

Exhibit 32. The five topics emphasized most by grade 8 science teachers. U.S. grade 8 general science teachers' five most extensively covered topics accounted for only about 40 percent of their instructional periods. Japanese teachers' five topics most extensively covered included over 60 percent of instructional periods, and German teachers' five topics about 50 percent. U.S. grade 8 teachers for specialized science courses ('earth science,' etc.) showed more focused coverage. Their five most extensively covered topics included over 50 percent of instructional time. [Each bar shows the cumulative percentage of intended class periods, averaged across teachers, devoted to the five topics allocated most time by grade 8 science teachers. We show bars for Japan, Germany, and the U.S. Each bar segment shows the specific TIMSS framework topics (e.g., 'earth features') involved. Corresponding international data are not yet approved for release.]

