation of the pilot program included:

- High school student exit surveys indicating their post-secondary plan after high school graduation
- High school demographic data including gender, ethnicity, special education status, and high school grade point average
- Counselors tracking number of connections with students and topics discussed with students selected for the summer melt interventions
- A survey in fall 2016 with students and counselors about their experience with the program
- College enrollment and attendance prior to the fall 2016 drop dates at KVCC or WMU
- College enrollment based on National Student Clearinghouse (NSC) data to indicate if any students who "melted" from KVCC or WMU actually enrolled and attended post-secondary education elsewhere

STEP 3.
Memoranda of understanding (or data sharing agreements) were developed between CACAN, iEval (the external evaluation team), and each participating school district to share student data necessary for this evaluation. Data sharing agreements were also developed between iEval and each of the participating institutions of higher education.

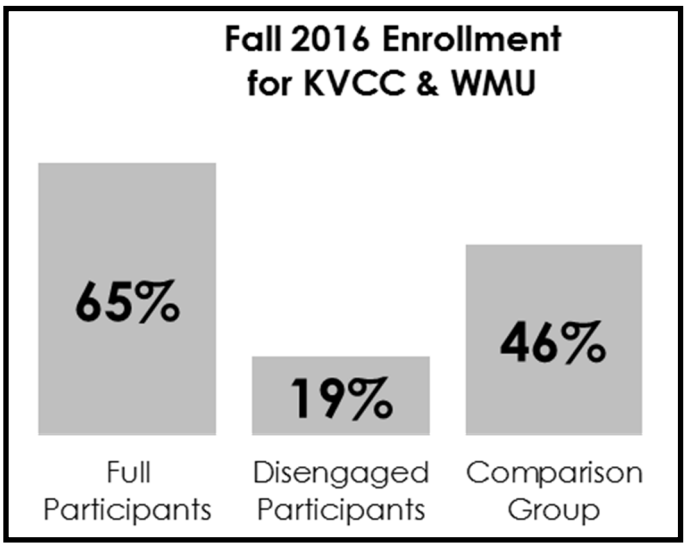
STEP 4.
In order to more accurately determine if the summer interventions were related to student enrollment/attendance at college in the fall, a comparison group was necessary. From the pool of seniors that met the criteria for participation in the program (see Program Design section), the counselor selected up to ten students to invite as summer melt prevention participants. The rest of the students in that pool were considered part of the comparison group since they were matched based on qualifying criteria. The participant group started at 66 students but ended at 50 students (16 students became disengaged due to no return communication or moving and were not considered program participants). The comparison group had 73 students.

STEP 5.
A data tracking spreadsheet was developed in partnership between CACAN and iEval. The spreadsheet was used to track both hours spent on the project (for payment of time for the counselors) and communication dosage and type between counselors and students. The spreadsheet was reviewed at a countywide school counselor meeting prior to the beginning of the program.

STEP 6.
The data analyses conducted by the external evaluation team included qualitative and quantitative measures, with findings triangulated from the data including student demographics, student high school exit surveys, summer melt program type and dosage, counselor surveys, and student surveys. Key findings are reported in the next section.

Key Findings
The summer melt prevention program had 66 student participants, ranging from 3-10 students at each of the nine participating high schools. Sixteen (24%) of the participating students disengaged from the summer melt prevention program with reasons such as moving out of state, death in the family, and lack of response to counselor communications. When examining the overall impact that participating in the program has on student enrollment in college in fall 2016, the students were disaggregated into three groups: students who fully participated in the summer melt prevention program (n=50), students who disengaged from the summer melt prevention program (n=13), and students who were in the comparison group (n=73). Students who were full participants in the summer melt prevention program attended KVCC or WMU at a higher rate than students in the comparison group (65% and 46%, respectively).

Graph 1.
Fall 2016 Enrollment



While there was not enough power in the analyses because of the number of participants (50 full participants, compared to the 100 originally planned) to determine if the timeframe for, type of, or topics of each mentoring session had any different levels of impact on summer melt, some findings related to the sessions are as follows:

- The average number of mentoring sessions (e.g., text, phone call, in-person meeting, college visit) per student was 4, with 219 mentoring sessions overall ranging in time from 1-180 minutes. The majority of the

mentoring sessions took place in June (34%) and July (34%).
- The type of mentoring sessions varied greatly by counselor, with some counselors employing a variety of communication strategies and others using only one or two. The type of mentoring sessions recorded included Facebook Messenger, individual text messages, group text messages, emails, phone calls, and group and individual face -to-face meetings.
- The majority of face-to-face communications took place at either the high school or KVCC.
- There were several examples of creative face-to-face meeting locations such as counselors driving participants to the bank to figure out financial aid deposits, riding bus routes with participants to ensure they could get to school, and meeting at student/counselors' homes.
- The most commonly covered topics at mentoring sessions were financial aid and attending college orientation. The least often covered topics were career planning, tuition bills, residence life, employment, and scholarships.

While the low number of full participants did not allow for generalizable findings, the preliminary analyses did support the research. Students were very interested in talking with their mentors about financial aid issues, which aligns with the need for financial advisors to work with incoming freshmen. Individual text messages, group text messages, and FaceBook Messenger discussions were the most popular ways the mentors and students maintained communication over the summer. Automated text messages were not used, as suggested in the research, as the local counselors felt the personal touch of individualized communication was important.

