

# Case Study of the Impact of Quality Management System CAF 2020 on the Employees in a Secondary Vocational School

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## **Abstract**

In Slovakia, secondary schools are starting to increase their quality with the help of various management techniques. The organisation's quality is also based on a well-established quality system and, of course, on the involvement of the teaching staff, employees, and students. Managing the quality of a school or school facility is a specific problem. When introducing the school management system, the school management decides and selects appropriate quality management systems. The article presents an analysis of the impact of the introduction of the new CAF model within secondary vocational education on school employees. The new CAF 2020 model is the fifth revised version of the model, while the changes to the current version of the CAF 2020 model mainly deal with digitization, agility, sustainability and diversity. A case study of this impact focuses on the conditions of one of the secondary vocational schools established in the Bratislava Self-Governing Region, namely the Secondary Vocational School of Transport.

**Keywords:** Quality of secondary vocational schools, Quality management systems, common Assessment Framework CAF 2020, European Institute of Public Administration EIPA, STN ISO

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## 1 Introduction

There is a wide range of ways to approach the efficiency of the functioning of organisations, and one of the possibilities is the introduction of quality management. In contrast, the quality assessment of secondary vocational education primarily focuses on the quality of theoretical teaching and practical training of students. However, the quality of a school is not measured exclusively by the quality of the educational process or professional training but also by how the school is managed, individual processes, organisational processes, promotion or care for students, parents, third parties and, finally, school employees. To be successful, organisations, regardless of size, structure, or maturity (level of management effectiveness and organisational excellence), need to create an appropriate management framework.

The Secondary Vocational School of Transport in Bratislava SOŠDBA (Stredná odborná škola dopravná, Bratislava) has been working for a long time to improve quality in all areas of its activity, both through the work of the school management and the work of the entire teaching and non-teaching staff. In 2020, the school management responded to the call of its founder – the Bratislava Self-Governing Region (BSR), to implement the Common Assessment Framework (CAF) at the school and thus increase its quality and make the school's operation more efficient. Based on the school's positive reaction to the above call, a contract was concluded between BSR and the company QM Slovakia Ltd., the subject of which was providing a quality management system according to the CAF model at the Secondary Vocational School of Transport in Bratislava.

Next, an analysis of the impact of the implementation of quality management according to the CAF model on SOŠDBA is presented based on the employees' opinions on the implemented measures (Prorok et al., 2021).

## 2 Background of the case study

### 2.1 Secondary Vocational School of Transport

The Secondary Vocational School of Transport in Bratislava (SOŠDBA), the subject of the processed subject study, is a modern educational institution for the transport and car repair segment, which provides professional education and training in study and teaching fields, and additional and post-secondary studies. It is a state school founded by the Bratislava Self-Governing Region (BSR). The main strategic goal of the school management is to maintain the school at such a high level that there is constant interest in studying at the school on the part of students, parents, and employers, and that it is attractive as an employer for quality teachers. About the strategic goal, the school constantly monitors development trends, challenges and changes in automobile production.

The school closely cooperates with various unions, status, and professional organizations in the form of active membership in unions, guilds, and organisations. In addition, it also cooperates with strategic employers within the private sector and finally, with universities and colleges. An essential part of the school's activities is international cooperation with foreign partners, which it develops within the framework of Erasmus + projects.

Part of the expansion of the school's activities is also making the study conditions more attractive, creating innovative study fields and overall development of the offered study options. Thanks to the introduction of new creative fields and the attractiveness of educational conditions, interest in studying at this school increased in 2018, and this interest continues to grow. Introducing new innovative fields is also related to the fact that school graduates either successfully apply themselves in practice or at universities.

## 2.2 Common Assessment Framework (CAF)

The CAF model (*Common Assessment Framework*) is already a well-known comprehensive quality management tool in Slovakia, created as a priority for the public sector (OECD, 2021; Maslov, Thijs & Dochot, 2018; Petrášová, Ryšánek & Votápek, 2004). As stated on the website of the Office for Standardization, Metrology and Quality Control of the Slovak Republic (Úrad SR, 2018), CAF is adapted specifically for the needs of public administration organizations. The current CAF 2020 model is already the fifth revised version of this model. It is a general, simple, accessible and easy-to-use model for any public sector organization (Asensio, Evaristo & Martins, 2021). It is based on the assumption that superior organizational performance results as well as results towards citizens/customers, employees and society are achieved through leadership strategy and planning. The CAF model, therefore, looks at the organization from different angles simultaneously. The individual criteria it deals with can be summarized:

- Leadership,
- Strategy and planning,
- Employees,
- Partnerships and resources,
- Processes,
- Citizen / customer-oriented results,
- Results in relation to employees,
- Results in relation to social responsibility,
- Key performance results.

