

# Final Research Proposal: Evaluating UVEI’s Teacher Intern Program

Julia Csorba, Avery Hormaechea, Ryan Rebne, Mira Chiruvolu, Rachel Zhang

November 2023

---

## Table of Contents

I. Literature Review	2
II. Methods	3
A. Measures and Methods	3
B. Sampling and Recruitment	5
C. Interpret the Data	6
III. Ethical Considerations	7
IV. Feasibility and Considerations	7
V. References	9
VI. Appendix	11
A. Consent Form	11
B. Screener Survey	14
C. Interview Guide	16
D. Interview Codebook	19
E. UVEI’s 10 Standards of Effective Teaching	23

## I. Literature Review

As we all know, teachers are the backbone of our society's education system. Our research was motivated by the fact that throughout our lives, teachers serve as the blueprint of student learning and development. This research will focus on whether the current systems in place of teacher training serve as a strong foundation for their confidence in their capabilities to provide effective instruction in the classroom.

Recent research reveals that teacher enrollment and retention have been at their lowest ever in the past decade. The demand for teachers far exceeds the availability of teachers, which demonstrates the dearth of qualified teachers in school systems (The New Hampshire, 2023). As a result of teacher shortages, states have attempted to address this problem by relying on "underqualified" teachers who don't have standard certifications, and instead have fast-track provisional or emergency certificates. These teachers serve as "short-term" solutions to keep schools open. New Hampshire was identified as one of the top states with the highest teacher-to-student ratio with 40 unqualified teachers per 100 students (Tamez-Robledo, 2023). At the same time, the New Hampshire Department of Education has stated that while New Hampshire has faced high rates of teacher shortages, the state is trending positively in the rate of teacher certification renewals. They have seen the third-highest number of renewals in the past decade, and an improvement in the state's Critical Shortage list of teachers (2023). These statistics seem contradictory to each other, which begs the question of whether New Hampshire is at risk in its education system. Megan Tuttle, president of the National Education Association of New Hampshire, a teachers union, has stated that the numbers presented by the state are "misleading" and don't paint an accurate picture of the reality of the classroom experience. She remarked that a renewal of a certification or a license isn't directly connected to a physical body and presence of a qualified teacher, given that teachers may not be teaching in the subject they were trained in and they may have renewed their license even if they aren't currently teaching (New Hampshire Department of Education, 2023). Tuttle's perspective opens a conversation into how the current statistics around New Hampshire's teacher attrition and retention rates compared to other states may need more critical analysis to surmise an accurate conclusion.

As discussed, educators in New Hampshire may be at risk of being below qualified teacher to student ratio national standards. Our conceptual model focuses on how the concrete experiences of participants of a teacher training program impact their confidence levels in their abilities in the classroom with the mediating variables being facilitators and barriers to their confidence as defined by individual perspectives on aspects of their training program.

Importantly, the link between our IV and DV – that is, how the particular structure of the teacher preparation programs results in differing levels of self-reported confidence and preparedness once in the classroom – arises from Grambs' article "The Sociology of the 'Born Teacher.'" Grambs proposes that more informal teaching situations (like experiential learning) with younger teachers need to be provided in teacher education procedures, as it makes them more confident in adequately handling interactions in the role (1952). This is reflected in Ingersoll's article "The Problem of Underqualified Teachers: A Sociological Perspective." Ingersoll writes that addressing the problem of underqualified teachers requires a systemic approach that addresses the organizational and occupational contexts within which teachers work (2005). This means that, even as early as training programs, if educational institutions are unable to create professional environments that meet teachers' personal needs, then teachers will remain unable to fully connect with the material that they're engaging with. As a teacher-in-training, this means being systematically unable to absorb the pedagogical skills and techniques being taught

due to contextual reasons. Lastly, the final link between our mediating variables and the DV arises from teachers' potentially unsatisfied experiences, therefore resulting in lowered confidence in the classroom. In the case of Wild's article "Pre-service Teacher Education Programmes for Information Technology: an Effective Education?", teachers can often feel unprepared to engage their students in technology-related subjects (1995).

New Hampshire currently oversees a variety of teacher certification programs that exist under the umbrella of the New Hampshire State Board of Education. These include Franklin Pierce University, Keene State College, New England College, NHTI (Concord Community College), Plymouth State University, Rivier University, Saint Anselm College, Southern New Hampshire University, University of New Hampshire, UNH, and the Upper Valley Educators Institute (New Hampshire Department of Education). Out of this list, every program is through a university in New Hampshire, except for one. The Upper Valley Educators Institute (UVEI), a nonprofit, is the only non-university teacher training program in New Hampshire that prioritizes experiential-based learning. The unique approach of UVEI's Teacher Intern Program (TIP) is that participants spend 20% of their time on academic theory with 80% of time doing classroom practice, which is the reversal of traditional curriculums in teacher training programs (Upper Valley Educators Institute). The highlights of experiential learning are that participants work with a mentor and cohorts of small groups in order to graduate as a qualified educator who has had ample teaching experience in a classroom. Literature and research on the quality of New Hampshire's existing teacher training programs and their ability to effectively prepare teachers in the classroom have not been explored, despite evidence of contradictory data about teacher enrollment and retention. What is missing from the existing literature is whether an experiential approach to teacher training begets qualified educators. If so, UVEI may serve as an indicator to better understand the state of New Hampshire's education system to improve teacher attrition and retention rates.

