5. Researchers' Comments (English)

00:03:05 **Assessing student learning.** The teacher assesses a student in front of the classroom. In 50% of the Czech lessons, teachers assessed students' knowledge (Roth et al., 2006, *Teaching Science in Five Countries: Results from the TIMSS 1999 Video Study* [hereafter Video Report], table 3.3). In this particular segment, the student responds to the teacher's questions about the human skeleton and characteristics of different elephants. The teacher publicly assigns the student a grade. Public announcements of students' grades occurred in 37% of the Czech science lessons (Video Report, figure 11.4).

00:11:50 **Technical science terms**. The teacher uses a skeleton model to talk about the spine. She describes the inward and outward curves along the spine, informing students of the highly technical terms: lordosis and cyrtosis. On average, 33 highly technical words were spoken in each Czech lesson (Video Report, figure 5.4). The highly technical terms in this segment represent scientific characteristics, labels, or definitions.

00:18:05 **Student science notebooks**. The teacher is writing information about the spine on the blackboard. Students copy the information into their science notebooks. In 96% of the Czech data set, students had organized notebooks, which was more than in the other countries (Video Report, figure 11.1).

00:33:06 **Science organization**. Students are putting away their notebooks and repositioning themselves to watch a video. This is an example of science organization. Science organization occurred in only two percent of science lesson time in the Czech data set, which is less than in all the other countries (Video Report, figure 3.2).

00:39:11 **Individual work**. The teacher assigns a worksheet about spinal disorders and vertebrae identification. Students are expected to work individually on this independent task. Independent individual work occurred in 65% of the Czech science lessons (Video Report, figure 8.1). There is very little talk occurring at this time. In the Czech data set, students spent three percent of science instruction time on student-peer talk (Video Report, figure 9.2).