

Redesign a Practical Osteopathic Course Using Descriptive Grids and Peyton's Approach

by Mattia Cella, MSc, D.O.

Education Department of Osteopathy, Istituto Superiore di Osteopatia, Milan, Italy

Background: Teaching practical skills is a key element in health profession education (Grantcharov and Reznick, 2008). There are several ways to teach practical skills, starting from the traditional Halsted method (1904) to the more recent video learning (Maloney et al., 2012). Among all of these methods, one of the more supported is the Peyton's approach (Giacomino et al., 2020). Peyton's teaching approach is a four-steps procedure that leads student from the *demonstration* of the technique through the comprehension of each phase of the technique (*deconstruction* and *comprehension*) and it ends with the students that carry out the procedure by their own initiative (*performance*) (Krautter et al., 2011).

At Istituto Superiore di Osteopatia (ISO), Milan, more and more practical courses have been structured starting from the Peyton's approach with some variations. Each technique that was meant to be shown to the students was described in specific grids in order to align teacher and his/her assistants during their presentations. Nowadays, during the lessons, the classroom is split into equal groups so that each teacher/assistant is assigned to 8/10 students. These small groups enhance the quality of teaching with the Peyton's approach and favor the use of feedback tailored to each student (Giacomino et al., 2020). The descriptive grids are useful for the students to review technique by their own and for the teachers to construct an aligned evaluation grid for the exam. The evaluation grid is given and explained to the students in the beginning of the academic year. After the end of a specific argument, a formative assessment using the evaluation grids is scheduled.

Objective: The example of an ISO practical course will be used to explain step by step how to set an academic course using this kind of teaching method. The presentation will focus on the following points:

- the construction of descriptive grids and the related evaluation grids;
- the importance of a split class for the Peyton's approach;
- the formative evaluation with peer assessment based on the grids;
- the summative assessment;
- the students' feedback related to these previous mentioned course setting.

REDEFINE A PRACTICAL OSTEOPATHIC COURSE USING DESCRIPTIVE GRIDS AND PEYTON'S APPROACH

by Mattia Cella, MSc, D.O.

References:

Giacomino, K., Caliesch, R. and Sattelmayer, K., 2020. The effectiveness of the Peyton's 4-step teaching approach on skill acquisition of procedures in health professions education: A systematic review and meta-analysis with integrated meta-regression. *PeerJ*, 8, p.e10129.

Grantcharov, T. and Reznick, R., 2008. Teaching procedural skills. *BMJ*, 336(7653), pp.1129-1131.

Halsted, W.S., 1904. The training of the surgeon. *Bull Johns Hop Hosp*, 15, pp.267–275.

Maloney, S., Storr, M., Paynter, S., Morgan, P. and Ilic, D., 2012. Investigating the efficacy of practical skill teaching: a pilot-study comparing three educational methods. *Advances in Health Sciences Education*, 18(1), pp.71-80.

Krautter, M., Weyrich, P., Schultz, J., Buss, S., Maatouk, I., Jünger, J. and Nikendei, C., 2011. Effects of Peyton's Four-Step Approach on Objective Performance Measures in Technical Skills Training: A Controlled Trial. *Teaching and Learning in Medicine*, 23(3), pp.244-250.