# The National Center for the Improvement of Educational Assessment

**2025 Summer Internship Program in Educational Assessment and Accountability**

The National Center for the Improvement of Educational Assessment, Inc. (the Center) is a small non-profit organization occupying a unique and influential niche at the intersection of educational measurement and assessment policy. The Center is pleased to offer **up to six (6) summer internships** for advanced doctoral students in educational measurement and/or assessment/accountability policy who want the opportunity to work with the Center’s professionals on projects with direct implications for state and national educational policy.

## The Center for Assessment

The Center was formed in 1998 as a not-for-profit corporation that aims to increase student learning through improved assessment and accountability practices. The Center is located in Dover, NH (10 miles from the seacoast town of Portsmouth, NH, and about an hour north of Boston, MA). The Center’s fourteen professional staff members have advanced degrees in psychometrics, curriculum, or statistics. Most have worked at high levels in state education departments (e.g., assessment directors) or testing companies. The combination of technical expertise and practical experience allows Center professionals to contribute effectively to cutting-edge educational measurement and policy applications.

The Center works directly with states (currently more than 40 states or entities) and with several national research and advocacy organizations such as the Council of Chief State School Officers (CCSSO), Aspen Institute, and KnowledgeWorks. Some sample current projects of the Center include:

* Serving as technical leaders in the design and implementation of Innovative Assessment Demonstration Authority (IADA) projects with states pursuing this flexibility under the federal Every Student Succeeds Act (ESSA),
* Helping states evaluate the impact of the pandemic on student learning and the implications for ongoing support
* Working with states to develop student longitudinal growth systems for school accountability and evaluating the factors affecting the validity and reliability of such systems,
* Designing innovative, interactive assessment and accountability reporting systems designed to yield meaningful interpretations of student and school scores,
* Serving as conceptual leaders as well as assisting states in developing balanced systems of assessment that serve summative and formative purposes. For example, several Center professionals are authors of several chapters in the 2024 National Academy of Education volume, *Reimagining Balanced Assessment Systems*.

## The Summer Internship Program

Each intern will work on **one major project** throughout the summer (to be negotiated between the intern and the Center mentor) and may participate with Center staff on other projects. Most interns will have opportunities to attend meetings and interact with state assessment personnel. Interns will be expected to **produce a written report and a proposal for a research conference (e.g., NCME, AERA, NCSA)** as evidence of the successful completion of their project. One of the Center’s senior staff will serve as the intern’s primary mentor, but the interns will interact regularly with many other Center staff members. **Potential** intern projects for 2025 may include the following.[[1]](#footnote-1)

1. **Claims and Evidence for Instructional Usefulness**

Many assessment companies claim their products will improve learning by giving teachers actionable insights to support instruction. Promises are a type of claim. Claims are statements about what a product, person, or process will do under certain conditions (if specified). Claims are not statements of fact. They are hypotheses that must be evaluated with evidence. Unfortunately, we see very little evidence to support claims of instructional usefulness, as Carla Evans and Scott Marion noted in their recent book, [*Understanding Instructionally Useful Assessment*](https://www.routledge.com/Understanding-Instructionally-Useful-Assessment/Evans-Marion/p/book/9781032485485?srsltid=AfmBOopog9iYYYDPmTwOO_PRDYqpCX8MJoLOJrG3hY30PTxBWD5EYioV). This internship will work with an assessment company willing to support an investigation into the instructional usefulness of their products and services. The intern will help conceptualize methods for evaluating instructional usefulness starting from this recent [post](https://www.nciea.org/blog/evidence-of-instructional-usefuless/) by Scott Marion and then conduct a small-scale study to evaluate the degree to which this assessment company’s products can support these ambitious claims.

1. **Data Science in Education: Agile Development to Support State Assessment Analyses**

State assessment programs are often — and ideally — routine. However, comprehensive quantitative analyses that address policy-relevant questions about student performance based on these assessment programs are not routine. Such analyses are often developed on an ad hoc basis, usually by state personnel working under time and resource constraints and are rarely designed for replication. Numerous policy-relevant questions, however, could benefit from regular and systematic quantitative analyses.

