

2022-2024 Context Matters Awarded Grants (Round 4)

**Research title:** Science Teachers' Understanding and Use of 'Learning Context' in Ethiopian Secondary Schools

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**Summary**: Over the last few decades, educational research has highlighted the situated nature of learning and the importance of context for the success of learning and instruction. Students learn better when the topic of learning and instructional strategies are relevant to their everyday life. "Learning context" has been used to motivate students and to address the problem of teaching "just the facts", especially in science education. When teachers integrate the culture and context of their students into the lessons, it allows learners to build on the "social and epistemic dimensions that are embedded in the growth, evaluation, representation, and communication" of knowledge and practice (Duschl, 2008, p. 268).

The recognition of "learning context" has not, however, been accompanied by mechanisms of implementing context-oriented learning and instruction, particularly in countries in the global South, such as Ethiopia. Yet, serious challenges exist in Ethiopia in relation to student learning outcomes, gender inequality, and a related lack of creative skills in secondary education (Education Road map, 2018). The lack of context-focused curricula and instructional approaches can weaken students' efforts to address everyday life problems and to situate their learning in the context of their communities.

This study will provide a unique perspective on issues related to "contextualization in learning and instruction" in a low-income country. The research will document best practices and challenges of secondary school science teachers along with the perceptions of their students in Bahir Dar, Ethiopia. The results will be used to develop professional development programs for teachers so they can integrate context-oriented instructional approaches into their teaching; and set the foundation for a larger project to support teachers in their practice and professional development.

Dr. Dawit A. Getahun is Associate Professor in the College of Education and Behavioral Sciences at Bahir Dar University. He holds a PhD, Learning Sciences from McGill University, Canada and MA in Educational Psychology from Addis Ababa University, Ethiopia. Dr. Getahun teaches at both the graduate and undergraduate level, with a focus on Educational Psychology and Research Methods in Education. Along with his work at Bahir Dar University, he is the project coordinator for "Enhancing the quality of science and mathematics education in Ethiopia and South Sudan" and "Advancing quality in education in the primary and lower secondary schools of Ethiopia and South Sudan", both funded by Norwegian Agency for Development Cooperation (NORAD). His research interests are in the areas science teaching and learning as well as teacher education. He is a member of the Ethiopian Federal Ministry of Education Advisory Council.

**Dr. Engida Gebre is** Associate Professor in the Faculty of Education at Simon Fraser University, Canada. He received his PhD in Learning Sciences from McGill University and MSc in Information Science from Addis Ababa University, Ethiopia. He is a learning scientist conducting research on learning context and active contextualization, critical data literacy for secondary school students, open data and context-oriented learning design, and learning with multimodal representations.