



P-12 Annual Impact Study: 2018-2019

Introduction

Inspired by CAEP to use a case study approach to collect data on our program completer impact in the field, our methodology and research questions have evolved over the past four years. In our efforts to improve our study, in 2018-2019, we incorporated High Leverage Practices (see [IRIS Center](#)) into our case study design. High Leverage Practice (HPLs) are a collection of 22 techniques or practices that all teachers, including special education teachers, should use. We view HPLs as our mediating variable or, more simply, one of the causal mechanisms that support our program completer achievement of the CAEP and InTASC standards and our candidate impact in the field. Although we are confident that these 22 techniques are woven through each candidate's program of study, we do not measure or track candidate progress on each of them. Rather, our outcome measures are linked to the various program and unit-level standards such as SPA, InTASC, and CAEP standards and they are assessed throughout each candidate's program of study. Therefore, we posited that, because our candidates are achieving the requisite standards in their program of study, the use of these 22 HPLs should be evident in the daily classroom practice of our program completers.

The impetus for our study, therefore, was to gauge the degree to which our recent program completers are using these HPLs and whether they can explain how they know the HPLs work; do they use assessment information to gauge the effectiveness of their teaching strategies. We posit that those who report higher levels of efficacy implementing these practices will have increased the likelihood of impacting their students' learning. To this end, the annual P-12 Impact Study data gives us important information on what our candidates report to be able to do once they are in the field. This information combined with employer feedback and results from our Candidate Exit Surveys provides us with crucial information on the efficacy of our programs to prepare candidates to be impactful P-12 educators.

Research Questions and Review of the Literature

The purpose of the proposed study was to examine the relationship between completer self-reported efficacy in the use of [High Leverage Practices](#) and P-12 student academic performance. The following research questions were addressed:

1. To what degree do our program completers use high-leverage practices in their day-to-classroom teaching?
2. What are their efficacy levels associated with the implementation of the various high-level practices they choose to use?
3. To what degree are they able to use data-driven examples to explain how these high-leverage practices impact their students' academic performance?

Participants

The participant pool included $n = 10$ recent program completers from our elementary and secondary programs who, as of fall 2018, were teaching full-time in public or private schools in regional districts. From this pool,

we selected three participants for the AY 2018-2019 study based on the following criteria: (a) have five years or less full-time teaching experience, (b) currently teach full-time in a public or private school in a regional district, and (c) can commit to the study four semesters (fall 2018, spring 2019, fall 2019, and spring 2020). Each of the three selected participants was required to commit each semester to participate in two face-to-face interviews and one classroom observation. In addition, over the course of the study (four semesters), each participant was required to agree to submit planning and assessment artifacts related to high-leverage practices and student outcomes on related assessments. The selection of the final three participants was in part based on their current teaching assignment in addition to their willingness and ability to participate as outlined above. The final three participants are described below:

- Participant A: First year middle school ELA/AIS teacher in a local school district (not yet completed their Master’s Degree)
- Participant B: First year middle school Science teacher in a local school district (not yet completed their Master’s Degree)
- Participant C: Second year grade 2 teacher in a local school district (completed Master’s Degree in TESOL)

Data Collection and Summary Results

Although our case study does not have a dedicated funding source, we have been able to dedicate approximately 10 hours per week of Graduate Assistant support each semester. This support is crucial to the sustainability of the project. Each of the three selected participants was assigned to a College of Education graduate student who conducted the two face-to-face participant interviews and at least one on-site classroom observation between fall 2018 and spring 2019. The principal investigators held weekly or bi-monthly meetings each semester with the three graduate students as a means to keep current with their progress, address questions and concerns, and to review data. Each of the graduate students was enrolled in a research methods class where they were learning to conduct both qualitative and quantitative research studies and data collection strategies such as interviewing and data analysis techniques.

Table 2 below includes each interview question and participant responses followed by the classroom observation notes for Participant A (Participants B and C had not yet completed the classroom observation).