As such, our goal for this research proposal is to better understand specifically UVEI's existing teacher training infrastructure, as a means of improving teacher confidence and preparedness. Within the framework of this research, the conceptual model serves as a navigational tool, explaining the interplay between the confidence levels of UVEI graduates and their experiences in the UVEI Teacher Intern Program. We aim to address how the concrete experience of participation in the program impacts graduates' confidence levels in their careers as educators. The broader contribution of our proposed research aims to reveal the barriers and facilitators teacher training programs that impact teacher's confidence in the classroom in order to improve UVEI's Teacher Intern program for future cohorts and on a broader scale, gain a clearer image of the current state of New Hampshire's education system to gain greater visibility based on the state and national statistics. By focusing on UVEI's approach to teacher training through experiential learning, this research project will seek to close this gap in literature on how best to shape qualified educators in New Hampshire and nationwide.

## **II. Methods**

### **A. Measures and Methods**

As previously mentioned, the independent variable in this research is the UVEI Teacher Intern Program graduate's concrete experiences, which are operationally defined as the elements of the program that exist, such as existence of a mentorship program, etc. The dependent variable is the graduates' confidence levels in their abilities as educators, which is operationalized through

the four main domains of UVEI's 10 Teaching Standards (see UVEI's Teaching Standards in the Appendix). As discussed by Grambs (1952), the structure of teacher preparation programs results in different levels of reported confidence. We hypothesize that the concrete experiences of graduates, as demonstrated through its core, experiential approach in the Teacher Intern Program, will positively impact teacher confidence. The mediating variable in this research is defined as the facilitators and barriers to teacher confidence, and this will be operationalized through UVEI graduate's individual perspectives and personal experiences in the Teacher Intern Program. As found through a review of the literature, Wild (1995) claims that teachers being unsatisfied in their preparation experiences can result in lower confidence in the classroom. For UVEI, we hypothesize that if the teacher interns feel as if the structure and content of the TIP doesn't adequately match the type of material they'll be engaging with as full teachers, they will feel unprepared and experience less confidence once in the classroom. If teachers feel that their learnings within UVEI do not properly equip them to meet the modern demands of teaching, then they'll unavoidably feel unprepared after the program.

This research will focus on conducting a series of in-depth semi-structured interviews with past graduates of UVEI. Due to the fact that UVEI is interested in knowing the specific reasons as to *why* participants of their Teacher Intern Program feel confident in their abilities as teachers, it would be most beneficial for them to gather specific qualitative information. This will allow them to achieve a deeper understanding into the linkages between the variables presented in the conceptual model and yield higher quality insights. However, in-depth interviews do not provide high levels of anonymity. Because UVEI is a small organization, there is a high chance that interview participants will have relations with the interviewer in this research, which could lead to desirability bias in the interviewees' responses. It is therefore suggested that a lesser-known figure in UVEI conducts the interview research. Interviewees will be selected based on a short screener survey, which is discussed in depth in Section B. The survey should be sent two to three times over the course of 1-2 months to maximize response rates.

In an effort to create a diverse interview pool, researchers should select around 15 individuals who indicated willingness to participate in an in-depth interview and had varying levels of confidence in each of the four domains. Researchers will reach out to participants via their provided contact information from the survey and explain the purpose of the interview and schedule a time for it to take place. The interview should take place at a neutral location that does not have an affiliation with UVEI to minimize desirability bias. The interview may take place over the phone or Zoom if the participant does not reside locally. The interviewer should conduct the interview by first introducing themselves and explaining the purpose of the interview. The interviewer should then obtain informed consent from the participant (see Consent Form in Appendix). They should conduct the interview using the Interview Guide (see Appendix) by asking questions, actively listening, and probing the participant for further explanation when necessary. It is estimated that the interview will take approximately 30 to 45 minutes, and this should be communicated to the interviewee when explaining its purpose.

We have carefully structured our interview guide to ensure that the first three questions in the interview (and the related probes) directly relate to our independent variable, as they seek to understand the graduate's specific experiences in TIP that were either facilitators or barriers to teacher confidence. We do so by asking questions such as "What aspects of the Teacher Intern Program do you think best prepared you and made you feel confident in your career as an educator?" and others that target specific sentiments and experiences in the program (see full Interview Guide in Appendix). After we have spent some time understanding the interviewee's

experiences in the program, the following three questions seek to operationalize our dependent variable, which addresses the graduate's confidence in their position as a teacher. Before this section, the interviewee will be given the opportunity to familiarize themselves with the current UVEI 10 Teaching Standards. They will be presented with either a physical piece of paper if the interview is conducted in person or emailed a digital document outlining an in-depth description as to what the UVEI is expecting from each standard. We will use these descriptions to ensure that participants have a clear understanding of each one before assessing their competency in each. This section of our interview includes questions such as "Now that you've spent some time reading through these 10 Standards, which of these do you say you feel most prepared and confident in? Why?" in order to get at specific areas of confidence or lack of confidence.

