



THE NATIONAL CENTER FOR THE IMPROVEMENT OF EDUCATIONAL ASSESSMENT

2022 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 that occupies a unique and influential niche at the intersection of educational measurement and educational assessment policy. The Center is pleased to offer **up to four (4) 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 with a mission 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 and most have worked at high levels in state departments of education (e.g., assessment directors) or in testing companies. The combination of technical expertise and practical experience allows Center professionals to contribute effectively to cutting edge applications in educational measurement and policy.

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 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,
- ✓ Assisting states in developing comprehensive and coherent systems of assessment that serve summative and formative purposes. For example, the Center has been a national leader in designing systems to support competency-based and personalized learning models.



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 ongoing projects. The intern will have the opportunity 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)**, as evidence of 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 of the Center's staff. **Potential** intern projects for 2022 may include the following¹:

- 1. Developing criteria for evaluating the quality of state and district assessment literacy initiatives.** Many states, organizations, and educational institutions are creating online assessment literacy professional learning resources for K-12 teachers. The proliferation of these professional learning resources is aimed to support ambitious teaching practices and student learning. It is unclear, however, if the content of the trainings and implementation processes employed by schools, districts, or states meet quality standards. The purpose of this internship is to produce a tool for states or districts to use to evaluate the quality of assessment literacy professional learning content and implementation plans before they launch assessment literacy efforts.
- 2. Is there evidence of performance mobility in educational accountability systems?** While there is widespread research on economic mobility, which refers to the ability of groups to improve their relative standing on economic measures such as income, less is known about mobility with respect to educational outcomes. At the school and student group level, these educational outcomes are ostensibly measured by contemporary accountability systems. The objective of this project is to explore the extent to which schools and groups receiving lower accountability scores attain higher levels of performance over time. Additionally, how does mobility differ by indicators (e.g., proficiency, academic growth, graduation rate) and under what conditions is mobility observed to greater or lesser degrees? The study will involve analyses of longitudinal accountability data to address these and related inquiries to inform the development of recommendations for accountability design and school support.
- 3. What do we know about the academic impact of the pandemic on students with disabilities?** Many researchers have examined the academic impact of the pandemic for students who take the general assessment but less is known about the impact for students with significant cognitive disabilities (SCD) who take an alternate assessment. This purpose of this project is to explore patterns of participation and performance on state alternate assessments in 2021 compared to 2019 to elicit insights about the academic impact of the pandemic. To the extent practicable, findings may help address the magnitude of the impact overall for SCD compared to students in the general population and the extent to which the impact varied for

¹ More details about the Center for Assessment can be found at www.nciea.org. Please also navigate to the Internship page for additional details about potential projects.

different contexts or conditions. Ultimately, the goal is to leverage insights from this study to guide future support initiatives.

4. **Is learning accelerating? Can we tell?** One of the biggest challenges coming out of the pandemic (hopefully) is to accelerate student learning at unprecedented rates. While the instructional and capacity challenges associated with this goal are significant, we, as measurement experts, need to be able to document the extent to which such acceleration efforts are occurring and where, using state and local assessment results. Therefore, this project involves conceptualizing how school districts and states should carry out these analyses with special attention to issues of causal attribution and measurement sensitivity/uncertainty. The project will have to account differential test participation rates in the 2020-2021 testing year. The second part of the work involves testing the framework empirically with state and/or district data.

5. **Evaluating the reliability and validity of school accountability performance scores**
School performance scores for accountability can be produced a variety of ways, but almost always are group level aggregates or composite scores of several other school- or subgroup-level scores. These scores can be viewed as having technical properties similar to interpretations of student scores, including validity, reliability/precision, and fairness. Because of the complexity, most users of school performance scores have not calculated or published statistical analyses of the reliability/precision or validity of school accountability scores. One productive framework for understanding and calculating the reliability of school performance scores is G-theory, where aspects of both reliability and validity might be addressed as generalizability (e.g., Cronbach et al., 1997²; Brennan and colleagues, e.g., 2002³).

This project involves analyzing the reliability/generalizability of states' school accountability performance scores, and evaluating through simulation studies the impact on reliability/generalizability of specific elements in school accountability systems, such as type of scores (e.g., growth scores), types of scoring (e.g., locally scored performance assessments), type of metric (e.g., non-interval ratings, including pass/fail), and the use of compensatory/conjunctive rules (e.g., must have a minimum number of students to be included). The successful intern will have the opportunity through this project to contribute to both substantive educational policy, measurement methodology, and practical tools that can support better school accountability systems nationwide.

² Cronbach, Lee & Linn, Robert & Brennan, Robert & Haertel, Edward. (1997). Generalizability Analysis for Performance Assessments of Student Achievement or School Effectiveness. *Educational and Psychological Measurement*, 57. 373-399. 10.1177/0013164497057003001.

³ Lee, Won-Chan & Hanson, Bradley & Brennan, Robert. (2002). Estimating Consistency and Accuracy Indices for Multiple Classifications. *Applied Psychological Measurement*. 26. 412-432. 10.1177/014662102237797.



Application Information

General Qualifications

The intern must have completed at least two years of doctoral course work 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 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 duration is **8 weeks** and will be conducted remotely this year unless current health conditions change considerably prior to June. The internship will start in early June 2021; the specific date will be determined by the intern and the mentor.

Support

The Center will provide a stipend of **\$8000** as well as a **\$2000** housing allowance and reasonable relocation expenses (assuming the internship is in person).

Application

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

- ✓ A letter of interest explaining why the candidate would be a good fit with the Center, what the candidate hopes to gain from the experience, and which project(s) the candidate's preferred project. Further, the letter should explain both what the candidate could contribute to the preferred project(s) and why the project(s) fits with the candidate's interests.
- ✓ Curriculum vita, and
- ✓ Two letters of recommendations (one must be from the candidate's academic advisor).

From among the applicants (typically approximately 20-30) 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 recommendations) to:
Sandi Chaplin at schaplin@nceia.org and received by February 7, 2022.**

Applicants selected for interviews will be notified by February 28, 2022 regarding their candidacy. To learn more about the Center, please visit www.nceia.org.

The National Center for the Improvement of Educational Assessment, Inc.
31 Mount Vernon Street • Dover, New Hampshire 03820
(603) 516-7900 • www.nceia.org