The implementation of the CAF model at SOŠDBA began at the end of 2020 and took place in the following steps:

- creation and training of the CAF team,
- processing of the work plan by the CAF team,
- informing all school employees about the implementation of quality management within the school,

- processing of the Self-Assessment Report,
- processing of the Improvement Action Plan, which became the starting point for subsequent proposals for improving the quality of the school.

The Self-Assessment Report (Kalfa & Yetim, 2020) 2020 was prepared by the CAF team under the leadership of the supplier organisation QM Slovakia, Ltd. The report was focused on the description and characteristics of the organisation and within each of the criteria mentioned above of the CAF model, the strengths and weaknesses of the school were analysed. The analysis of the school's strengths and weaknesses, processed in the Self-Assessment Report, became the starting point for the search for possibilities for further improvement of the school's quality. These were subsequently specified in the Improvement Action Plan, which was also processed as the Self-Assessment Report by the CAF team under the leadership of the supplier organisation. Following the PDCA (*Plan-Do-Check-Act*) cycle, each school activity was evaluated in terms of its fulfilment status. SOŠDBA is striving for the title of the *Effective user of the CAF model*.

### 3 Collected Research Data and Findings

Research data were collected through an electronically administrated questionnaire. Respondents to the questionnaire survey were both pedagogical and non-pedagogical employees of the vocational school SOSDBA. It was administrated to all 45 employees of the school; however, its return was only 58%, i.e., only 26 employees from their total number of 45 responded to the call.

The questionnaire consisted of 13 items, of which one was an open question, in which the respondents could state openly their opinions. After this is presented an overview of the questionnaire items together with a discussion of the findings resulting from the data collected at them. The first items of the questionnaire were of factual character (age, gender, job position). The characteristics of the research sample of the employees who responded to the call to inquire in the questionnaire are presented in Fig. 1.

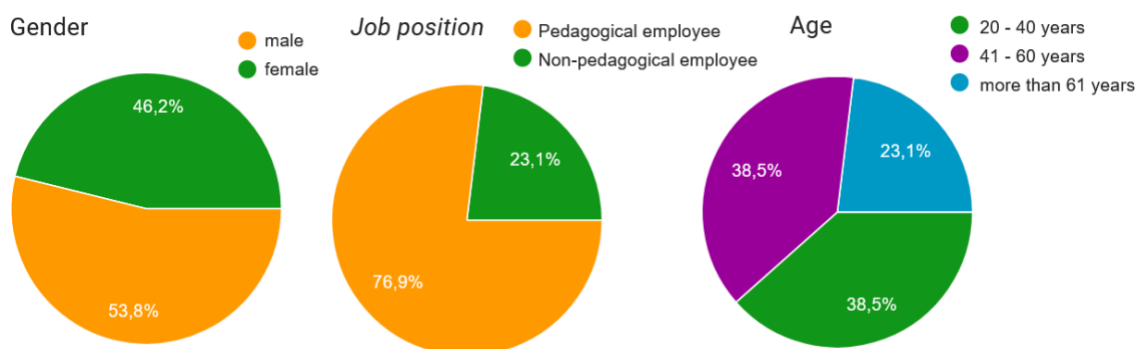


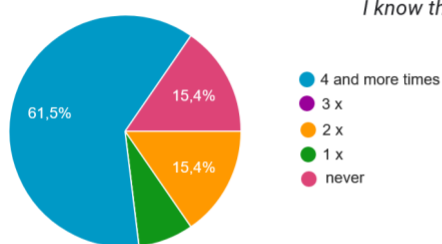
Fig. 1: Composition of the respondent's sample according to gender, job position and age.

The average age of the employees is 51.5. As the school has a relatively high number of employees over 60, employees under 40 who participated in the survey accounted for only 23% of the respondents. The survey was dominated by men at 53.8%, even though women comprise 55% of employees. According to expectations, pedagogical and non-pedagogical employees are equally at the level of statistically insignificant errors to participate in the questionnaire survey.

Due to the increased number of students after 2018, new employees have had to be hired in 2019 – 2022. This was why in one of the factual questionnaire items, the respondents were asked whether they had started their job in SOSDBA after July 1, 2022, since all employees were trained at CAF before this date. Concerning this aspect, 76.9% of the respondents started their job before the given date, while 23.1% after it.

Since the awareness of all employees and the correct understanding of the goals is a key factor for successfully implementing CAF, two of the questionnaire items were focused on this issue. The first of them was focused on the intensity of informing the school employees about CAF, and the other one on familiarising employees with its reasons and goals. As can be seen from the results presented in Fig. 2, the rate of informing was: 61.5% of employees were informed more than four times, 15.4% never and 84.6% were informed at least one time. The number 15.4% represents the respondents who entered their job at SOŠDBA when the CAF training had already been finished. What is essential is the fact that half of the respondents declared their familiarisation with CAF and reasons for its implementation at level 75 – 100 %. Because 23.1% of employees started working at SOŠDBA after implementing the CAF system, the level of awareness and understanding of the CAF goals can be evaluated as effective.