Researchers will collect data from their interviews by taking observational field notes and recording each interview so that it can be condensed into a full transcript. In order to do this, we recommend that UVEI utilize an AI transcript platform to make this process much quicker. Once they have consolidated their interview notes and transcripts, they can begin to analyze the qualitative data (see Interview Codebook in Appendix). This should be done in conjunction with the interviewees survey responses so that researchers may draw better conclusions based on known confidence levels in the four main domains. See Section C for more information on analyzing the interview data.

## **B. Sampling and Recruitment**

For this study, we will be using a purposive sampling method in order to gather people from our target population, which are graduates of UVEI's Teacher Intern Program. While this non-probability sampling method isn't random and will not allow us to make causal inferences from our study, it will allow us to intentionally select participants with a wide range of experiences to gain a more complete perspective on the effectiveness of the program. This will be done by using a short screening survey sent out to our sampling frame, which is the entire database of Teacher Intern Program graduates via email (see Screener Survey in the Appendix). We recognize that this will not be a comprehensive sampling frame, since UVEI's teacher training program has been running for over 50 years and they don't have contact information for every graduate of the program. However, UVEI does have contact information for nearly 600 graduates, so we believe this frame will be large enough to collect a range of responses.

Our screener survey will contain seven short questions: the first question asks how many years ago the participant completed the TIP; the next four questions ask respondents to assess how confident they feel within the four general domains of UVEI's Teaching Standards (see Teaching Standards in Appendix); the next question asks participants to assess how effective they believe the Teacher Intern Program was; and the last question asks whether or not the participant consents to be contacted for a follow-up interview (see full Screener Survey in Appendix). Participants will be incentivized to complete a follow-up interview with a \$10 Amazon gift card. This survey should be sent at least two or three times over the course of several months to maximize the number of respondents.

Once UVEI receives responses from at least 25 graduates who indicated that they are interested in completing a follow-up interview, they can purposively sample from this pool for a list of interviewees. We recommend that UVEI select individuals who have a diverse range of experiences and confidence levels, to thus gain a more expansive picture of the program's effects. In order to do this, UVEI should select participants who indicated both low and high confidence levels in certain domains of teacher effectiveness, as well as graduates who felt the program was either very effective or not very effective. We also suggest that UVEI select

graduates who completed the program at different times, both recently and less recently. After several conversations with UVEI, we recommend that they select approximately 15 participants to conduct secondary interviews with. We believe that this sample size is large enough to gather interesting data about the effectiveness of the program, while still being a realistic number of interviews for UVEI staff members to conduct in a reasonable time frame.

This non-probability sampling method that we have chosen for this study will not allow us to make causal conclusions because we are not randomly sampling our participants. However, purposive sampling will still allow us to answer questions about *why* there is a relationship between our independent and dependent variables. Because UVEI is interested in understanding what specific aspects of their Teacher Intern Program are most effective and why, through looking at teacher confidence levels, we believe that this sampling method will be most effective for our research design. A purposive sampling method allows UVEI the flexibility to select individuals with diverse experiences in the program, thus gaining a broader perspective as to why their program is (or is not) effective in boosting teacher confidence after graduation.

### **C. Interpret the Data**

Because the data we are collecting from our interviews is very qualitative, our research team will be using a codebook to analyze and assess the collected data. The data will consist of observational notes from the interviewer as well as a transcript from the recorded interview. This codebook will pull insights from these data by creating a list of possible variables that may arise in these interviews, organized into categories depending on what variable in our conceptual model they relate to (see Interview Codebook in Appendix). Codes for our independent variable consist of the concrete aspects of the program, such as mentorship, classroom practicum, course materials, instructors, cohorts, and schedules. When analyzing interview data, the researcher should highlight when these specific aspects of the program are mentioned, regardless of the interviewee's opinion on them. Our independent variable codes assess if and how often certain aspects of the program were mentioned in interviews.

Our dependent variable is the confidence level of the participant operationalized by UVEI's 10 Standards of Effective Teaching, so our codes for this include the ten standards themselves, and codes for whether or not the standard was important to students and teacher confidence. For example, let's say an interviewee discussed the "Content Knowledge & Application" domain in great depth in their interview. Perhaps they felt that this standard was extremely important for student outcomes, but they did not feel very confident in this aspect of their role as an educator. Researchers would then use the codebook to flag not only the specific standard mentioned but also that they mentioned high student importance and low teacher confidence within this standard. These codes will help to inform researchers on which standards teachers felt confident in and which they did not, as well as which standards they believed were important for their students' learning outcomes.

