



THE NATIONAL CENTER FOR THE IMPROVEMENT OF EDUCATIONAL ASSESSMENT

2017 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 psychometrics and educational assessment policy. The Center is pleased to offer **summer internships** for **up to four** 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 twelve professional staff members have earned doctorates 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 (current contracts include more than 30 states or entities) and has working relationships with several national research and advocacy organizations such as the National Center for Educational Outcomes (NCEO), Achieve, and the Council of Chief State School Officers (CCSSO). Some sample current projects of the Center include:

- ✓ Serving as technical leaders in the design and implementation of "reciprocal accountability systems" that rely on close partnerships of districts and states and focuses on using high-quality local assessment information to support accountability determinations
- ✓ Helping states devise student longitudinal growth systems for school accountability, and analyze 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
- ✓ Working with four multi-state assessment consortia on a variety of issues ranging from assessment design and development to structuring systems for assisting the consortia in receiving relevant and timely technical advice
- ✓ Helping states design new educator evaluation systems while trying to find the best balance between validity and stringent policy constraints



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 will participate with Center staff on multiple ongoing projects. The intern will have the opportunity to attend meetings and interact with numerous state assessment personnel. Interns will be expected to **produce a written report, suitable for conference presentation and/or publication**, 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 all of the Center's staff. **Potential** intern projects for 2017 may include the following¹:

Measuring Academic Growth with Alternate Assessments

Many states may be interested in producing measures of academic growth for students participating in an Alternate Assessment based on Alternate Achievement Standards (AA-AAS). Interest may be magnified given the emphasis placed on growth in state accountability systems in the Every Student Succeeds Act (ESSA). ESSA and supporting regulations require states to select an academic progress measure that is "valid, reliable, and comparable" and specifies that the indicator must include students who take an AA-AAS. Accordingly, the purpose of this project is to develop guidance and potentially identify promising practices for producing estimates of academic growth for students taking an AA-AAS. We anticipate that this project may involve one or more of the following:

- Conducting a literature review and critically analyzing approaches for computing individual measures of academic growth for students who take an AA-AAS
- Identifying factors that have traditionally limited the calculation, reporting and use of growth measures for students with significant cognitive disabilities
- Exploring evidence to inform decisions about expected growth rates for students with significant cognitive disabilities
- Developing recommendations and implications for practice, including considerations for incorporating academic growth in school accountability systems.

Performance Expectations for School Accountability Systems

Proponents of 'letter grade' school accountability systems (i.e. a system in which school receive a rating of A, B, C, D, or F) often advocate that the meaning of letter grades are clear to stakeholders, such as teachers and parents. But is this true? What makes a school an 'A' school an 'A' school? What makes a school an 'F'? If the definitions are not clear, meaningful, or defensible, what alternatives should be considered to address this?

Most states are currently working to develop or revise school accountability systems that are compliant with requirements of the Every Student Succeeds Act (ESSA). These systems, which incorporate multiple indicators for schools and groups, can be complex to design and implement. Given the central importance of the culminating accountability rating, many would argue that it is important to provide convincing evidence that the rating is has a high degree of validity for the intended interpretation and

¹ Additional potential projects may be added to the posted version of this announcement (www.nciea.org). Please check for updates before submitting your application.

uses. Therefore, the purpose of this project is to identify and/or develop recommended principles or practices to guide establishment of performance standards for school accountability systems. We anticipate that this project may involve one or more of the following:

- Conducting a literature review to understand the range of approaches states use to establish performance expectations for school accountability systems
- Developing guiding principles to inform the process of establishing standards
- Illustrating one or more promising approaches for establishing standards
- Describing the evidence that should be evaluated to determine if the standards are valid for the intended interpretations and uses

Addressing Challenges to Performance Assessments

Performance assessments are widely admired for potentially providing more valid information regarding what students can do on valued constructs, as well as evidence of student thinking. However, they have a very restricted role in American large-scale assessment, especially with the expansion of computer-based assessments. Some challenges leveled at performance assessments include assertions that they are unreliable (e.g., because of high person-task interactions), invalid (e.g., because of construct under-representation due to thin sampling, and impractical (e.g., because they provide much less assessment information per unit of administration time,; they are very difficult to equate).

