

Content review of modified educational modules for the RailVET project

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Prepared by:

Ing. Milan Kment, Director of the Vocational College and Upper Secondary Technical School in Česká Třebová

Bc. Jiří Lukeš, systems specialist, personnel department, České dráhy a.s.

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1. General remarks on the education program

- The structure of individual educational modules is missing any mention (unless given in another document which is not available) of the manner in which course completion is evaluated. In other words, there is no system presented here for evaluating the results achieved by students in the program (methods, points, minimum standards for passing a course, etc...)
- None of the materials submitted make it clear what kind of job position students are being prepared for. It is possible to observe certain “educational paths” involving the completion of various modules (generally listed in the section of required pre-requisite skills). There should be a table of such paths ending in typical job positions.
- The previous point is also related to the question of whether the number of course hours is sufficient or the importance of individual modules. It appears that all of the modules listed are important from the perspective of work processes in rail transportation. The sufficiency of course hours is related to what depth the designers of the various modules need to educate students, i.e. what kind of jobs they are being prepared for. Certain specific notes in this regard are listed for particular modules. A fundamental observation is made with regard to the course hours for module no. 8 (Vocational Language). The justification states that the “student should be able to communicate in the chosen foreign language.” A pre-requisite is completion of module no. 1 (Introduction to railways). A total of 80 course hours is certainly sufficient to learn specialized terminology, but in no case is sufficient to attain communicative linguistic proficiency if the student has no knowledge of the particular foreign language when beginning the module.
- The content of a number of modules, or the required skills of those completing the courses, are related to a considerable degree with obtaining not only theoretical but also practical experience. The introduction of each module may state that the instruction also takes place in “real work environments”, but the ratio of theory to practice, or the extent of “professional training in real work environments” compared to theoretical preparation is never actually specified.

2. Specific notes to certain educational modules

- Module no. 1 gives a good theoretical overview of the relevant issues in the field of railway transportation, although for a complete beginner the 50 course hours are very little considering the topics covered (assuming that this is not merely an overview of professional terminology without more in depth knowledge). I presume this because several 2-hour courses (2 hours per week) are devoted for theoretical instruction at trade schools for the breadth of the topics covered. The question for practical application then becomes whether a student who has completed this module is able, after 50 hours, to sufficiently manage the entire theory (and to what depth?) and to be

able to “detect defects...”. Just when during these 50 hours will the student receive enough practical experience?

- Module no. 2 - “Preparing timetables”. Does this involve the creation of timetables or only the ability to work a special train into an existing timetable? The module is comprised of 20 course hours. An expert in rail scheduling should assess whether this is sufficient. What is the ratio between theory and practice?
- Module no. 2 – “Calculating economic indicators on traffic and keeping records”. Given the desired diversity and extent of calculations, the 20 course hours here seems relatively little.
- Module no. 3. The individual sub-modules list a number of practical and manual skills which students must acquire. It would be good to clearly define the hours of theory and hours of practical instruction in operations. The time allotted for the “Forming and monitoring train sets” and “Shunting” units are sufficient, in conjunction with the introductory module (Module 1). The previous comments apply to the “Checking trains” units. At present, this part of the module, even taking into account the introductory module, may be considered an introduction to the given topic to serve as a foundation for additional instruction at a railway company.
- Module no. 4. This module was created by combining modules 3 and 4 of the previous version, but the time allotted was not increased. For this reason, the same applies as in the previous paragraph – this module may be considered an introduction to the given topic which will serve as a foundation for further instruction at a rail company. We recommend consulting a practical instructor whether the given course hours are sufficient, even taking into account prior mandatory module no. 1, for work with signaling systems in full operation. It would be good to add which practical skills necessary for transportation safety will be practiced, where, on which systems (real or simulated), and what the ratio of theory to practice will be.
- Module no. 5, sub unit 1/3, data in the table is missing. In the “Transport of dangerous goods” sub-module we recommend increasing the course hours from 10 to 20 considering the importance and complexity of the topic.
- Module no. 6. We recommend more clearly defining the final job position of a graduate: the brief description of the “Plan and management of logistics” sub-module lists a fairly broad spectrum of skills required of graduates, which raises the question of whether the 24 course hours are sufficient. In what manner and where will practical training take place?
- Module no. 8 – vocational language module. A new language module with maximum content, which may be managed in the given time assuming that students already have a fairly high degree of competence in the given language when beginning the course.

3. Conclusion

The text of modules includes the words “Pedler” and “Kruvazmanlar”. The spelling and meaning of these words should be checked to make sure they are being used properly. In

conclusion I have one systemic question. For example, completing module no. 7 requires prior completion of module no. 1. If we add module no. 8, this adds up to a total of 230 course hours. Is a graduate of such a course prepared to perform a specific job? If I am not mistaken, the entire educational program is directed at attaining the EQF 4 qualification. Is it thus possible to advance from EQF 3 to EQF 4 after 230 hours of study of the given modules?