The majority of our codebook is dedicated to describing possible mediating variables that could explain the relationship between graduates' experiences in the program (IV) and their confidence as teachers now (DV). These codes are highly specific, qualitative reasons as to why a specific aspect of the Teacher Intern Program may have been a facilitator or barrier to teacher confidence. The current codes presented are just a few codes we suspect may arise in interviews given our literature review. For example, perhaps a person did not have easy access to technology while they were completing the program and therefore missed some of the content. This could have been a barrier that made them feel less confident as an educator. Or, perhaps a graduate had a particularly close cohort of peers, who met outside of class and supported each

other even after the program ended, and this relationship helped to boost their confidence as a teacher today. These specific conditions help bridge the gap between our independent and dependent variables and explain why (or why not) UVEI's Teacher Intern Program has effectively made its graduates feel confident in their abilities as educators.

This codebook is far from comprehensive. While we have been able to deduce some possible codes from our literature review, we expect many more to arise as the interviews are being conducted. For this reason, we have intentionally left space for the codebook to change over the course of this research. As more mediating variables arise, UVEI will be able to better assess the relationship between the independent and dependent variables and begin to develop theories based on their analysis of the interview data. We expect researchers to find both positive and negative relationships between specific aspects of the program and teacher confidence, which can help identify areas of the program that are in need of further improvement. We recommend that UVEI use the platform "Deduce" to help analyze their interview data, as they are familiar with this platform and the technology will speed up the analysis process.

### **III. Ethical Considerations**

The principles of respect for persons, beneficence, and justice are fundamental ethical principles in human research outlined in the Belmont Report. We have identified and outlined potential ethical concerns in the context of our research study and how we will safeguard against such violations should they arise. The respect for persons principle emphasizes the importance of recognizing the autonomy of research participants and consists of two ethical requirements. To ensure (1) informed consent and in the context of interviewing teachers, we will ensure that teachers are fully aware of the purpose of the study, the nature of the interviews, and any potential risks. Ethical concerns may arise if teachers feel coerced into participating or if they are not provided with all the necessary information to make an informed decision. We safeguard against this by providing a consent form (Appendix) to all participants. In order to (2) protect vulnerable populations, teachers with limited English proficiency or in a subordinate position will be treated with particular care to ensure their rights are safeguarded. The beneficence principle involves the obligation to maximize potential benefits and minimize potential harm to research participants. We will minimize potential psychological harm that might arise from discussing sensitive topics during interviews. Given the confidential nature of the interviews we will ensure that teachers' identities and responses are adequately protected is crucial. The principle of justice emphasizes the fair and equitable distribution of the benefits and burdens of research. Ethical concerns related to justice in this study may include selection bias if the selection of teachers is not representative of the broader population of teachers. We will ensure that the sample is diverse and unbiased and that the benefits of the research are distributed fairly among all teachers and do not disproportionately benefit certain groups.

### **IV. Feasibility and Considerations**

UVEI is interested in the impact of their graduates and their impact on schools, stating that the effectiveness of teacher programs matters a lot right now. There are massive shortages in teaching, and their Teacher Intern Program has declined by 50% (on track with regional trends). This design is a practical choice for UVEI and for us to explore because determining which aspects are most effective would be beneficial in many different aspects. This research is feasible

and allows for resource allocation. UVEI is interested in knowing the specific reasons as to why their Teacher Intern Program is effective or ineffective, so it would be most beneficial for them to gather specific qualitative information through our interview method so there can be an optimal allocation of resources to maximize teacher outcomes. Research in this area could help educators and program directors make informed decisions about where to invest resources to enhance teaching quality.

Our research team met with UVEI repeatedly at different steps along our project to ensure that our design method was centered around their needs and resources. For example, due to UVEI's decrease in enrollment numbers, we made sure to focus our methods around their enrollment capacity and selected 15 participants for the interview from the initial screen survey. By optimizing teacher development, this research could positively impact the professional growth and job satisfaction of teachers, making them feel more supported and prepared to perform at an excellent level. The significance of this research includes its extended positive impact, such as its potential economic and social benefits, where a well-trained workforce can positively contribute back to society and the economy, supporting growth and progress. Additionally, the quality of teacher training directly impacts student achievement. Therefore, this research could not only positively impact teacher education, but also identify the programs that have the greatest positive influence on student learning outcomes, ultimately improving educational experiences for students as well.



