

Research Associate (Mathematics), Assessment Unit, ASER

A. About Pratham:

Pratham was founded in 1995, to provide preschool education to children in the slums of Mumbai. Over the last 30 years, Pratham has grown to be one of India's largest NGOs working to provide quality education to underprivileged youth and children in over 25 states and union territories across the country, with a range of interventions.

Pratham is a widely recognized organization, having received notable awards such as the Lui Che Woo Prize, the WISE Prize for Innovation, Skoll Award for Social Entrepreneurship, the Henry R Kravis Prize in Leadership and the CNN-IBN Indian of the Year for Public Service. For more details, refer to www.pratham.org.

B. About Program:

Established in 2008, ASER is the measurement, assessment, and research arm of Pratham Education Foundation. ASER generates evidence for action and focuses on outcomes and processes in education and other social sectors. It builds the capacity of individuals and institutions to measure at scale, understand, communicate and act upon the findings of assessments and research, with the objective of improving the quality of social sector programs. It aims to create a culture where rigorous measurement of outcomes is integral to action, thus bridging the gap between theory and practice, assumption and reality.

The Assessment Unit at ASER specializes in designing innovative assessment tools for various educational programs, both nationally and internationally. Our expertise spans Early Childhood Education (ECE), Primary, and Upper-Primary groups, as well as EdTech initiatives. We develop assessments to measure student learning outcomes, teacher effectiveness, and impact of educational interventions with a focus on continuous improvement. Our recent endeavors include creating tools to evaluate the impact of technology-driven learning interventions and designing adaptive assessments on Android applications.

C. Position Summary:

The Research Associate will be responsible for all aspects related to designing educational assessments and frameworks pertaining to Mathematics oriented projects of the Assessment Unit. The role may additionally involve project management duties which include setting and delivering on project timelines and milestones, and coordinating closely with various units at ASER and Pratham and/or external clients/donors.

D. Key Responsibilities:

1. Design and development of mathematics assessments

- Develop the Mathematics assessment frameworks, theory of change, and technical report through extensive literature review and field pilots
- Develop simple, standardized, and discriminating items/assessment tools to measure children's knowledge and skills across multiple programs and languages, through extensive literature review, and field pilots.
- Translate and validate items and content to enhance the quality of the assessment tool

2. Development of training material and plan

- Create print and audio-visual material for training of trainers and volunteers
 - Create detailed training plans for different levels of training
 - Review and finalize the regional translations of training material
- 3. Planning and implementing at scale**
- Support in identifying resource requirements for projects and allocate them adequately
 - Create a plan, timeline, and budget for assessment roll-out from literature review to implementation
 - Troubleshoot problems during assessment roll-out with support from the Senior Researchers and Teammates.
- 4. Data interpretation and report writing**
- Explore different interpretations and visualizations of collected data
 - Write and edit reports and visualize report design
- 5. Miscellaneous**
- Create content such as proposals, articles, research papers and evidence briefs as required
 - Participate in any other research, assessment, survey project of ASER on need basis

E. Required Qualifications and Skills:

1. Education

Minimum graduates in relevant fields like Mathematics, science, psychology, measurement or a related field (with one of the core subjects as Mathematics, Statistics, Applied Mathematics etc). Post-graduation in the relevant field and B.Ed./M.Ed. will be an added advantage.

2. Work experience

- Minimum 1 year of work experience in assessment development, implementation, or analysis (if no full-time work experience, then internships can be considered)
- Familiarity with Mathematics assessment frameworks, test development, educational measurement theories and psychometric

3. Communication

- Reading, speaking and writing proficiency in English and Hindi is essential; proficiency in any other regional language is an added advantage
- Strong written and oral communication skills to correspond with a diverse audience – rural, urban, faculty, students, government officials, partner organizations, donors, etc.
- Experience with research writing and editing is an added advantage

4. Technical

- Advanced proficiency in MS Office – Word, PowerPoint, Excel
- Knowledge of any data analysis software such as Stata, R, Python is an advantage

5. Organizational

- Able to work under minimum supervision
- Able to manage multiple projects simultaneously with great attention to detail
- Able to handle work pressure and deliver under tight schedules
- Take initiative and think innovatively
- Open to rural travel for long and short durations, often at short notice and sometimes alone

6. Location: New Delhi

7. Travel: Frequent travel to rural locations across the country

8. Duration: Minimum 2 years' commitment

9. Remuneration: CTC 6 - 6.6 lac per annum, negotiable as per experience

10. Reporting: The selected candidate will report to the Unit Head, Assessment Unit

F. Application Procedure

To apply, fill the Google form using this link: <https://forms.gle/Hx5BixnZdfNKtT8w9> and upload the following documents:

- Latest CV (File name: Full name_CV_RA_Mathematics)
- Statement of Purpose (SOP) describing your motivation to apply and how you make a good fit for this role in up to 700 words. Please give specific examples that align with the job requirements and future goals (File name: Full Name_SOP_RA_Mathematics)

Incomplete applications will not be considered. Shortlisted candidates will be contacted for three subsequent rounds: telephonic/online interview, written assignments, and final interview.

Application Deadline: Open until filled.

Note: Due to the high volume of applications we receive, we may not be able to provide individual responses to every applicant. We will reach out only to shortlisted candidates. We appreciate your understanding and patience.