Table 2: Interview Question Responses

Interview Questions	Participant A	Participant B
Which high-leverage practices (HLPs) do you remember being emphasized in your program of study at Fredonia?	<ul style="list-style-type: none"> ● Leading a group discussion ● explaining and modeling content, practices and strategies ● Subject-matter domain ● Designing single lessons and sequences of lessons ● Checking student understanding during and at the conclusion of lessons ● Selecting and designing formal assessments of student learning ● Providing oral and written feedback to students ● Analyzing instruction for the purpose of improving it 	<ul style="list-style-type: none"> ● Explaining and modeling content, practices, and strategies ● Implementing norms and routines for classroom discourse and work ● Interpreting the results of student work, including routine assignments, quizzes, tests, projects and standardized assessments
Which HLPs did you use the most in your Student Teaching experiences?	Well with the edTPA, definitely designing single lessons and sequences of lessons, checking student understanding during and at the conclusion of lessons, selecting and designing formal assessments of student learning, and providing oral and written feedback to students. Those would definitely be my top choices, mostly because of the edTPA.	<ul style="list-style-type: none"> ● Providing oral and written feedback to students ● Analyzing instruction for the purpose of improving it

<p>Which HLPs have you used most frequently in the last year?</p>	<p>Definitely explaining and modeling content, practices, and strategies, like jigsaws, we do all the time. Also, eliciting and interpreting individual students' thinking. Since I have classes of 6 to 9 students.</p>	<ul style="list-style-type: none"> Analyzing instruction for the purpose of improving it. Checking student understanding during and at the conclusion of the lesson.
<p>Have you received professional development in any HLPs since you started teaching?</p>	<p>Yes, so definitely subject-matter domain. I have had a lot training with what I teach, so like Read 180 training is what we focus on. I have had two days of training with that. Let me see... also in analyzing instruction for the purpose of improving it, so we have to analyze our instruction all the time. Williamsville also has a catalog that comes out every season and we can sign up for as many courses as we want. These courses are offered after school, and I have participated in about 12 of these offered professional development courses. So I go to the development trainings that I feel like I need for my job and my students. So for example, I took one on ELLs because I have a couple of them, and I felt like I needed more help with teaching these students successfully. I also have been taking literacy-based courses to help with my teaching as well.</p>	<ul style="list-style-type: none"> Yes
<p>Are there HLPs from the list that you don't use?</p>	<p>I noticed that designing simple lessons are mentioned on here, and I remember having to do that so many times in undergrad, and I can honestly say that I have only put together like a typed up lesson 3 times this entire school year. I have a plan book that I have to hand in at the end of the year. I also get observed three times throughout the year, and those are the only times I have to submit typed up lesson plans.</p>	<p>Interviewer accidentally skipped over this questions</p>
<p>How efficacious do you feel using HLPs in general?</p>	<p>I would say, very effective, the only HLP I do not think I use very often is designing typed single lessons. I plan out what I am going to do, but I do not have to do those extensive write-ups. Other than that, I use all of these HLPs all of the time.</p>	<ul style="list-style-type: none"> Very efficacious
<p>What are your preferred HLPs and why? Explain to the interviewer, artifacts such as lesson plans and student work samples, how they provide evidence for HLP impact on student learning</p>	<p>Definitely oral and written feedback for students, but not so much written because they hate reading enough as it is. But definitely oral feedback because I liked to give feedback like if they are showing growth, did well on the reading unit, are increasing their fluency, or doing well on their comprehension. Also, building respectful relationships with students is a big one for me. I really make sure I connect with my students. That is my favorite thing. Every Friday, I do a community circle for 10 minutes. Each student is able to have a turn to ask any question they want, and it also helps with students speaking and listening skills.</p> <p>How they provide evidence? I mean you would see my written feedback to students all of the time. A lot of my feedback is oral though because I am not grading the students work. It is kind of difficult to answer this question because each one of my classes are so different.</p>	<ul style="list-style-type: none"> Checking student understanding during and at the conclusion of lessons - I teach 6th grade science, it is important to check multiple times throughout the lesson to make sure students are understanding the academic vocabulary, the lab materials, or the overall essential question/end result. Creating Check for Understand slides in my presentations for a reminder for myself to make sure I ask the students/connect the students back to the learning target/essential question.

Classroom Observation Notes: Participant A

May 10th, 2019 Participant A – 8th grade ELA

Topic: Accept vs. Except

Daily Routine, then Grammar mini lesson

Daily Routine: - using Kagan switchboards – pose a sentence – and then the students show their response on the switchboards.