## V. References

- Clotfelter, Charles T., Helen F. Ladd, and Jacob L. Vigdor. 2010. "Teacher Credentials and Student Achievement in High School: A Cross-Subject Analysis with Student Fixed Effects." *The Journal of Human Resources* 45(3):655–681.
- Grambs, Jean D. 1952. "The Sociology of the 'Born Teacher.'" *The Journal of Educational Sociology* 25(9):532–541.
- Ingersoll, Richard M. 2005. "The Problem of Underqualified Teachers: A Sociological Perspective." *Sociology of Education* 78(2):175–178.
- New Hampshire Department of Education. 2023. "Renewals for educator credentials remain high." Retrieved Nov. 7, 2023 (<https://www.education.nh.gov/news/renewals-educator-credentials-remain-high>).
- New Hampshire Department of Education. "Educator Preparation." Retrieved Nov. 11, 2023 (<https://www.education.nh.gov/who-we-are/division-of-educator-support-and-higher-education/educator-preparation>).
- Reynolds, John R., Stephanie W. Burge, Cheryl L. Robbins, Emily M. Boyd, and Brandy Harris. 2007. "Mastery and the Fulfillment of Occupational Expectations by Midlife." *Social Psychology Quarterly* 70(4):366-383.
- Reynolds, Margaret. 1999. "Standards and Professional Practice: The TTA and Initial Teacher Training." *British Journal of Educational Studies* 47(3):247-260.
- Rosenholtz, Susan and Carl Simpson. 1990. "Workplace Conditions and the Rise and Fall of Teacher's Commitment." *Sociology of Education* 63(4):241-257.
- Tamez-Robledo, Nadia. 2023. "These States Have the Most Underqualified Teachers Stepping in to Fill Open Positions." EdSurge. Retrieved Nov. 7, 2023 (<https://edsurge.com/news/2023-04-04-these-states-have-the-most-underqualified-teachers-stepping-in-to-fill-open-positions>).
- The New Hampshire. 2023. "Why Are Teachers Leaving Our Schools?" Retrieved Nov. 4, 2023 (<https://tnhdigital.com/22890/news/why-are-teachers-leaving-our-schools/>).
- Upper Valley Educators' Institute. "Teacher Certification." Retrieved Oct. 23, 2023. (<https://uvei.edu/teaching-programs/teacher-certification/>).
- Waite, Linda J., and Sue E. Berryman. 1986. "Job Stability Among Young Women: A Comparison of Traditional and Nontraditional Occupations." *American Journal of Sociology* 92(3):568–595.

- Watlington, Eliah, Robert Shockley, Paul Guglielmino, and Rivka Felsher. 2010. "The High Cost of Leaving: An Analysis of the Cost of Teacher Turnover." *Journal of Education Finance* 36(1):22–37.
- Whaland, Michael E. 2020. "Why Rural Teachers Stay: Examining Teacher Retention and Attrition in New Hampshire's Rural Schools." Ph.D. dissertation, Department of Education, Plymouth State University, New Hampshire.
- Wild, Martyn. 1995. "Pre-service Teacher Education Programmes for Information Technology: an Effective Education?" *Journal of Information Technology for Teacher Education* 4(1): 7-20.
- Zhang, Guili and Nancy Zeller. 2016. "A Longitudinal Investigation of the Relationship between Teacher Preparation and Teacher Retention." *Teacher Education Quarterly* 43(2):73–92.

## VI. Appendix

### A. Consent Form

#### CONSENT TO TAKE PART IN RESEARCH

November 2023

Dartmouth College

*Study title:* UVEI Teacher Intern Program Efficacy Evaluation

*Principal Investigator:* Chris Ward

**You are being asked to take part in a research study. Taking part in research is voluntary.**

Study Summary: This study is interested in understanding how the experience in the UVEI Teacher Intern program impacts teacher confidence after graduation. The driving research question is: *How does the experience in UVEI's Teacher Intern Program (TIP) impact graduates' confidence in their careers as teachers?* This study consists of two parts: a screener survey sent out to all TIP graduates via email in order to gather interested graduates, and an interview conducted with select participants to further investigate these research questions. This study will be used by UVEI to improve their teacher training programs based on feedback from graduates.

Your decision whether or not to take part will have no effect on your job status. Please ask questions if there is anything about this study that you do not understand.

#### **What is the purpose of this study?**

The purpose of the study is to determine the ways in which the UVEI teacher intern program is successful in preparing teachers to enter the classroom and begin work with confidence.

#### **Will you benefit from taking part in this study?**

You will not personally benefit from being in this research study. But we hope to gather information that may help people in the future.

#### **What does this study involve?**

Your participation in this study may last up to the completion of an optional interview, acting as a follow-up to your answers in the enclosed survey.

#### **What are the risks involved with being enrolled in this study?**

Due to participant survey anonymity, there are no anticipated risks with being enrolled in this study. If you elect to participate in a second-round interview, your information will be confidential.

### **Will my data be deidentified and used in the future for other purposes?**

Your survey answers will be stripped of identifiers and used for future research.

### **Other important items you should know:**

- **Leaving the study:** You may choose to stop taking part in this study at any time. If you decide to stop taking part, it will have no effect on your job status.
- **Funding:** There is no outside funding for this research project.

### **How will your privacy be protected?**

1) The information collected about you as data for this study includes:

- Self-reported measures of feelings of confidence and preparedness
- Potentially anecdotal experiences, in part influenced by your time at UVEI

Data collected for this study will be maintained indefinitely.

We are careful to protect the identities of the people in this study. We also keep the information collected for this study secure and confidential.

2) The information collected about you as data for this study will be protected by:

- De-identified precautions via random number coding of research data
- Password protection and administrative safeguards

3) The information collected about you as data for this study (in the case that you elect to do a second round interview) will be protected by:

- Confidential restrictions

### **Will you be paid to take part in this study?**

There will be a \$10 Amazon gift card offered to those who complete an interview, following the screening survey.

