

All school subjects are scientific: Calling for an inclusive approach in addressing scientific literacy teaching

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Abstract. In school policies, competing perspectives regulate scientific literacy teaching. The Vision I perspective, also known as the "deficit model," assumes that scientific literacy is a set of knowledge and skills that can be taught and measured through standardized tests. This approach often leads to a narrow focus on STEM subjects at the expense of other disciplines. The Vision II perspective, on the other hand, recognizes that scientific literacy is a complex and multifaceted construct that involves not only knowledge and skills, but also attitudes, values, and dispositions. Arguments will be provided on the dominance of the Vision I perspective discussing how it has resulted in a lack of recognition of the scientific literacy and scientific identity of teachers in other subject areas. Furthermore, it will be highlighted that the school subject cultures also play a role in shaping the scientific literacy and scientific identity of teachers, and that these cultures are influenced by the dominant perspectives of scientific literacy in school policies. In conclusion, a call will be made for a shift towards a more inclusive and holistic approach to scientific literacy that recognizes the diverse perspectives of teachers and the role of school subject cultures in order to promote a more equitable and inclusive understanding of scientific literacy.

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