*I was informed about CAF by the school leaders*



*I know the goals of CAF as well as the reasons of its implementation at school*

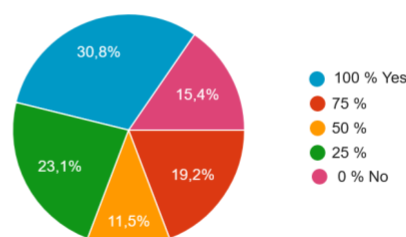


Fig. 2: Results regarding the employees` awareness of CAF.

The implementation of CAF at SOŠDBA affected primarily administrative and pedagogical employees. They were forced to adjust their work activities following CAF, at the same time, participate in the creation of new guidelines, report data from several years back, and prepare the Self-Assessment Report and the Improvement Action Plan. They performed these activities in addition to their regular work duties. We were interested in how satisfied they were with the changes that resulted from the CAF implementation and how they felt about

the work that had to be done concerning this implementation. An overview of the responses to these questionnaire items is presented in Fig. 3.

*In my opinion implementation of CAF will qualitatively enrich the school*

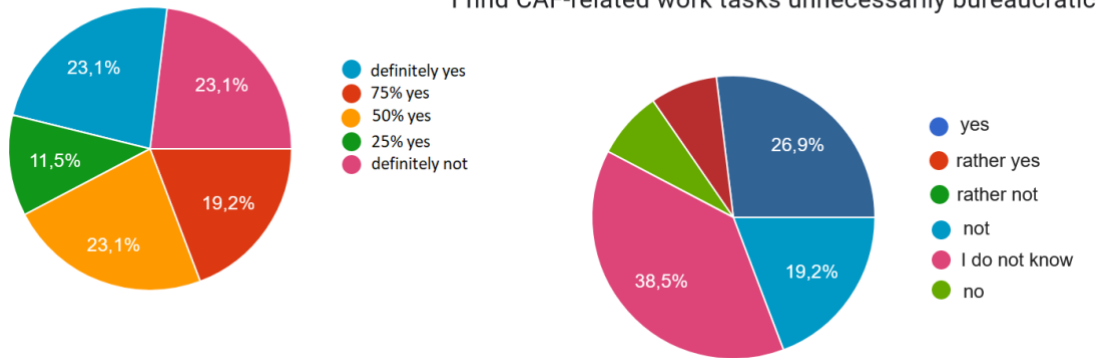
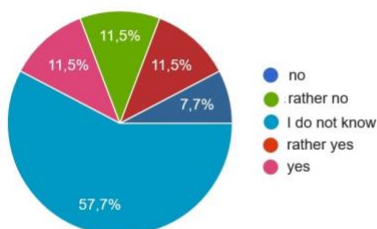


Fig. 3 Results regarding employees' willingness to accept the CAF quality system and their opinions on CAF usefulness for the school

As the data presented in Fig. 3 shows, almost half of the respondents declared dissatisfaction with the modifications of their work activities following the principles of CAF. Only 4% of the respondents are satisfied with the introduced changes. Similarly, almost half of the respondents consider the CAF implementation a useless bureaucratic matter. Only four employees think otherwise. The others did not have a clear, strong view on this matter. Up to 57% of the employees participating in the inquiry perceived the work related to CAF as extra work, however, more than half would be willing to devote 1-2 hours a week to CAF. On the other hand, up to 30% of them do not want to devote themselves to it at all.

Finally, we ascertained the employees' opinions whether, according to them, the implemented changes connected with the CAF implementation increased the quality of the school or not. More than half of the respondents could not answer this question clearly; six employees answered positively and five negatively. This is also reflected in the employees' willingness to perform activities connected with the implementation of CAF at the school (Fig. 4).

*I think that the changes introduced so far related to the implementation of CAF have increased the quality of the school*



*I am willing to devote myself to activities related to the implementation of CAF at the school on a weekly basis*

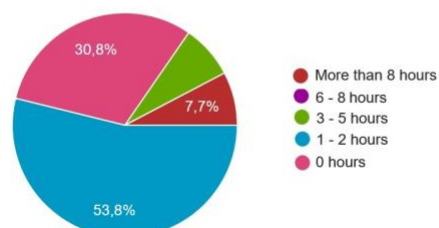


Fig. 4 Results regarding employees' opinions on the impact of CAF implementation on the school quality and their approach to their involvement in the CAF implementation activities.

The possibility to state their opinions on CAF implementation or to comment on this issue, given to the respondents in the last questionnaire item (in the form of an open question), was used only by four employees. Two of them expressed themselves positively and looked forward to further work; two, on the contrary, negatively, and one suggested using SQM, which results in ISO standards.