This project will involve careful analysis of the root causes for the challenges, and synthesizing the best past and current work on performance assessments. A key aspect will be to work on developing new validation arguments in the context of innovative science and competency-based assessments. Prerequisites for working on this project include prior experience working on a large-scale performance assessment program, content knowledge in a domain with performance assessments in the U.S., commitment to improving performance assessments, facility with constructing Kane-based validation arguments, and excellent written and spoken English.

Recommendations for Expanded and Enhanced Reports Informed by Interim Assessments

Score reports are essential for both validity and usefulness. How can score reports for summative assessments be made more informative? There are many more reports available for the most widely used commercial interim assessments than most states provide for the states' summative assessments. This project will analyze interim assessments' reports to address these questions: 1) What information is found in interim assessment reports but not in summative assessment reports, and vice versa? 2) What is the basis for the non-over-lapping report information (e.g., intended interpretation and action; context, including time frame and knowledge about intended curriculum and instruction; etc.)? 3) What implications are there for summative assessment report design, and for comprehensive assessment systems? Prerequisites for working on this project include deep assessment literacy in understanding typical assessment reports, knowledge of technical constraints on what should be reported and why (e.g., subscores), and excellent facility in communicating in English.



Designing Powerful Reports to Inform Equity Actions

Equity has been a major focus of U.S. assessment and accountability systems for decades. Yet there are few reports used widely that inform understanding and action regarding equity. This project will involve:

- Literature review of conceptions of equity (e.g., different definitions of “achievement gap”) and promising actions for education,
- Literature review of powerful reports that might inform equity-centered policies, especially graphical representations combining assessment and other information, and
- Design of some reports that may be used by states in their assessment and accountability systems to monitor equity outcomes within real-world practical constraints (e.g., many schools with very small subgroups).

The graphical representations will be tested using actual state data. Prerequisites for working on this project include academic experience in research literature regarding equity in the U.S., program evaluation in equity, facility in analyzing large datasets, and demonstrated ability to design elegant graphical displays of relationships between variables.

The Changing Landscape of High School Assessment

In part due to new flexibility offered under the Every Student Succeeds Act, states have moved rapidly to replace their state or consortium assessments in high schools with the ACT or SAT. There are many technical (e.g., alignment, scaling) and policy issues (e.g., procurement decisions, “diamonds in the rough”) associated with these decisions, but we have become interested in the utility and consequential functions of these college readiness tests. If these college readiness assessments are not well aligned to the state standards, how do teachers adapt their curriculum to meet two sets of learning targets (or do they)? In some states and many districts, educational leaders are administering additional “college readiness” assessments (e.g., PSAT, ACT Aspire) purported to predict scores on the ACT or SAT as an indicator of being “on track” to college readiness. Anecdotally, district leaders report that the use of these assessments administered as early as 8th or 9th grade has helped educators target students for interventions to ensure that the students can be successful on the ACT or SAT administered in 11th grade. This internship project likely will involve:

1. Interviewing local educators and leaders to gain a better understanding of how they are using data from these assessments to make curricular, instructional, and intervention decisions,
2. Conducting quantitative analyses to better understand the score trends over time both in districts that use the additional assessments and those that do not
3. Analyzing what is learned from 1 and 2 above in comparison to the stated policy goals for using such assessments in the first place.

The intern will be expected to produce a short policy brief on the implications from the study by the end of the internship as well as a more technical proposal for a conference such as AERA, NCME, or CCSSO’s National Conference on Student Assessment.

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 described below is of course **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
- ✓ 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 is **located at our offices in Dover, NH for the full 8 weeks**, generally starting in the first week of June.

Support

The Center will provide a stipend of **\$6000** as well as a housing allowance and reasonable relocation expenses.

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 would prefer
- ✓ Curriculum vita,
- ✓ The proposed dates (contiguous 8 weeks) for the internship, and
- ✓ Two letters of recommendations (one must be from the candidate's academic advisor).

Of approximately 20-30 applicants, six to eight are identified for a telephone interview. Those interviewees may be asked to submit one recent sole (preferred) or first-authored 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 support@nceia.org and received by February 17, 2017.**

Applicants selected for interviews will be notified by March 6, 2017 regarding their candidacy.

To learn more about the Center, please visit www.nceia.org.