Dean, C. B., Hubbell, E. R., Pitler, H., & Stone, B. *Classroom Instruction that Works. Research-Based Strategies for Increasing Student Achievement.* 2nd Edition. Pearson, 2012. ISBN 978-0-13336672-3. 188 pp.

"Learning outcomes" has recently become the major focus of most educational studies, shifting aside "student motivation", "self-directedness" and other favorites of the previous research into the effectiveness of education. It is closely linked to the growing realization that "the fundamental obligation of education is to at least ensure that all students are making appropriate gains relative to the time they spend in class-rooms" (Dean, et al., 2012, p. vii). The book, from which this quote is taken, is the second edition of the *Classroom Instruction that Works* (2001) and it incorporates updated research and further interpretation of evidence from the field, published in the decade since the first edition was released. The forte of the book is that it helps to understand how and why various strategies outlined in the first edition work more effectively than others.

Essentially, the authors present nine categories of instruction, that are perceived as effective, literally "making a difference" in how we teach and learn. Rather than concentrating on particular techniques or methods of teaching, the authors insist that we need to go back to models of learning. The "notable nine," as the authors call them, comprise: 1) Setting Objectives and Providing Feedback; 2) Reinforcing Effort and Providing Recognition; 3) Cooperative Learning; 4) Cues, Questions, and Advance Organizers; 5) Nonlinguistic Representations; 6) Summarizing and Note Taking; 7) Assigning Homework and Providing Practice; 8) Identifying Similarities and Differences; and 9) Generating and Testing Hypothesis. These strategies have been identified through a meta-analysis of instruction conducted by McREL organization (Mid-Continent Research for Education and Learning, Denver, USA) and presented in the first edition of *Classroom Instruction that Works* (Marzano et al., 2001). This second edition incorporates further research and analysis of literature on the effect of each strategy on student achievement, published since the first edition. Furthermore, it emphasizes that the nine categories of instructional strategies are directly related to the development of the essential skills for 21st century learners, helping students become college and career ready and economically competitive in the global market of the new epoch.

The book is organized into four parts, the first three of which focus on strategies and include recommended classroom practices, examples of the strategies in use, tips for teaching, and other relevant information. The forth part presents specific guidance on how to use strategies in planning instruction directed towards different types of knowledge. The general framework for instructional planning suggested in the book rests on three pillars: Creating the Environment for Learning; Helping Students Develop Understanding; and Helping Students Extend and Apply Knowledge.

In more detail, the first part, *Creating the Environment for Learning*, starts with the chapter on setting objectives and providing feedback. The authors of the book deem this category important as, with setting objectives, teachers establish the direction, which helps students to see easily the connections between

Reviews of Books

what they are doing in class and what they are supposed to learn. It also builds intrinsic motivation as they set their personal learning objectives, because students can identify how the learning is relevant to them, feel greater self-control and develop self-regulation skills. With this, the objectives should be appropriately specific, but not restricting, and can be communicated via social media to audiences outside the classroom. As for the feedback, which is an ongoing practice, it should be corrective, timely, and focused on criteria. Its purpose is to help students see what high-quality performance looks like, and what changes are necessary to improve their learning, rather than compare their grades with those of their peers. Additionally, students should be engaged in self- and peer assessment, which, together with personalizing their learning objectives, helps them find relevant, real-world applications of what they are learning and develop them as life-long learners.

The next chapter, Reinforcing *Effort and Providing Recognition*, is about ways of fostering motivation. In a nutshell, reinforcing effort is a process that involves explicitly teaching students about the relationship between effort and achievement and acknowledging students' efforts when they work hard to achieve. An interesting idea is a suggestion to set up a rubric, which helps students track their effort in relation to their achievement, thus substituting performance orientation (i.e. comparing students' performances) with a mastery-goal orientation.

One more category discussed in this part is *Cooperative Learning*. Looking at the multiple layers of the contemporary world, especially the world of business, the authors of the book ascertain that students of today need to possess not only intellectual capabilities but also the ability to function effectively in an environment that requires working with others to accomplish a variety of tasks. Using cooperative learning helps teachers to develop students' skills of collaboration and cooperation. Though the need to address this category is well realized in today's teaching, there is still certain confusion on how this need should be addressed. According to Dean et al., confusion arises from multiple models of cooperative learning proposed by researchers. Comparing some of these models, the authors arrive at two most essential elements to be considered for cooperative learning activities: positive interdependence and individual accountability. Research has proved that an instructional strategy that involves grouping students maximizes learning through well-designed, intentional social interaction with others. Like with other strategies, the chapter comprises some examples of how cooperative learning can be organized and some tips for using the strategy more effectively.