## 4 Conclusions

Every school trying to improve its work probably considers which quality models to use. SOŠDBA decided between TQM and QMS (Hackman & Waterman, 1995). An advantage of using the QMS would probably be clearly defined, unalterable rules and standards in the form of directives and regulations. However, by its nature, QMS is more suitable for manufacturing companies, where it is possible to harmonise requirements with standards better and thus measure quality at all levels.

SOŠDBA finally decided on the CAF model. Mainly because the ISO standards are tough to apply to all activities within the school. The school works with students, while its customers are not only students but also their parents, future employers of its students, and the entire society for which the school prepares its graduates. CAF appears to be a better alternative in line with respecting the uniqueness of the students and the staff. However, even this decision is good to consider.

If we talk about CAF as a suitable quality management model, it must be said that neither is the suitable ideal model for the school environment. The criteria deal with political involvement (schools in Slovakia are apolitical), the customer is difficult to grasp, and the same relates to customer satisfaction. Suppose the organisation aims to have satisfied customers, and we consider the students to be the school's customers. In that case, these will be satisfied if they do not have to study and have good grades. If we consider that parents are the school's customers, they rely on the school to do all the work, and the children do not have to learn at home. If the customer is considered an employer, this also sees the school's output from his specific point of view.

Another problem arises in matters of finances. Schools are primarily budgetary or contributory organisations that cannot influence financial resources to a sufficient extent.

The practice has shown that although one says the CAF is about a simple system, writing the Self-Evaluation report is quite demanding, mainly in terms of quantity (approx. 160 pages of text). This is also confirmed by the information on the website of The European Institute for Public Administration, where it is stated that the core of the CAF 2020 model is a questionnaire with 200 examples of self-evaluation of public organisations (4). The items in the individual criteria are, to a large extent, repeated. The school carries out some activities

that are the subject of questions within specific criteria. However, it does not have any evidence to prove that (e.g., promotion of the school – giving interviews on current social issues related to education, which subsequently do not even occur in the media).

From our point of view, CAF represents a long-distance race, the result of which should be a huge database of evidence of every single activity documented and allowing its checking. However, for such activities, the school would have to employ an entire staff of employees who would do nothing but process and evaluate tables and statistics. Nevertheless, the school is, first and foremost, an educational institution. Its priority is to provide a high-quality educational process and prepare students for the profession. Administrative employees, who usually work in negligible numbers at the school, mainly deal with personnel or financial matters. As the results of our questionnaire confirmed, teachers are not willing to spend time on activities that are not directly related to teaching. Organisations implementing the CAF model effectively can obtain the European title *Effective user of the CAF model*, valid for two years (Úrad SR, 2019). So once employees are relieved to have earned their CAF user title, they can start over again.

Based on the above-stated, we recommend designing a model specially created for the educational environment and not using the artificially modified model for public administration institutions. We are convinced that if such a model involved more students, teachers and other school employees, there would be a much greater effort to involve teachers in its implementation. They would see real possibilities for positive changes in the daily work and life of teachers, students, and administrative staff.

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## **References**

- Asensio, M., Evaristo, C., & Martins, M. (2021). CAF challenges to promote public sector capacity. Lisboa, DGAEP. <https://www.eipa.eu/wp-content/uploads>
- Hackman, R., & Wagerman R. (1995). Total quality management: empirical, conceptual, and practical issues. *Administrative Science Quarterly*, 40 (2), 309–42.
- Kalfa, M., & Yetim, A. A. (2020). Organisational self-assessment based on a common assessment framework to improve organizational quality in public administration. *Total Quality Management & Business Excellence*, 31 (11-12), 1307-1324.
- Maslov, D., Thijs, N., & Dochot, J. M. (2018). *Enhancing Social Responsibility in the public sector through the application of the Common Assessment Framework*. <https://www.eipa.eu/wp-content>



- OECD (2021). *Ageing and Talent Management in European Public Administrations*. The OECD report for the Slovenian Presidency of the Council of the European Union. <https://www.eipa.eu/wp-content/uploads>
- Petrášová, I., Ryšánek, P., & Votápek, V. (2004). CAF Společný hodnotící rámec (Model CAF). Praha, Národní informační středisko pro podporu jakosti.
- Prorok, T., Parzer, P., Hochholdinger, N., & Ladstätter, M. (2021). *Impact of CAF on Human Resource Management and People*. <https://www.eipa.eu/wp-content/uploads>
- Úrad pre normalizáciu, metrológiu a skúšobníctvo SR (2019). *CAF 2020 Spoločný rámec hodnotenia: Európsky model zlepšovania organizácií verejnej správy prostredníctvom samohodnotenia*. <https://www.caf-network.eu>