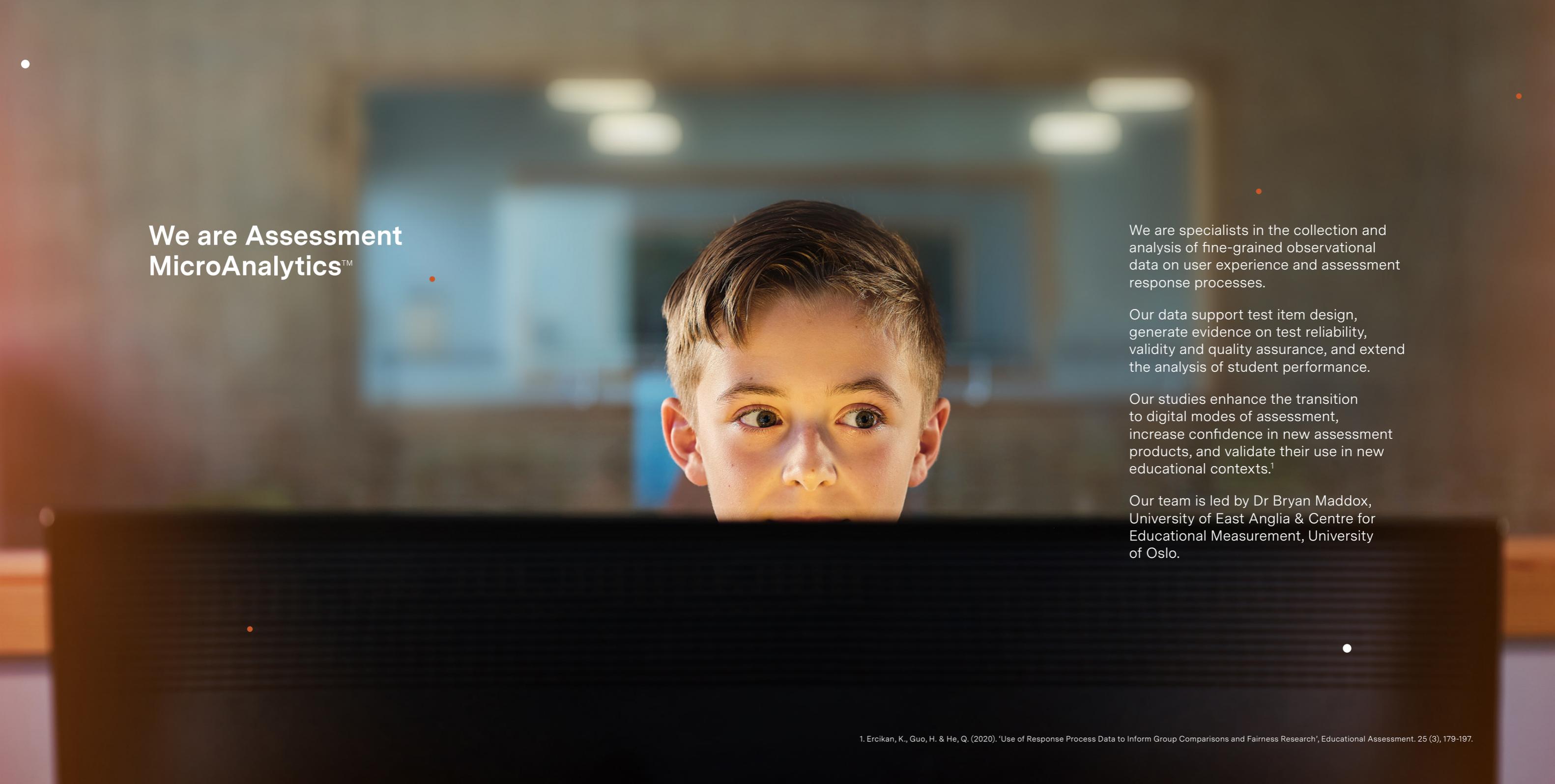




Assessment  
MicroAnalytics™

Improving the performance  
and reliability of educational  
assessments



A young boy with short brown hair and blue eyes is looking intently at a computer screen. The background is a blurred classroom with blue walls and ceiling lights. The text is overlaid on the image.

