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Inside the Mathematics Class. Sociological Perspectives on Participation, Inclusion, and Enhancement.

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Review

Gellert, U., Knipping, C., & Straehler-Pohl, H. (2018). *Inside the Mathematics Class. Sociological Perspectives on Participation, Inclusion, and Enhancement.* Cham: Springer.

Inside the Mathematics Class is the latest volume of the book series Advances in Mathematics Education. Social issues, especially socioeconomic status, have a great impact on students' possibilities of success. Understanding the mechanisms that influence the production and reproduction of disadvantage and advantage in mathematics classrooms, from a theoretical perspective, is essential to avoid them in practice. With this aim, in the book, we get a deep insight into interaction in mathematics classrooms.

The volume is divided into sixteen chapters that are arranged in three main sections, apart from the introductory chapters and the final comments. In the first chapter, Uwe Gellert explains the rationale for the book. The author exposes the reasons for using sociological tools to look at the mathematics classroom and presents the structure of the volume. In the second chapter, based on the Bernstein's model of Pedagogic Rights, Hauke Straehler-Pohl and Michael Sertl reflect on the intrinsic normativity of sociological research in mathematics education and re-analyze some episodes from their own previous research in a context of low academic expectations. The Pedagogic Rights (enhancement, inclusion and participation) also permeate the three main sections of the book: "Enhancement: Facilitating Possible Futures", "Inclusion and Exclusion in Social Practices", and "Participation in Classroom Culture and Beyond".

The first section includes five chapters. The first one, "Resistance from Within the Mathematics Classroom: Silences, Strategies, and Subjectivities", focuses on communication between teacher and students, the influence of dominating discourses and silences as a form of resistance towards these discourses. The next chapter offers a reflection on the teacher's perspective in the context of realistic school mathematics and the relation between the teacher's implicit transmission practices and assumed

transmission practices in the academic pedagogical field. The use of language and how it and representations of speakers enhance students' learning opportunities is the topic of the third chapter in this section. The following two chapters address research in preschool: the enhancement of children's opportunities using distributive strategies, in the first case, and the interaction with materials, such as manipulatives and digital technology, in the second case.

The "Inclusion and Exclusion in Social Practices" section comes next. In the eight chapter, the *racial democracies* are put into question. The next chapter highlights the importance of considering students' personhood when making pedagogical decisions. The tenth chapter focuses on the inclusion of deaf students in the mathematics classroom facilitated by some interactive patterns. The last chapter in this section analyses the students' participation in an episode of collective argumentation in a mathematics class, using two different approaches.

The "Participation in Classroom Culture and Beyond" section includes four research studies. Critical mathematics are used in the first one to analyze the cross-race and cross-class relations between the teacher and students and effective ways of teaching mathematics in this situation. The next contribution focuses on how the gendered and classed positions interfere in students' participation in whole class discussions. Then, we find a case study of a teacher that moves to a new school and the establishment of authority is analyzed through the discourse in mathematics classroom. The last research study in this section compares the discursive practices in mathematics classrooms from Seoul, Shanghai and Tokyo focusing on the meta-discursive rules, which seem to be a determinant factor in students' learning opportunities.

Finally, the commentary chapter remarks the similarities between the different empirical studies previously explained. It also reminds some suggestions for future research.

As time passes, we are more conscious of the importance of attending students' diversity in the classrooms and adapt teaching practices to the necessities of each learner, in order to achieve educational success and respond to the curricular demand of equity. This adaptation should be based on the student's background, which includes prior experiences, thinking styles, language, cultural and ethnic issues. And, obviously, mathematics classes are not an exception in this changing scenario. *Inside the*

Mathematics Class shows several examples of empirical research on the socio-political issues that are present in the mathematics classrooms and the effect of class, race, etc. on the micro-sociology of the mathematics classroom, through interaction processes.

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