



Nudge Letters with Parents

Using Nudge Letters to Engage Parents
and Increase Attendance

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Executive Summary

Background

Attendance is critical to academic success -- increased attendance is correlated with academic performance and graduation. Parents and caregivers play an important role in both ensuring that their learners attend and reinforcing its importance. The role of parents and caregivers in attendance is perhaps more critical during virtual learning than when in person.

Methodology

A quasi-experimental approach (meaning everyone who meets our criteria for inclusion will receive the nudge letter(s)) and assessing outcomes using an interrupted time series design (compare measures of weekly attendance before and after the intervention). This is a small population which might include between 40 and 50 students.

Key Findings

- No evidence that sending letters to parents about attendance decreased the students' number of absences.
- Parents underestimate the number of times their child has been absent.

Key Recommendations

- Could be improved to include more information
- Its implementation throughout the entire school year might bring more efficient results

1 Introduction

1.1 Background

Motivation: Attendance during the second quarter of the grading period (2020-2021 school year) averaged to 84.24% for 9th graders, 80.63% for 10th graders, 81.56% for 11th graders and 81.34 for 12th graders. As a whole school, the attendance has averaged to 82.28%. This includes the whole school. When parents get involved in a child's attendance and grades, we have seen more success because they are being pushed at home and at school. However, our English language learners have had such low attendance during online learning that it has led to low performance. These students are failing at higher rates than their peers. My school data indicates that students who are English Language Learners disproportionately are failing core classes. When we consider our 9th graders, 42% failed a core course in the first grading period compared to 54% 9th grade ELLs who failed a core course in the first grading period also. This pattern continues with our 10th graders as 42% failed compared to 46% 10th grade ELLs.

Research/Evaluation Literature: we examined a meta-analysis (Rogers et. al., 2017) of research-supported practices for improving attendance in high schools that identified the most common components of successful (as measured by statistical significance) attendance interventions. Common threads were skills training, family support, and incentive-based strategies. Examining family support strategies more closely, we were excited to learn about the emerging practice of "nudge" letters. Nudge letters marry learnings from psychology and behavioural economics. These brief notes are sent to families and include (1) why attendance is important, (2) their own child's attendance record, (3) contact information to reach the letter sender, and (4) [optional] typical attendance for the student's peer group. This emerging practice has been field tested in Seattle Public Schools (see Willis) and the School District of Philadelphia (see Rogers et. al.) with mixed results.

1.2 Objectives

We are curious if nudge letters sent to families successfully increase student attendance. We are also curious to know if there is a differential impact of nudge letters for students in particular attendance categories (i.e., low risk (attendance>90%), at risk (80-90%), and "extreme" (<80%)).

We plan to translate letters to the home language recorded from student registration and rely on mailing physical letters in lieu of emails and text messages as this proves to be the most consistent and reliable way to reach families.

Though attendance is particularly challenging during remote instruction, if the practice proves effective then it can be carried forward when in-person instruction resumes.

2 Methodology

2.1 Research Questions

1. Do Nudge letters sent to families successfully increase student attendance?
2. Is there a differential impact of nudge letters for students in particular attendance categories? (i.e., low risk (attendance > 90%), at risk (80-90%), and “extreme” (< 80%).)

2.2 Research Design

We proceeded to do a quasi-experimental approach (meaning everyone who meets our criteria for inclusion will receive the letter(s)) and assessing outcomes using an interrupted time series design (compare measures of weekly attendance before and after the intervention). We have not yet decided clear criteria for inclusion.

This is a small population which might ultimately include between 40 and 50 students and their families. Possible demographic characteristics that past researchers have controlled for include gender, home language, ELL status, race/ethnicity, and free or reduced lunch status. Because we’re interested in improving attendance among students who are English learners, perhaps our analysis will compare outcomes by that descriptor.

Ongoing measurement: attendance in Geometry -- we are focusing on attendance during their math class period over daily school attendance. Similarly, the letters will provide Alfonso’s contact information in lieu of the principals/superintendents.

Frequency of letters: past research sent letters one time or once per trimester; we’re curious about sending letters weekly, bi-weekly, or with some increased frequency. These letters will be tailored to that student’s attendance in the previous period -- encouragement and information.