The second part of the book, *Helping Students Develop Understanding*, comprises four chapters. Chapter Four is about cues and questions, activities, which account for 80 percent of teacher interactions with students, according to the quoted research. The authors also include into this category advance organizers, i.e., stories, pictures, and other introductory materials that help students use their background knowledge to learn new information. Recommendations for questions is that they are better be inferential and analytic; as for advance organizers, four different formats are recommended: expository, narrative, graphic and skimming as an advance organizer. The book calls for a wider exploitation of unlimited web resources and multimedia tools in providing engaging advance organizers.

Since imagery – mental pictures and physical sensations – has been found instrumental in merging knowledge presented in the classroom with mechanisms for understanding and remembering that knowledge, the next important category outlined in the book is *Nonlinguistic Representations*. According to the McREL's 2010 study, promotion of nonlinguistic representations in teaching, such as graphic organizers, physical models and manipulatives, engaging in kinesthetic activities and creating pictures or visualization have positive impact on student achievement. The importance of this category is further reinforced by the fact that in the 21st century "we are quickly moving beyond a text-based society to one in which all forms of communication have equal value" (p. 75). Each of the suggested types of nonlinguistic representation is illustrated in the chapter by interesting examples from teaching practice, one of which, in particular, caught

Reviews of Books

my attention as a reading teacher. When one teacher noticed that students got tired of reading circles and started loosing their motivation in extensive reading, she decided to use a collaborative online resource VoiceThread. Through sketching and drawing and explaining their nonlinguistic representations of the material covered in reading, the teacher has tapped into students' interest in computers and has created an engaging reading-related activity.

With regards to the next category, *Summarizing and Note Taking*, special interest should be drawn to the fact that research found that note taking has a significantly higher positive impact on learning than summarizing, however, it is minimally addressed in teaching. Meanwhile, note-taking strategies are not intuitive and students are sure to benefit from explicit instruction in these strategies. Summarizing skills also need addressing, and the authors of the book suggest six basic frames into which text can be placed for summarizing. Reciprocal teaching is also a common effective strategy with summarizing, and here an interesting method of using comprehensive strategies in a group has been suggested. Students are teamed in groups of 4 where each student assumes a role of either summarizer, questioner, clarifier, or predictor and takes turn in leading the discussion.

The concluding chapter of this part is about, probably, the most controversial category, homework. The book reports a mixed research reviews on the importance of assigning homework or providing tasks for practicing. What is, however, clear from this part is that any assignment should be focused and explicit, and, again, the Internet should be considered as a valuable source of multiple engaging avenues to learn a concept in homework.

Part III addresses the set of categories, which help students extend and apply knowledge, the first of these categories being *Identifying Similarities and Differences*. This category is important as it helps learners gain insight, draw inferences, make generalizations, and develop or refine schemas. The authors of the book insist that these skills need to be taught and suggest a variety of ways how to do it. This is followed by the chapter on *Generating and Testing Hypotheses*, where a catching question "What if?" can trigger upper-level thinking processes of deduction and induction. Generating and testing hypotheses is proved to deepen student knowledge as two other critical thinking skills are also involved – analysis and evaluation. The chapter gives tips and recommendations of arranging activities, which address all these skills, such as systems analysis, problem solving, experimental inquiry and investigation.

The nine instructional categories described in the previous three parts are brought together in the final chapter, *Putting the Instructional Strategies to Use*. It provides guidance on how to build up an instructional planning framework that selects the best mix of nine instructional strategies for teaching different types of knowledge. The authors stress that teachers need to make a distinction between two types of knowledge: declarative one, which is informational in nature, and procedural one, which is process oriented. Different types of knowledge require different types of teaching, therefore different plans, specific for each type, are suggested, which include a plan for acquiring knowledge and a plan for extending and applying knowledge. Finally, all essential categories of instruction are assembled in a comprehensive table *Key Instructional Practice for Teaching of Knowledge*. It correlates the fundamental elements of each type of knowledge, such as Vocabulary, Details, Organizing Ideas, Skills and Processes, with Key Instructional Practices, and further on with relevant strategies from the "notable nine," that support teaching. In a nutshell, this is a blueprint for planning effective and purposeful instruction of any subject anywhere.

There are no break-through teaching innovations or instructional revelations in *Classroom Instruction that Works*, but pairing well–known instructional strategies with effective and well-researched teaching practice (and the latter is attested by a very impressive, for the book of this size, bibliography) results in a very valuable product. It is a clear-cut, comprehensive and corroborated manual, which should be used by any teacher, who wishes to make a difference and who believes that high-quality teaching must be a norm and not the exception.

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