Multiple interns will work together to create a suite of R functions organized within an R package to analyze state assessment and related data in ways that address critical policy questions. These functions will produce static, high-quality reports through a development stack that includes R, GitHub, Quarto, and Observable. To do so, interns will (1) first collaborate with Center researchers and state partners to define specific research questions, (2) iterate on analysis and supporting visualizations to address these questions and (3) share the results with state partners to explore whether and how these results are useful. In addition to the development of an R-Package, the work will result in intern produced Web-based (GitHub) documentation of each analysis, interim, Web-based (GitHub) project update presentations to Center staff, a conference proposal to showcase the work (e.g., NCME demonstration session) and, time permitting, supporting papers that detail the value of and approach to translating high-level analysis recommendations into concrete analysis questions with supporting code. The ultimate goal is to ensure that every state analyst who uses R can also produce high-quality reports on their state assessment program.

The project is structured around agile development sprints for efficient prototyping and refinement, with opportunities to present to state agencies and incorporate real-world feedback. Each intern’s project will be structured around a specific sub-project, which includes the analysis and reporting on, for example, (a) multiyear trends, (b) equities and disparities related to social justice, (c) participation and chronic absenteeism, (c) early warning indicators, and (d) comparisons of matched schools and districts. Interns are welcome to propose their projects if they can be implemented within the two-month internship.

Interns are expected to work individually on their subprojects while collaborating on common issues (e.g., software installation and use, data formats and analyses). Ideal candidates will have advanced expertise in R, with additional experience in Quarto, GitHub, and Observable highly preferred. Strong skills in data science, educational measurement, or related fields, along with the ability to collaborate in a fast-paced environment, are essential.

1. **Leveraging SEA Data around Student Performance: A Toolkit for State Leaders**

State education agencies are sitting on a rich quantitative and qualitative data repository across their various internal divisions or teams. Center colleagues have laid out a conceptual framework that describes how to leverage these multiple sources of information in systematic ways for common purposes that include (1) public reporting of assessment and accountability results, (2) school improvement conversations with district leaders, and (3) internal strategic planning for support initiatives. The framework emphasizes using state and local data, cross-divisional data and expertise, and integrating quantitative, qualitative, and multimedia information.

The goal of this internship is to transform the framework paper into a practical toolkit that can be used by state agency leadership to systematically plan and implement data interrogation work to support these three purposes. That is, this project focuses on developing guides, checklists, planning templates, and brief multimedia resources tailored to state agency workflows rather than extensive computational analyses or programming covered in a complementary internship project.

To do this work, the intern will conduct a brief landscape analysis of publicly available frameworks and tools for data interrogation work from other organizations, reviewing relevant documentation from state education agencies (e.g., public press releases around assessment and accountability results, internal presentations/memos from select partner states), co-designing the structure of the toolkit as well as individual component tools, and developing core digital components of a professional development package. It will be possible to talk to representatives from different offices in partner states about their current and envisioned internal best practices for data interrogation work.

The eventual goal is to publish this toolkit in the Center library as an open-source strategic toolkit that will be refined over time as state agencies try it out and provide feedback. If needed, collaboration with the complementary internship project on data science in education will be possible. A coordinated session proposal for NCSA 2026 with partners is envisioned. Skills and experience with systematic reviews or efficient landscape analyses with the support of modern resource management tools (e.g., Zotero) and AI-based knowledge work tools (e.g., Notebook LM, ChatGPT) are essential while developing training materials/resources are helpful. Strong reading, writing, and speaking skills are essential.

1. **Math Badging in High School**

As more states take action to support districts in competency-based determinations of student learning, the [XQ Math Badging Initiative](https://xqsuperschool.org/resource/xq-math-badging-initiative/) has been supporting KY, ID, and IL as well as the Bureau of Indian Education to work with high school educators on a "micro-credentialing" or "badging" project. State leads coordinate the work at the district or school level and provide considerable support in providing professional learning opportunities about the competency framework, implications for instruction, collecting portfolios of evidence, and preparing students for the performance assessments.

This internship aims to support the formative evaluation of the 2024-25 program implementation across districts based on qualitative analyses of teacher and, possibly, student focus group data and mixed-methods information from surveys and internal reports. The intern would develop the qualitative data analysis plan and lead the methodological steps of this work. The intern could also share the resulting insights with the cross-state steering committee and submit a proposal to CCSSO, NCSA, or AERA (classroom assessment SIG). This work would also feed into an annual report about program implementation and evaluation planning for the upcoming school year. Multiple opportunities to expand this work in the case of early completion of the core work are possible.