2.3 Instruments

Letter translations -- three letter templates in up to five languages – Facilitated ESL Office of Translation and Interpretation

Printer – Conducted at Brashear

Postage

Computer – Spreadsheets to keep track of data

Phone/Cell phone – to conduct question from parents about their child’s attendance and reason for Nudge Letters

2.4 Sample

Students who had a D or lower in Mr. Fajardo's geometry classes. ELL students as well as non-ELL students were included. These students were likely to have been chronically absent in the first semester. Due to their poor attendance, their grade was poor.

Other students who had poor attendance were considered and selected. Mrs. Roberto and Ms. Eady (co-teachers) suggested student names to participate in the intervention.

2.5 Data Collection

Mr. Fajardo sent biweekly letters during the second semester to the parents of the selected sample students. Their attendance was recorded for the second semester and compared throughout. Parents who contacted us with regards of the letters were also noted

2.6 Data Analysis

Number of days absent in a biweekly timeframe was entered in an Excel Spreadsheet to view a potential increase of attendance.

2.7 Limitations

Samples size too small. Only a sample of students chosen by Mr. Fajardo from his classes were used in this research.












































There were other interventions taking place from the school such as I-Contracts, which allowed students who failed 1st semester with the chance to get a passing grade by obtaining at least a C second semester.

There was also a transition from Remote learning to Hybrid Learning

Technology issues could have affected students during 1st semester. (i.e., Laptop not working, no Wi-Fi, slow internet) These issues could have been resolved by second semester.

3 Results

3.1 Do Nudge letters sent to families successfully increase student attendance?






















Stude	3/1-3/12	3/15-3/26	4/6-4/16	4/19-4/30	5/3-5/14	5/17-5/28	
MB	10	10	5	5	7	6	
AA	5	1	0	1	1	2	
AC	3	4	2	2	5	3	
AC	3	2	1	2	6	2	
DL	9	10	8	10	10	6	
DQ	6	2	4	3	5	3	
NT	9	6	7	5	1	5	
JW	10	10	6	2	9	4	
DW	8	9	8	7	5	4	
EAC	2	0	1	0	0	0	
MB	6	3	3	5	7	2	
SC	5	6	8	7	6	6	
MJ	8	7	9	10	8	3	
CP	1	3	2	3	3	5	
JS	7	2	4	4	5	1	
JZ	0	1	1	0	0	0	
MD	10	10	8	8	5	6	
WD	7	5	4	5	5	4	
AE	2	3	1	2	7	2	
NF	10	10	10	6	3	2	
KGH	2	5	0	2	5	2	
KM	8	7	9	6	2	1	
KM	9	7	9	6	2	1	
HP	3	0	3	2	4	5	
MA	7	6	2	3	1	2	
MH	9	9	6	3	7	1	
AJ	1	1	1	5	1	0	
JJ	4	5	4	6	10	10	
NM	10	10	10	10	10	10	
JM	0	0	1	0	0	0	
MR	6	2	4	2	1	3	
ZS	8	10	9	6	5	3	
JS	8	10	5	6	8	4	
SA	4	3	3	5	2	2	
DG	10	10	10	10	10	10	
NI	4	3	3	4	3	0	
GM	10	10	10	8	4	2	
BM	7	5	5	5	5	6	
JP	10	10	10	6	3	5	
WP	1	2	4	5	6	3	
RS	0	6	5	5	3	2	
DW	10	10	9	10	10	10	
LW	6	4	3	4	6	5	

18 out of 43 students (42%) of students chosen from the sample improved their attendance.

- 10 out of 22 students (45%) were 10th graders.
- 3 out of 5 (60%) were 11th graders
- 5 out of 16 (31%) were 12th graders.



















3.2 Is there a differential impact of nudge letters for students in particular attendance categories?

At risk

Initials	Grade	3/1-3/12	3/15-3/26	4/6-4/16	4/19-4/30	5/3-5/14	5/17-5/28	
AJ	10	1	1	1	5	1	0	
BM	10	7	5	5	5	5	6	
EAC	10	2	0	1	0	0	0	
GM	10	10	10	10	8	4	2	
JS	10	8	10	5	6	8	4	
JJ	10	4	5	4	6	10	10	
KGH	10	2	5	0	2	5	2	
NI	10	4	3	3	4	3	0	
SA	10	4	3	3	5	2	2	
WD	10	7	5	4	5	5	4	
WP	10	1	2	4	5	6	3	
ZS	10	8	10	9	6	5	3	
MB	11	6	2	4	2	1	3	
AC	12	3	2	1	2	6	2	
AC	12	3	4	2	2	5	3	
CP	12	1	3	2	3	3	5	
JZ	12	0	1	1	0	0	0	
JW	12	10	10	6	2	9	4	
LW	12	6	4	3	4	6	5	
MH	12	9	9	6	3	7	1	
SC	12	5	6	8	7	6	6	





