Opportunities to notice: Chinese prospective teachers noticing students’ ideas in a distance formula lesson.

Summary: This paper investigates the noticing of six Chinese mathematics prospective teachers (PSTs) when looking at a procedural error and responding to three specific tasks related to that error. Using video clips of one student’s procedural error consisting of exchanging the order of coordinates when applying the distance formula, some variation was found in how PSTs attended to, interpreted, and responded to this error. A more important finding is represented by the inconsistent responses that individual PSTs provided to the three related tasks. This finding suggests that, to some extent, prior learning experience, beliefs, and orientations inform what PSTs notice. But the finding also suggests the centrality of selecting tasks that provide accurate representations of PSTs’ emerging professional noticing. Implications for teacher educators are discussed.

Classification: C39 D39 D49 D70

Keywords: prospective teacher education; professional noticing; students’ mathematical thinking; lower secondary; K-8

doi:10.1007/s10857-015-9301-3