1. **Analyzing the Landscape of Generative AI Applications in Classroom Assessment**

Every month, there seem to be new edtech companies and apps that promise to help teachers more quickly and efficiently interpret student work, provide feedback to students, and suggest next instructional actions for individual students, small groups, or the whole class. The rise of large language models and generative AI are the linchpin of these innovations. However, the range of generative AI applications within classroom assessment purposes/uses across grade levels and content areas is unclear. For example, while machine or automated scoring of essays is a common application in large-scale assessment, what are the affordances and constraints of automated essay scoring and feedback models in classroom assessment applications? What generative AI models have been developed to analyze student work in mathematics or science where students are typically not writing essays but may show their thinking, create a product, complete a presentation, or construct a mathematical or scientific model? What is the conceptual foundation, learning progressions, and/or theories of learning reified by these innovations—and what are the implications on teaching and learning? The intern working on this project will conduct a landscape analysis of generative AI applications for classroom assessment purposes/uses across content areas and grade levels. The intern will then use that landscape analysis to describe potential areas of significant positive and negative consequences for teachers and students using generative AI in the classroom and if that varies by content area and/or grade level.

1. **Examining Patterns of Curriculum-Embedded Assessment Use**

High-quality curriculum and instruction are central to ensuring that all students have access to grade-level, standards-aligned teaching and learning experiences. It is a fundamental equity issue that all students have opportunities to learn what they are supposed to know and be able to do by the end of each school year. These high-quality instructional materials often include different types of assessment. For example, questions are given to students after a lesson for practice or to gauge understanding, mid-unit quizzes, end-of-unit tests, and even periodic assessments that may elicit student understanding or application across multiple units. Not much is known about curriculum-embedded assessment use because districts don’t typically track classroom assessment use. The intern working on this project will work with data from a large school district where classroom assessments embedded within the curriculum are administered online but are not required. This district wants to understand and examine patterns of assessment use by assessment type, grade level, and content area. The information from this analysis will then inform subsequent follow-up focus groups or interviews with educators to contextualize and deepen the quantitative results.

## Application Information

#### General Qualifications

The intern must have completed at least two years of doctoral coursework in educational measurement, curriculum studies, statistics, research methods, or a related field. Interns with documented previous research experience are preferred. Further, interns must document their ability to work independently to complete a long-term project. We have found that successful interns possess **most** of the following skills and knowledge (the importance of the level of skills and knowledge in each of the areas described below is **dependent** on the specific project):

* Ability to work on a team under a rapid development model
* A deep understanding of educational assessment and its uses, including policy and practice
* Content knowledge in a relevant discipline (e.g., science, mathematics, language arts)
* Depending on the project, working knowledge of statistical analysis through multivariate analyses as well as fluency with one or more statistical packages, e.g., SAS, SPSS, R
* A solid understanding of research design
* Psychometrics (both classical and IRT) with a demonstrated understanding of the principles of reliability and validity
* An interest in applying technical skills and understanding major policy and practical issues
* Excellent written and competent spoken English skills

#### Logistics

The internship is for **8 weeks** at the **Center’s Dover, New Hampshire office.** The internship will start in early June 2025; the intern and the mentor will determine the specific date.

#### Support

The Center will provide a stipend of **$8000**, a **$2000** housing allowance, reasonable relocation expenses, and a **$1000** travel stipend to support attendance at a conference in 2026 to present the results of the intern’s project (contingent upon acceptance of a conference proposal).

#### Application

To apply for the internship program, candidates should submit the following materials **electronically**:

* A letter of interest explaining why you would be a good fit with the Center, what you hope to gain from the experience. The letter must also identify your **preferred** **project(s)** and explain what you could contribute to the project and why it fits your interests.
* Curriculum vita, and
* Two letters of recommendation (one must be from your academic advisor).

From among the applicants, approximately six to eight are identified for a telephone interview. Those interviewed by phone may be asked to submit one recent academic paper. Please do not submit the paper until it is requested.

**Materials must be submitted electronically (including letters of recommendation) to:**

**Sandi Chaplin at** [schaplin@nciea.org](mailto:schaplin@nciea.org) **and received by February 7, 2025.**

Applicants selected for interviews will be notified by March 10, 2025, regarding their candidacy.

To learn more about the Center, please visit [www.nciea.org](http://www.nciea.org).

1. *More details about the Center for Assessment can be found at* [*www.nciea.org*](http://www.nciea.org)*. Please also navigate to the* [*Internship page*](https://www.nciea.org/about-us/internships/) *for additional details about potential projects.* [↑](#footnote-ref-1)