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## Anarchism and Mathematics: A Concrete Experiment in Horizontal Teaching

Contemporary anarchism centres around three tenets: challenging existing power structures and forms of domination, aligning thoughts and actions by making decisions that are consistent with core values, and focusing on diversity and open-endedness. I believe that mathematics research shares many values with anarchism, and hence I suggest that we examine mathematics education from an anarchist viewpoint. Are learning outcomes appropriate for course design? How can we address the power dynamics of grading and assessments? Is our teaching celebrating process, diversity and autonomy? In this direction, I will share an experiment in horizontal teaching that I have done in a large second-year vector calculus course for the last two years. Based on the ideas of "ungrading", I developed a new approach to grading and assessments, with the goal being to challenge inherent power structures in the classroom, to emphasize growth and learning over marks, to focus on mathematical skills, processes and virtues, to reduce pressure and anxiety, and to help students develop metacognition. While making such drastic changes in a large classroom was quite stressful at first, it turned out to be really exciting; I believe that it significantly transformed the learning environment!