Going over literary elements that are most likely going to be on the regents’ exam

Using mnemonic devices to help students remember the difference between accept and except
Except – like exit or excluding

Now working on a worksheet – filling in the blank in a sentence with either accept or except -going over the worksheet – read aloud – teacher centered

1:48 – Now Partner work – students are collaborating and working together on putting in little cutouts of either accept or except in the blank part of the sentences. I like that she made the sentences relatable and current to the 8th grade students’ current culture & interests

Reading “Because of Mr. Terupt” – Teacher Participant is reviewing and having the students tell her what they remembered from reading the last class. Each student has been assigned their own character – they read aloud their part when it is their turn. Teacher Participant asks comprehension questions prompts during the read aloud. For each character, the students have to fill out a “RAPP” which stands for reputation, attitude, personality, and physical description.

HLPs I noticed the most in the lesson

- Leading a group discussion
- Explaining and modeling content, practices and strategies
- Implementing organizational routines
- Building respectful relationships with students – community circles
- Using student interests in instruction
- Setting long term goals – posed in the beginning of the lesson on the presentation
- Providing oral and written feedback to students – meeting with some students after class

Results

Several points were raised in the interviews that have potential implications for the implementation of HLPs. Specifically, it was noteworthy that Participant A reported to do relatively few written lessons during the year and was only required to prepare lesson plans for their administrator when they were being formally observed for APPR purposes. Participant A referred to a “Plan Book” they were required to hand in to administration at the end of the school year but didn’t indicate if it was evaluated in any way or what specifically was included in the plan book. It’s possible the Plan Book involves single lesson plans but this question should be asked in the follow up interviews conducted in the fall. Designing single lessons and sequences of lessons is

The issue of lesson planning raised by Participant A is an appropriate segue into another issue related to the 2018-2019 case study in terms of the particular version of High Leverage Practices that we selected for our study. There are various HLP models. For example, the University of Michigan [TeachingWorks \(2013\)](#) is a popular set used by their [School of Education](#) which integrates these practices across their programs. In

addition, the [IRIS Center](#) promotes a set of [High-Leverage Practices in Special Education](#). The fit between the set of HLPs selected for our study and the nature of our programs needs to be revisited for the 2019-2020 study.

It was also interesting that Participant A mentioned two times that they were not responsible for assessment which can be inferred to mean they are not the teacher of record and do not submit a formal grade on a report card for any of their students. However, it was interesting that this novice teacher did not consider all of their daily formative work to be “assessment.” In fall 2019, the GA can follow up with their Participant on this question.

In the next round of data collection with the Participant A and B and the replacement for Participant C who likely will self-select to not participate, we must move to the next level and begin the process of using the Participants’ work samples as evidence for P-12 Impact. Our research questions as seen below were addressed only in part through the fall 2018 data collection. Question 3 was not adequately addressed. In part, this could have been due to time constraints where the interviewers simply did not put enough time into the process. It could also be the result of participants not understanding what was intended by the question. For the fall, we will include a few examples for this interview question as well as have the interviewers probe the interviewees somewhat to ensure they understand the question:

1. To what degree do our program completers use high-leverage practices in their day-to-classroom teaching?
2. What are their efficacy levels associated with the implementation of the various high-level practices they choose to use?
3. To what degree are they able to use data-driven examples to explain how these high-leverage practices facilitate students’ academic performance?

The observation data collected in 2018-2019 was intended as a triangulation strategy in which to test the validity of the interview data through the convergence of information from different sources, which in this case would be the (a) interview data, (b) the observation data, and (c) the student work sample data. Collectively, these data should show a similar picture of the participant’s use of HLPs. Based on the data collected in fall 2018, it is unclear if this triangulation strategy will work as participants had difficulty explaining how their students’ work samples demonstrated the efficacy of a particular HLP they were using. It is possible that Research Question 3 (as seen above) is too complex for the current study and perhaps we should make this question more of a focus through multiple interviews and perhaps not conduct the in class observation?

Next Steps for fall 2019

Our next steps for the 2019-2020 study is to continue our efforts to improve the methodology and to collect more in-depth and relevant data. Additional Graduate Student training, more intense review by the Principal Investigators in terms of the Graduate Assistant data collection, having Graduate Assistants do member checks, and enforcing a more rigid data collection timeline will improve the study and help to alleviate some of the problems we encountered in 2018-2019. We believe the P-12 Impact study has potential to provide important information for program improvement and to make a significant contribution as a meaningful outcome measure in our Quality Assurance System.