### **Whom should you contact with questions about this study?**

If you have questions about this study or concerns about a research-related problem or injury, you can contact the research director for this study: Chris Ward at [cward@uvei.org](mailto:cward@uvei.org) during normal business hours.

If you have questions, concerns, complaints, or suggestions about human research at Dartmouth, you may call the Office of the Committee for the Protection of Human Subjects at Dartmouth College (603) 646-6482 during normal business hours.

**CONSENT**

I have read the above information about the UVEI Teacher Intern Program Efficacy Evaluation and have been given time to ask questions. I agree to take part in this study and I will be given a copy of this signed consent form.

---

Participant's Signature and Date

PRINTED NAME

---

Researcher or Designee Signature and Date

PRINTED NAME

## B. Screener Survey

Thank you for your interest in improving UVEI's Teacher Intern Program! Your honest feedback will help us improve our programming for future cohorts. Graduates who complete this survey will be entered into a raffle for a \$10 Amazon gift card. Winners will be notified in the coming months.

1. How many years ago did you complete the UVEI Teacher Intern Program (TIP)?
  - a. Less than 1 year ago
  - b. 2-3 years ago
  - c. 4-5 years ago
  - d. 6-10 years ago
  - e. 11-20 years ago
  - f. 21-30 years ago
  - g. 31-40 years ago
  - h. More than 40 years ago
2. How confident do you feel in your ability to apply content knowledge in the classroom and understand the content of the discipline?
  - a. Not confident at all
  - b. Slightly confident
  - c. Mostly confident
  - d. Very confident
3. How confident do you feel in your ability to assess student learning, plan for instruction, and engage students in learning?
  - a. Not confident at all
  - b. Slightly confident
  - c. Mostly confident
  - d. Very confident
4. How confident do you feel in your ability to know students well, understand how learners develop, and foster safe and productive learning environments?
  - a. Not confident at all
  - b. Slightly confident
  - c. Mostly confident
  - d. Very confident
5. How confident do you feel in your ability to engage in professional learning and collaboration with colleagues?
  - a. Not confident at all
  - b. Slightly confident
  - c. Mostly confident
  - d. Very confident

6. On a scale from 1-5, with 5 being the most effective and 1 being not effective, how effective overall was the UVEI Teacher Intern Program?
  - a. 1 (Not effective)
  - b. 2 (Slightly effective)
  - c. 3 (Neither effective nor ineffective)
  - d. 4 (Somewhat effective)
  - e. 5 (Very effective)
7. Would you be interested in participating in a confidential interview with UVEI for us to learn more about the effectiveness and impact of our Teacher Intern Program? These interviews will be 30-45 minutes long and will be conducted either in-person or on Zoom depending on your availability. Participants who complete an interview with UVEI will receive a \$10 Amazon gift card.
  - a. Yes
  - b. No

Thank you for completing this survey and for offering your honest feedback about our programming. If you indicated that you are interested in participating in a confidential interview, a UVEI staff member will reach out to you in the coming weeks. Winners of the Amazon gift card raffle will also be notified soon.

## C. Interview Guide

### Opening:

*“Hi, thank you for electing to participate in this UVEI Teacher Intern Program evaluative interview. We’d like to remind you that anything and everything you say here will be entirely confidential and only the words you choose will be recorded on the transcript. This data will be kept confidential and only used by the UVEI team to evaluate the effectiveness of our Teacher Intern Program. Our goal today is to establish the ways in which UVEI was successful, or not, in preparing you for your role in the classroom; with a particular focus on why and how distinct parts of the program had the effects they did. This interview will be approximately 30 to 45 minutes, after which you will receive a \$10 Amazon gift card as compensation for your time and efforts.”*

1. Do you consent to participate in this interview? Your statements will be entirely confidential and only be used to evaluate UVEI’s Teacher Intern Program.
  - a. The consent/assent form will be implemented in this stage verbally and delivered through documentation.

### Transition:

*“Thank you for your consent to participate in this interview. Now, we would like to understand your experience in the UVEI training program and how it has impacted your confidence and abilities in the classroom today. We’re interested in getting a general sense of what aspects of the program were impactful for you and helped you feel prepared to enter a career as an educator”*

2. To start off, I’d love to hear more about your experience in UVEI’s Teacher Intern Program. What aspects of the program really stood out to you?
  - a. What did you like/dislike about specific components of the program?
  - b. Probe for specific aspects of the program such as the cohorts, classroom practicum, course materials, mentors, etc.
  - c. Probe for *why* these aspects of the program stand out to the participant.
  - d. If time allows, probe for narratives and specific stories.
3. Let’s try to get more specific, if possible. What aspects of the Teacher Intern Program do you think best prepared you and made you feel confident in your career as an educator?
  - a. Probe for specific barriers to confidence such as *positive* mentor relationships, practicum experience, class materials, or scheduling.
  - b. *Why* did these aspects of the program make you feel more confident?
4. On the flip side, what aspects of the Teacher Intern Program do you think made it more challenging for you to feel prepared and confident in your career as an educator?
  - a. Probe for specific barriers to confidence such as *negative* mentor relationships, practicum experience, class materials, or scheduling.



