

Table 2. Some contrasts between standards-based and direct instruction views of good teaching in mathematics organized according to the 7 categories used in the High Quality Teaching Study.

High Quality Teaching Categories	Standards-Based Instruction	Direct Instruction
Teacher activity	<p>Present rich tasks;^a scaffold to evoke from and build on prior learning.^b</p> <p>Pose higher level tasks/questions. Maintain tasks at high level.^a</p> <p>Tell judiciously.^c</p> <p>Question student reasoning.^b [ie] Prompt student reflection on learning.^a</p>	<p>Evoke critical prior knowledge. Tell and demonstrate—briefly but clearly and explicitly.^d</p> <p>Ask some process questions but use more product questions with simple answers. (Ask product questions more frequently for lower performing, intermediate grade students.)^e</p> <p>Provide guided practice.^d</p>

	Provide opportunity for both invention and practice. ^b	Provide immediate, helpful feedback. ^d
Student activity	<p>Provide reasons for answers.</p> <p>Present alternative methods. Discuss and compare alternative methods.^b Conjecture.</p> <p>Question other students as well as teacher^c.</p> <p>Evaluate own and other students' answers/methods.</p>	<p>Respond with simple answers.^e</p> <p>Independently practice demonstrated procedures- massed practice- of new skills. Attaining automaticity should precede problem solving.^d</p>
Organization of class	Whole class discussion, small group work, some independent work ^c .	Whole class lecture/demonstration and discussion and independent practice ^e

Content	Begin with conceptual and link to procedural ^b .	Teach explicit strategies. ^d
Context	Connections to real world applications and to other mathematics ^a .	State objective to be learned. ^d
Classroom behavior	Engagement in high-level tasks ^a	Time on task highly related to achievement.
Use of technology	Flexible use of technology including manipulatives ^a	Use manipulatives after an algorithm is taught ^d

^a Fennema & Romberg, 1999

^b Hiebert, 2003

^c Lampert & Cobb, 2003

^d Stein, Silbert, & Carnine., 1997

^e Evertson, Anderson, Anderson & Brohpy, 1980