Scaffolding practices for effective numeracy teachers

Effective teachers use a range of scaffolding practices that support the students in their learning process. They support teachers to make more informed decisions about how they will meet the learning needs of all students in the most appropriate way possible.

Teachers can select from and use twelve scaffolding practices, appropriate to purpose, throughout the five phases of instruction as described in the e^5 Instructional Model. The scaffolding practices include:

Excavating - *drawing out, digging, uncovering what is known, making it transparent*
Teacher systematically questions to find out what students know or to make the known explicit. Teacher explores children's understanding in a systematic way

Modelling - *demonstrating, directing, instructing, showing, telling, funnelling, naming, labelling, explaining*
Teacher shows students what to do and/or how to do it. Teacher instructs, explains, demonstrates, tells, offers behaviour for imitation

Collaborating - *acting as an accomplice, co-learner/problem-solver, co-conspirator, negotiating*
Teacher works interactively with students in-the-moment on a task to jointly achieve a solution. Teacher contributes ideas, tries things out, responds to suggestions of others, invites comments/opinions in what she/he is doing, accepts critique

Guiding - *cuing, prompting, hinting, navigating, shepherding, encouraging, nudging*
Teacher observes, listens, monitors students as they work, asks questions designed to help them see connections, and/or articulate generalisations

Convince Me - *seeking explanation, justification, evidence; proving*
Teacher actively seeks evidence, encourages students to be more specific. Teacher may act as if he/she doesn't understand what students are saying, encourages students to explain, to provide/obtain data

Noticing - *highlighting, drawing attention to, valuing, pointing to*
Teacher draws students attention to particular feature without telling students what to see/notice (i.e. by careful questioning, rephrasing or gestures), encourages students to question their sensory experience

Focusing - *coaching, tutoring, mentoring, flagging, redirecting, re-voicing, filtering*
Teacher focuses on a specific gap (i.e. a concept, skill or strategy) that students need to progress. Teacher maintains a joint collective focus and provides an opportunity for students to bridge the gap themselves

Probing - *clarifying, monitoring, checking*
Teacher evaluates students understanding using a specific question/task designed to elicit a range of strategies, presses for clarification, identifies possible areas of need

Orienting - *setting the scene, contextualising, reminding, alerting, recalling*
Teacher sets the scene, poses a problem, establishes a context, invokes relevant prior knowledge and experience, provides a rationale (not necessarily at the beginning of the lesson, but at the beginning of a new task/idea)

Reflecting/Reviewing - *sharing, reflecting, recounting, summarising, capturing, reinforcing, reflecting, rehearsing*
Teacher orchestrates a recount of what was learnt, a sharing of ideas and strategies. This typically occurs during whole class share time at the end of a lesson where learning is made explicit, key strategies are articulated, valued and recorded

Extending - *challenging, spring boarding, linking, connecting*
Teacher sets significant challenge, uses open-ended questions to explore extent of children's understanding, facilitate generalisations, provide a context for further learning

Apprenticing - *inviting peer assistance, peer teaching, peer mentoring*
Teacher provides opportunities for more learned peers to operate in a student-as-teacher capacity, endorses student/student interaction.

Researching numeracy approaches in primary schools (DEST, 2004) researched in Victorian primary schools