- b. *Why did these aspects of the program make you feel less confident?*

Transition:

*“Thank you so much for sharing your experiences and perspectives on the Teacher Intern Program. These answers help us to get a better picture of how the program is working and what aspects are most effective for graduates. For the next portion of the interview, we will focus on UVEI’s 10 Standards of Effective Teaching. Please take a moment to read through these 10 Standards and familiarize yourself with them. Please feel free to ask any questions you may have.”*

5. Now that you’ve spent some time reading through these 10 Standards, which of these do you say you feel most prepared and confident in?
  - a. Why do you feel particularly confident in this area?
  - b. What about UVEI’s Teacher Intern Program helped you feel confident in this area?
  - c. Do you feel that it is important to be capable and confident in this area of teaching? Why or why not?
  - d. Probe for specific aspects of the course that helped build confidence within the specific standard or domain of effective teaching.
6. Now that we’ve discussed which standards you feel most confident in, let's turn to some that you feel less confident about. If you had to select one or two standards that you feel the least confident in, which would you choose?
  - a. Why do you not feel as confident in this area?
  - b. Do you feel that it is important to be capable and confident in this area of teaching? Why or why not?
  - c. What could UVEI have done to make you feel more prepared and confident in this aspect of teaching?
7. If time allows, circle back to the other domains of effective teaching that the participant did not bring up earlier.
  - a. Probe for reasons why these aspects of teaching may or may not be important and why.
  - b. Probe for how their experiences at UVEI may or may not have helped them feel prepared in these areas of effective teaching.

Transition:

*“Thank you so much for your honest feedback so far. To conclude this interview, we would love your ideas on how UVEI can improve its Teacher Intern Program for future cohorts of students..”*

8. What aspects of the Teacher Intern Program were more impactful in your confidence as a teacher that should be continued in future years, and what areas need to be improved?
  - a. Probe for specific, concrete ways in which the program was impactful and helped build teacher confidence.
  - b. Probe for specific, concrete ways in which specific aspects of the course could be improved.
  - c. Touch on both facilitators and barriers to classroom confidence.

Closing Scripts:

*“We want to thank you greatly for your participation in our interview today. The UVEI Teacher Intern Program serves as an important aspect of shaping the curriculum of teacher training, and your feedback will be pivotal in ensuring that our program is meeting the needs of our students. We appreciate you taking the time to meet with us and offering your honest feedback: if you have any questions or closing statements, please feel free to share them with our team.”*

## D. Interview Codebook

The following deductive codes are just a few key themes we expect may emerge from our interview with TIP graduates. It is important to note that as these interviews progress, more inductive themes may emerge that will need to be added to this list.

- Independent Variable Codes:
  - Mentorship
    - Definition: The full-time, experienced teacher who works in the classroom and facilitates learning for the UVEI student.
    - Origin/Importance: Mentors are crucial due to their ability to provide guidance, practical insights, and a supporting framework, facilitating the development of effective teaching skills and fostering professional growth.
  - Classroom Practicum
    - Definition: The time spent in an actual classroom with children rather than in UVEI. This experiential component of the program takes up the majority of the UVEI students' time.
    - Origin/Importance: Classroom practicums are vital for aspiring educators, as it offers hands-on experience, allowing them to apply theoretical knowledge, refine teaching techniques, and develop the practical skills necessary for effective classroom instruction.
  - Course Materials
    - Definition: The lessons, worksheets, and activities administered during formal UVEI class sessions by UVEI instructors.
    - Origin/Importance: Prepared materials provide teachers with structure in their UVEI program to facilitate pedagogical training and skill development.
  - UVEI Instructor
    - Definition: The instructor working for UVEI who is in charge of facilitating lessons and answering questions from students.
    - Origin/Importance: Instructors provide years of expertise, focused guidance, and real-time feedback.
  - Cohorts
    - Definition: The groups of UVEI students working together in collaboration with mentors and instructors.
    - Origin/Importance: Cohorts cultivate a collaborative and supportive community, fostering peer interaction, diverse perspectives, and shared experiences, which not only enhances understanding and retention of course material but also promotes a sense of belonging and professional networking among individuals pursuing a common educational goal.
  - Course Schedule