## We are Assessment MicroAnalytics™

We are specialists in the collection and analysis of fine-grained observational data on user experience and assessment response processes.

Our data support test item design, generate evidence on test reliability, validity and quality assurance, and extend the analysis of student performance.

Our studies enhance the transition to digital modes of assessment, increase confidence in new assessment products, and validate their use in new educational contexts.<sup>1</sup>

Our team is led by Dr Bryan Maddox, University of East Anglia & Centre for Educational Measurement, University of Oslo.

## We are experts

- We employ world-class expertise and equipment to produce rapid and reliable data on assessment performance in real-world settings.

We capture the cognitive and emotional dimensions of test performance with techniques including eye tracking, and the analysis of gesture, talk and facial expressions in real life assessment contexts such as schools, households, and examination centres.<sup>2</sup>

We have internationally established expertise in the analysis of assessment response processes, user experience, and areas such as inclusive assessment and disability.





Our experienced team deliver high quality process data, at the item and test level.

## We are experienced

We work with the world's leading testing companies, exam boards, and national Ministries of Education on international large-scale assessments, national examinations, and classroom instructional environments.<sup>3</sup>

We are experienced in the analysis of on-screen assessment performance in dynamic, technology-enhanced items, gamified assessments, and innovative domains.

Our experienced team deliver high quality process data, rapidly, and at the item level. We provide accessible data visualisations, animations, and statistical reports.

Our data informs studies of test performance, validity, data mining and artificial intelligence.

3. Maddox, B. (2018). 'Interviewer-Respondent Interaction and Rapport in PIAAC: The OECD Survey of Adult Skills', Quality Assurance in Education. 26 (2), 182-195.

## We are mobile

With our state-of-the-art mobile eye tracking laboratory, we can work in classrooms and testing centres anywhere in the world to collect observational data on educational assessment as it takes place in real-life contexts. We have an international focus and expertise in studying assessment in cultural and linguistically diverse settings. This includes experience in the UK, France, Luxembourg, Slovenia, Senegal, the USA and Mongolia.<sup>4</sup>



Our mobile eye tracking laboratory is equipped with a suite of the latest Tobii screen mounted eye trackers and high definition webcams to capture fine-grained, empirical data on student performance.

4. Maddox, B., Zumbo, B.D., Tay-Lim, B. S-H., & Qu, D. (2015). 'An Anthropologist among the Psychometricians: Assessment Events, Ethnography and DIF in the Mongolian Gobi'. *International Journal of Testing*. 14 (2), 291-309.