- 7 out of 21 (33%) at risk students improved their attendance

Extreme

DW	10	10	10	9	10	10	10	
HP	10	3	0	3	2	4	5	
JP	10	10	10	10	6	3	5	
KM	10	9	7	9	6	2	1	
KM	10	8	7	9	6	2	1	
MD	10	10	10	8	8	5	6	
NF	10	10	10	10	6	3	2	
NM	10	10	10	10	10	10	10	
MA	11	7	6	2	3	1	2	
NT	11	9	6	7	5	1	5	
AA	12	5	1	0	1	1	2	
DQ	12	6	2	4	3	5	3	
DL	12	9	10	8	10	10	6	
JS	12	7	2	4	4	5	1	
JM	12	0	0	1	0	0	0	
MJ	12	8	7	9	10	8	3	
MB	12	6	3	3	5	7	2	
MB	12	10	10	5	5	7	6	

10 out of 18 (56%) Extreme students improved their attendance.

Low Risk

AE	10	2	3	1	2	7	2	
DG	10	10	10	10	10	10	10	
DW	11	8	9	8	7	5	4	
RS	11	0	6	5	5	3	2	

1 out of 4 students (25%) that were at low risk improved their attendance.

4 Discussion

Forty two percent of the students improved their attendance. All of them improved their grade or it remained the same. Although, the attendance did not improve for everyone, it did show similar results to the similar study performed at the school district of Philadelphia (Rogers et. Al, 2017). There was no evidence that the Nudge letters decreased their attendance. There was also no evidence of a significant differential impact when it comes to students in particular attendance categories (low risk, at risk, extreme).

Although, there was no evidence that the nudge letters increase the attendance for a particular ethnic group or race (black, white, Hispanic, Asian ethnicity), a bigger sample would be needed to obtain sufficient and satisfying results.

The results of this research project tell that communication with parents is vital for the attendance and success of the students. Using attendance for communicating with parents is a strong tool. Additionally, it caused parents to approach the teacher, as they seek clarification of the nudge letters, rather than a communication started by the teacher. Also, 100% of the parents that approached the teacher for clarification of the nudge letter were underestimating the number of absences of their child. Furthermore, the nudge letters sent to parents enabled communication with parents that have been difficult to get in touch with and proved to be successful for future communication as phone records were able to be updated and shared with other teachers within the school setting. The study was successful in raising the awareness for parents of their child's absences and was successful in making them aware of its importance.

Some limitations with the study were the transition from Remote learning to Hybrid learning. Students were to go to school twice a week and were expected to do remote learning the other three days. Some students used in this study attended school twice per week so their attendance might have improved because of that and not because of the nudge letter.

5 Recommendations

This research project was performed bi-weekly for the last 3 months of the school year. I think it could be improved by implementing it at the beginning of the school year and continue through the end. The Nudge letters proved to be a powerful tool for communicating with parents. It was successful with parents of ELL students as the translation and interpretation was performed. The nudge letter used in this project only included information about attendance in Mr. Fajardo's geometry classes. The nudge letter could also be improved by including more information on the nudge letters such as grades or attendance in other classes.

This project could also have the potential to produce more efficient results in a school year in which the learning environment is consistent. In other words, if the school setting is remote, hybrid only, or in person only, it might produce more clear results. At the same time, it might be interesting to see which school environment setting this research project could be more effective on.

The research could also be improved by expanding the size of the different ethnicity, race groups. But to approach this, there would have to be a bigger involvement from other teachers or implement it as a school.

6 References

Rogers, T., Duncan, T., Wolford, T., Ternovski, J., Subramanyam, S., & Reitano, A. (2017). A Randomized Experiment Using Absenteeism Information to "Nudge" Attendance. REL 2017 252. *Regional Educational Laboratory Mid-Atlantic*.