- **Definition:** The online or in-person structure of the course, how often the course meets, and the overall timeline of the Teacher Intern Program.
  - **Origin/Importance:** The schedule provides the necessary structure to the program, ensuring that teacher interns maintain their training benchmarks.
- **Mediating Variable Codes:**
  - **Scheduling Issues**
    - **Definition:** UVEI Teacher Intern Program participants were not able to meet all training sessions due to scheduling issues.
    - **Origin/Importance:** A lack of consistency in attendance can lead to participants being left out of aspects of the program, and therefore can hurt their confidence in their learning.
  - **Lack of Mentor Guidance**
    - **Definition:** Teachers feeling lost or less prepared due to a lack of communication with their mentor. Their mentor did not make them feel supported and guided throughout their training.
    - **Origin/Importance:** Mentor relationships rely on interpersonal relationships in order to foster personal and professional development. If this connection is missing, much of the intention behind the mentor program can be lost.
  - **Rural vs Urban School Structures**
    - **Definition:** Depending on what type of school graduates go on to work in after they complete their UVEI training, they may feel like their training was beneficial or harmful. For example, a teacher who goes on to work in an urban school may feel that they did not receive the proper training and support if UVEI is tailoring their content to more rural schools.
    - **Origin/Importance:** The work environment that new teachers enter into has a great effect on their self-reported levels of job satisfaction; thus, rural versus urban contexts can greatly impact a teacher's degree of confidence.
  - **Cohort Bonding**
    - **Definition:** Establishing meaningful connections within the UVEI teacher intern cohort results in a sense of belonging and purpose to the job.
    - **Origin/Importance:** Having meaningful relationships could lead to a higher level of confidence for teachers, while a lack of connections could diminish confidence levels and a sense of purpose as a teacher.
  - **Technology Access**
    - **Definition:** UVEI participants did not have full access to technology or technological platforms that would have benefited their experience in the Teacher Intern Program.

- **Origin/Importance:** Education technology is a powerful tool in pedagogy, even when training teacher interns. However, lack of access to such advancements has the potential to hinder professional development.
- **Dependent Variable Codes:**
  - **Content Knowledge & Application**
    - **Definition:** The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to ensure mastery of the content (understanding the content of the discipline). The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem-solving related to authentic local and global issues (applying content knowledge).
    - **Origin/Importance:** This standard was created by UVEI as a measure of the teacher competency levels that participants must have. We think that it's important to use their own standards to assess teacher's confidence levels in their profession.
  - **Instructional Knowledge**
    - **Definition:** The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision-making. The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context. The teacher understands and uses a variety of instructional strategies to encourage learners to develop a deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways (engaging students in learning).
    - **Origin/Importance:** This standard was created by UVEI as a measure of the teacher competency levels that participants must have. We think that it's important to use their own standards to assess teacher's confidence levels in their profession.
  - **Learner & Learner Environments**
    - **Definition:** The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences. The teacher uses an understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high

standards. The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation (fostering safe & productive learning environments). This standard of competency is based on the National InTASC Standard for Learning Environments.

- **Origin/Importance:** This standard was created by UVEI as a measure of the teacher competency levels that participants must have. We think that it's important to use their own standards to assess teacher's confidence levels in their profession.
- **Professional Learning & Collaboration**
  - **Definition:** The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others, and adapts practice to meet the needs of each learner. The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning and collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.
  - **Origin/Importance:** This standard was created by UVEI as a measure of the teacher competency levels that participants must have. We think that it's important to use their own standards to assess teacher's confidence levels in their profession.
- **Student Importance**
  - **Definition:** Whether or not students feel that the specific component of effective teaching is actually important to their learning journeys. For example, students may not feel that professional development is important to their learning, even if their teachers do feel so.
  - **Origin/Importance:** Students' perceptions of teacher/pedagogical competence have a great impact on how readily they are willing to learn new material.
- **Teacher Confidence**
  - **Definition:** How the specific component of effective teaching impacted the interviewee's confidence as a teacher. Depending on their experiences and opinions, teachers may believe that a certain aspect within the 10 Standards made them feel more or less confident in their careers.
  - **Origin/Importance:** Teacher efficacy is proven to dramatically increase after the first 3 years of teaching. So, any effort that is made to shorten this lag, i.e. via increased new teacher confidence, has great returns.

## E. UVEI's 10 Standards of Effective Teaching



### The Learner and Learning Differences:

*Teaching Standard #1: Understanding how learners develop:* The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences. This standard of competency is based on the National InTASC Standard for Learner Development.

*Teaching Standard #2: Understanding & responding to learning differences:* The teacher uses understanding of individual differences and diverse cultures and communities to ensure

inclusive learning environments that enable each learner to meet high standards. This standard of competency is based on the National InTASC Standard for Learning Differences.

*Teaching Standard #3: Fostering safe & productive learning environments:* The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation. This standard of competency is based on the National InTASC Standard for Learning Environments.

### **Content Knowledge and Application:**

*Teaching Standard #4: Understanding the content of the discipline:* The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.

*Teaching Standard #5: Applying content knowledge:* The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem-solving related to authentic local and global issues.

### **Instructional Practice: Planning, Assessment, and Instruction:**

*Teaching Standard #6: Assessing student learning:* The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and guide the teacher's and learner's decision making.

*Teaching Standard #7: Planning for instruction:* The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

*Teaching Standard #8: Engaging students in learning:* The teacher understands and uses a variety of instructional strategies to encourage learners to develop a deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

### **Professional Learning and Collaboration:**

*Teaching Standard #9: Engaging in professional learning:* The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

*Teaching Standard #10: Collaborating with colleagues:* The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession