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Lara J Alcock* (1.j.alcock@lboro.ac.uk), Mathematics Education Centre, Loughborough University, Loughborough, LE11 3TU, England. How do your students think about proof? A DVD resource for mathematicians.

In this talk I will discuss a DVD created to assist mathematicians in better understanding their students' thinking at the transition-to-proof level. The DVD is divided into episodes showing individual students working on elementary problems related to upper bounds and functions. The material is annotated so as to show both subtitles and what the student is writing down, in order that we can follow their reasoning as well as possible in real time. The DVD material will be demonstrated in the talk, and the audience will be invited to engage with a process not unlike mathematics education research by analysing what they are seeing and discussing the learning and teaching issues that arise. The talk will conclude with a discussion of possible uses of such material in professional development for mathematicians from postgraduate stage onwards. (Received September 15, 2007)