The impact of learning outcomes-based curricula on teaching practices in schools

Polish case study

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Impact of consecutive curricular reforms

The introduction of the learning outcomes approach in initial vocational education has been an effect of consecutive curricular reforms.

– General education – introduction of competences (applicable knowledge, skills and attitudes), learner-centred approach...

– The shift from content-based to a learning outcomes-based curricula

– the introduction of external examinations

– Vocational education lagged behind.
The (national) core curriculum

The new curricula described qualifications in accordance with the European Qualifications Framework (EQF) standards.

The learning outcomes included in the core curricula are described in detail – a high level of granularity.

Verification criteria defined for each learning outcome – examination standards.

Core curriculum and school teaching programmes
School teaching programmes

The educational activity of the school in the field of education in a given occupation is specified in the teaching programme for that occupation, approved for use in the school. The teaching programme for the occupation implemented in the school encompasses all elements of the core curriculum for vocational education.

*The Regulation of the Minister of National Education of February 15, 2019*
Impact of detailed description of learning outcomes in the core curriculum

The high level of granularity of the core curriculum has both positive and negative aspects.

- On the one hand, schools and teachers are provided with a very detailed descriptions of the expected learning outcomes to be verified in external exams. That helps in planning instructional work.

- On the other hand, developing and modifying such detailed curricula is very labour-intensive and time-consuming. This makes it challenging to respond adequately and quickly to technological innovations, changes in the job market, and employers’ expectations.
After completing primary schools students can continue vocational education in two types of schools:

5-year **technical secondary schools** (*technikum*), for pupils 15 to 20 years old, where they obtain not only a vocational diploma for a given occupation upon passing a vocational exam, but also a maturity certificate (*świadectwo maturalne*) upon passing the maturity exam.

3-year **stage I sectoral vocational schools** (*szkoła branżowa I stopnia*) for pupils 15 to 18 years old. Pupils who have finished a stage I sectoral vocational school obtain a vocational diploma upon passing a vocational exam, and may continue education in a stage II sectoral vocational school or in a general secondary school for adults;

Only technical schools were visited. Attempts to visit also basic vocational school remained unsuccessful.
"In vocational schools, the percentage of students who achieve the highest levels of mathematical skills (level 5 and 6) is close to zero. Only 1% of students achieve level 4. A very worrying fact is that 66% of students in vocational schools score below level 2."
Teachers we spoke to emphasised that their initial training did not prepare them for developing and analysing teaching programmes. Therefore, they often rely on available ready-made teaching programmes, modifying them only in terms of subject division to adapt to the specialties and experience of the employed teachers. They do not interfere with the descriptions of learning outcomes.

The directors pointed out that the scope of educational content in the school teaching programme is derived from the core curriculum, and there is practically no room for changes.

Employers prefer to discuss the development of additional skills in the form of specialisation classes or innovative projects rather than focusing on the implementation of the core curriculum.

All the schools that we visited, benefit from the difference between the number of teaching hours allocated in the entire 5-year technical school cycle and the number of hours specified in the core curriculum for specific qualification acquisition. These “surplus” circa 200 hours are used for extended skills training in the form specialisation, innovation projects or acquisition of additional skills (beyond core curriculum). Those activities were planned and organised in direct cooperation with employers.
While solving assigned problems/tasks, students were encouraged to explore various solutions, including non-standard or even incorrect ones, to assess the computer network system's responses and learn to address potential malfunctions.

The teacher underscored the practical significance of troubleshooting in students’ future work. Additionally, he reiterated the importance of system security and network resource management, emphasizing adherence to IT specialists’ ethics, such as respecting privacy and data protection, particularly concerning access password creation and modification.

Transversal competences were developed during the lesson. In case of encountering problems, students spontaneously communicate with each other and provide explanations. In discussions after the lessons, they emphasised that such collaboration is beneficial and necessary, and that they expect to operate in a similar manner in their future work.

If they ask the teacher for support, they do not receive instructions like ‘do this and that...’ but rather tips and encouragement to find a solution independently (‘check if...’, ‘How is it set...’).

The activity in pairs varied, but the teacher made sure that everyone was engaged. She explained that pairs were chosen by her so that everyone (including weaker students) mastered the required skills. It was evident that the peer learning approach worked as students quickly managed to complete the task. That was praised by the teacher.
When formulating the objective and task for the current lesson, the teacher referred to the requirements students would be expected to fulfil in their future work, like the procedures used in hiring employees, and the responsibility for correctly completing the relevant documents.

During the lesson, legal regulations related to the current task were mentioned, and professional terminology was reinforced.

After introducing the theme, the teacher dictated notes to the students. She indicated what students should remember for the test and what issues would appear on the vocational exam.

Then, the teacher distributed sheets with drawings of the discussed devices (switch, solar installation). The drawings were to be glued into notebooks, which the students immediately started doing without closely following the continuation of teacher’s presentation.

The absence of practical exercises was explained during a focus group interview. Teachers complained about insufficient funding and the lack of simple equipment or devices on which students could practically practice basic assembly skills.
Students reported in a short interview after the lesson that it was a typical task, which helped to preparing them for the qualification exam. "We used the knowledge and skills acquired earlier to solve a new problem, drew on experience, and gained proficiency. Such skills will be needed (and appreciated) in future professional work.

In all visited schools, students in conversations emphasised that they are aware that the skills they acquire will be assessed in the vocational exam and, more importantly, will be useful in the future work they intend to pursue.
Thank you