Data accessible in April 2017 through the National Student Clearinghouse allowed for a deeper dive into understanding college enrollment, completion, and persistence of the full participants and comparison group of students. Several of the following updated findings reinforced initial data that pointed to participation in the summer melt prevention program contributing to higher college-going rates:

- Students participating in the summer melt prevention program were 1.25 times more likely to complete at least one semester of classes at KVCC or WMU the year after their high school graduation than students in the comparison group.
- 96% of the full participants who attended college completed their first semester immediately following their high school graduation, compared to 80% of the comparison group.
- 66% of the full participants who attended college persisted to completing their second semester in college during their freshman year, compared to 58% of the comparison group.
- A higher percentage of students completed first semester with full-time

status in the participant group compared to the comparison group (50% and 45%, respectively), while more comparison group students completed second semester with full-time status than the participant group (48 and 36%, respectively).
- The rate of withdrawal from enrollment in any one semester was the same for both the participant and treatment groups (10%).

Based on the preliminary findings from the pilot year of implementation of the summer melt program, CACAN is implementing a full second year of programming in 2017, incorporating many of the recommended changes that came out of the evaluation process, many of which are shared in the next section.

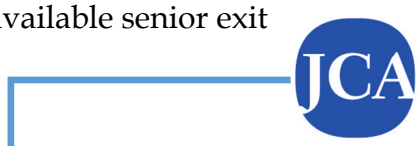
Recommendations for Replication

Based on the pilot year of summer melt implementation, the CACAN and iEval teams would like to share the following recommendations to consider when trying to replicate the summer melt prevention program:

- Provide clearer guidance and/or training with counselors on how to track the communication and interaction with the students (e.g., ensuring Facebook chats aren't counted for 45 minutes or texts for 30 minutes). Counselors reported having difficulty tracking the amount of time spent communicating via text message and Facebook Messenger. The recommendation for the future is to track the number of messages exchanged as opposed to time spent exchanging messages.
- In the pilot program, counselors were paid per contact hour with students. This payment structure proved not to be beneficial for those counselors who were more efficient with their time yet potentially just as effective as counselors who spent more time. The recommendation for programs that follow this year's pilot is to pay a stipend per student served, regardless of the hours.
- The total cost of the pilot program was $7,772. Costs included counselor stipends, supplies for meetings (e.g. printing, food), and mileage reimbursement. The recommendation for program replication is to budget $125 per student participant for counselor stipends and an additional $500-1,000 for additional resources.
- Counselors need to identify multiple ways to communicate with students prior to them graduating from high school, as well as rank the best ways for communication. This may help increase student engagement in the summer melt prevention program. The pilot data showed that students who fulfilled the summer program's requirements were almost 3½ times more likely to continue with college enrollment in the fall than those students who became disengaged. The recommendation for moving ahead with the summer program is to identify multiple strategies for communication,

specifically determining how students prefer to be contacted.

- Counselors were responsible for identifying students for the pilot program's comparison group. As noted, the students identified for the comparison group fit the criteria for the summer melt program but did not receive interventions throughout the summer. The recommendation is for the program coordinator to utilize available senior exit survey data and data regarding economic status to identify students for the comparison group. This would ensure that the comparison group is an accurate and exhaustive list.
- Due to the constraints of the pilot program, there was some confusion as to whether or not interventions should continue with students that self-reported plans to not attend a college/university or reported plans to attend an institution other than KVCC or WMU. The recommendation for the future is to have counselors continue working with these students to ensure matriculation to any college if they are still college-bound or to assist students in finding resources for viable work experience, apprenticeship/internship experiences, and career exploration if their intent to attend a college/university has shifted.
- One of the counselors' responsibilities in the pilot program was to hand off each student to an advisor at the college level so the student would have someone to continue working with if they needed support. This expectation was not reinforced, so it did not happen consistently across the county. Making that personal connection with students to someone at the college may not be as important for summer melt, but it could be critical for retention between freshman and sophomore years of college. The recommendation for future programs is to make that connection with an advisor at the college level a mandatory part of the program, prior to paying the counselor stipend.
- The two surveys, the student survey and the counselor survey, are critical for understanding the impact of the summer melt program within the students' lives, particularly for determining the most meaningful ways to improve the program for the future. The recommendation is to brainstorm, at the beginning of the program and with student input, ways of distributing the survey (e.g., text, online, final personal meeting) and encouraging survey completion (e.g., incentives) with



"Students who participated in the program were 1.4 times more likely to go to college the fall after high school graduation when compared to the matched comparison group and 3.4 times more likely to go when compared to students who disengaged from the program."

both students and counselors.

- In the pilot program, communication from the program coordinator occurred inconsistently to counselors and almost entirely via email. The recommendation moving forward is for the coordinator to vary the communication methods (e.g., phone, text) and schedule outreach appointments, which will help clarify data reporting expectations and potentially improve program satisfaction on both the part of the counselors and students.
- Some counselors reported that the student information letter to be signed and returned by participants was off-putting to some potential summer melt students. The recommendation for those considering programs is to exclude details that are unnecessary for participants to ensure clarity about the purpose of the program and avoid verbiage that marginalizes those identified for the program.

Conclusions

The overarching goal of CACAN is to increase college enrollment, with an emphasis on closing the existing gap between economically disadvantaged and non-economically disadvantaged students. The pilot of the summer melt prevention program accomplished that. Students who participated in the program were 1.4 times more likely to go to college the fall after high school graduation when compared to the matched comparison group and 3.4 times more likely to go when compared to students who disengaged from the program. Because of the vast variations in types of communication, dosage of interventions, and student participation, as well as the low number of participating students, no conclusions could be made about what specific types of communication or interventions had the most impact on the college going rate. The preliminary findings from the summer melt prevention pilot were positive enough to encourage the planning team to implement the program again, with modifications, in summer 2017. The CACAN partnership plans to implement the program, incorporating the recommendations previously mentioned, and expanding it to students intending to attend any postsecondary educational institution.

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