Learning by practice and performance sounds very logical if the students are expected to acquire skills and competencies that are clearly defined. With growing demand, especially of parents, on cross-cutting skills — such as critical thinking, problem-solving, communication and collaboration, some schools (esp. in USA) are trying to employ new educational methods such as experiential learning, project-based learning or flip learning. Adoption of these methods however, is not national policies yet. On the other hand, certain pockets of education, such as “medical training” are obliged to use intensive practice for learning. Community Colleges in USA or polytechnic schools in Europe are 2 or 4 year higher education institutions, which are mostly for vocational training, for those who wants to excel in their current professions or those who decides to acquire new professions. Unlike medical schools, these institutions need to expand experiential learning across many degree programmes. As early as 1970s some of these schools had efforts to take up an outcomes based approach called “Competency-based Education” (CBE). However, it is during the last few years that CBE began to be a popular (in USA) methodology which is officially recognized.

"Online competency-based education stands out as the innovation most likely to disrupt higher education."

Dr. Clayton Christensen,
Harvard Business School,
Innosight

US Department Education inspects submitted CBE programs and approves them based on published guidelines and includes them among a growing network of schools which credit coursework based on “Direct Assessment.” In fact, what the government approves is actually the assessment plan. Direct assessment is so central to CBE, that often times the degree offer is called “Direct Assessment Programme.”
In CBE method, “transfer of knowledge” happens outside the classroom. The school is “agnostic” to content but provides a select set of resources that are linked to the clearly defined competencies. Students are free to use various resources online, usually supported by a personalized learning software to organize their study. The faculty then, facilitates and guides performance activities, provides timely and meaningful feedback, and runs direct assessment throughout. As their learning translates to real-life, students gain mastery of the competencies in a way that they can immediately be productive upon degree completion. CBE curriculum is data driven and students commonly use learning analytics software such as Acrobatiq or eLumen to self-monitor their performance.

Blunt methods such as standardized tests are not fit for measuring competency. Since receiving the course credits is possible only with direct assessment, it is essential to develop a normative new method for direct assessment. One candidate method is rubric-based assessment. Association of American Colleges & Universities has launched in 2011 a multi-state initiative to advance learning outcomes assessment using normative rubrics. 59 Institutions have collaborated to develop rubrics for 16 intellectual and practical skills such as information literacy, critical thinking, and integrative learning. Faculty members were trained and through pilot studies, the rubrics were tested on campuses and rewritten three times before reaching a final version.

The results of pilots on rubric-based assessment are very encouraging. Not only student engagement, course completion rates and mastery demonstration are substantially improved, but also participant professors claimed it improved their teaching as indicated clearly by the responses they got from their students.

Supported by strong foundations such as Lumia, Gates and the Association of American Colleges and Universities, CBE is now expanding to K12 education.