# Chapter 5
# Leveraging Socially Shared Regulation of Learning and Culturally Responsive Teaching to Enhance Diverse Learning Environments

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## ABSTRACT

*Socially Shared Regulation of Learning (SSRL) is the process where members of a group collaborate to regulate their learning by setting shared learning goals, coming up with strategies and aligning their task perceptions. The chapter explores the potential of SSRL combined with Culturally Responsive Teaching (CRT) as a framework for effective instruction in mathematics and science education in classrooms*

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*with diverse students With a conceptual synthesis approach, the study synthesized evidence from research using ERIC, WOS, Wiley and ProQuest as search databases offering a theoretical and empirical basis for promoting SSRL in math and science classes and present practical implications for K-12 educators, pre-service teachers and in-service teachers. The study revealed how SSRL-based classroom practices can be facilitators of diverse student populations and enhance instruction by providing actionable guidelines in both teaching and assessment processes. However, the study also revealed that the research on combining SSRL and CRT is limited and more empirical research is needed*

## INTRODUCTION

Although the world of education has witnessed several efforts to leverage the strengths associated with diversity in classroom contexts, underrepresentation of some minority groups, equitable educational opportunities and bias against certain learners still remain issues to be addressed. Diversity in the classroom is essential for equitable education and thanks to diversity in the classroom, an enriching context that enhances learning, fosters personal growth and helps students learn to live together are provided (Shaeffer, 2019). Education has made progress in recognizing the value of diversity, yet challenges remain, including the underrepresentation of minority groups, unequal opportunities, and persistent biases. Learning environments which are effectively designed for collaboration have a high potential to mitigate such issues as they present learners with learning tasks requiring shared effort, shared accountability as well as inclusion of a diversity of learners. *Socially shared regulation of learning (SSRL)* refers to the process where students work collectively taking control of the task and completing it through negotiation and creation of common perspectives. With repeated calibration of behavioral, motivational and emotional conditions, the learners create a common understanding of learning and successfully learn at group level rather than individual level (Hadwin et al., 2018; Järvelä & Hadwin, 2013). Because SSRL puts emphasis on co-regulated learning and developing collective strategies to achieve a group goal, it has significant prospects to offer for educational settings in which learners come from different backgrounds and so have a variety of learning styles. Additionally, in such settings, in many cases, addressing diversity can be a challenge for teachers who are already overwhelmed with teaching-related tasks. A SSRL perspective has potential to address this issue by delegating the accountability of learning among all the learners.

The present study explores how SSRL can be instrumental in providing equitable participation and inclusion in diverse mathematics and science classrooms. In doing so, this chapter reveals fundamental SSRL strategies and feasible classroom

# Students' Kinaesthetic Interactions with a Touch-Enabled Virtual Mapping Tool

Theodosia Prodromou, Maria Meletiou-Mavrotherisand Andreas O. Kyriakides (2015). *Integrating Touch-Enabled and Mobile Devices into Contemporary Mathematics Education (pp. 1-23).*

www.irma-international.org/chapter/students-kinaesthetic-interactions-with-a-touch-enabled-virtual-mapping-tool/133312