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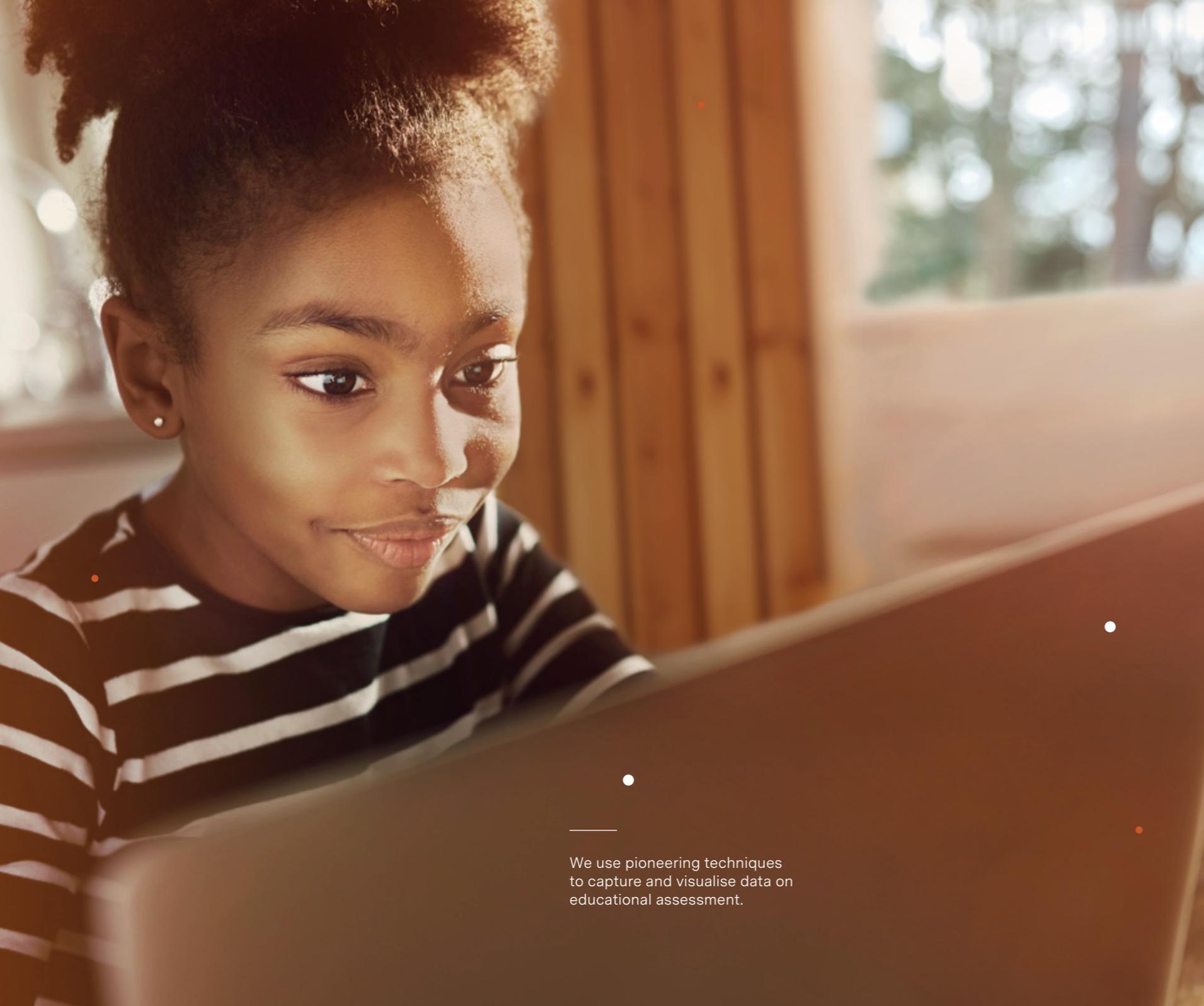
Small details such as eye movements, gesture, and facial expressions are used to help the analysis of assessment response processes and user experience.

## How we work

We can work independently or support existing assessment teams to collect and analyse data.

We are skilled in conducting studies with hard to reach populations, culturally and religiously diverse groups, and disabled students.

We produce data to support test design in pilot studies, and for quality assurance and validation, capturing evidence of assessment performance as it happens in assessments and examinations.



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We use pioneering techniques to capture and visualise data on educational assessment.

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## How can we help you?

Since our launch in 2018, we have worked with some of the world's leading testing organisations.

We can help you to enhance test quality, and to reduce the risks involved in the transition to digital assessments.

We can troubleshoot to identify and explain unintended anomalies in test performance, and to provide evidence of test reliability, fairness and validity.

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**Assessment  
MicroAnalytics™**

We are an international company with a global outlook. We already provide services to many of the world's leading testing organisations.

Recent clients include:



LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG  
Ministère de l'Éducation nationale,  
de l'Enfance et de la Jeunesse

Service de coordination de la recherche  
et de l'innovation pédagogiques  
et technologiques



**duolingo** english test

## Get in touch

We're happy to discuss how we can help, and to deliver a tailored service to meet your needs.



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