

Managing teacher turnover in regional schools

Jana Marie ŠAFRÁNKOVÁ¹, Martin ŠIKÝŘ², Renata SKÝPALOVÁ³

Abstract: *Employee resourcing comprising employment activities such as human resource planning, employee recruitment, selection, and adaptation, or retention planning and managing employee turnover seems to be a critical function of school management. It enables school managers to ensure the school has quality teachers and other employees it needs to achieve the expected objectives of the school. The biggest challenges of school managers in employee resourcing involve retaining teachers and dealing with teacher turnover. Based on the example of Czech regional schools, the article aims to discuss the current challenges of school managers in employee resourcing in regional schools and define possible ways to deal with the issue of retaining teachers and teacher turnover. The article applies findings of the authors' questionnaire survey on the practice of employee resourcing in Czech regional schools with the focus on the teachers' adaptation as a critical tool for retaining teachers. The authors' questionnaire survey was carried out in the second half of the school year 2018/2019 and in the first half of the school year 2019/2020. The respondents included managers of Czech preschools, elementary schools, and high schools. The answers were obtained from 19% of schools (116 out of 600 addressed schools). The findings show that surveyed regional schools can successfully deal with the challenges in employee resourcing, however, they should apply a more systematic approach, especially to the teachers' adaptation that could help them to deal with the challenge in retaining teachers and reducing the teacher turnover.*

Keywords: employee resourcing, regional schools, school managers, teacher turnover

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Introduction

A quality system of school education provided by regional schools (including preschools, elementary schools, and high schools) is essential for the successful development of society (Biro & Bodo, 2020). It purposefully develops

¹ Associate Professor; College of Regional Development and Banking Institute - AMBIS; Prague; Czech Republic, e-mail: jana.safrankova@ambis.cz

² Assistant Professor; College of Regional Development and Banking Institute - AMBIS; Prague; Czech Republic, e-mail: martin.sikyr@ambis.cz

³ Assistant Professor; College of Regional Development and Banking Institute - AMBIS; Prague; Czech Republic, e-mail: renata.skypalova@ambis.cz

the general and specific abilities of children and adolescents to successfully deal with the challenges of adulthood (Gurova, 2020). The contribution of quality school education to society lies in the fact that educated people contribute to the development and prosperity of society (Vutsova & Baltova, 2021). At the same time, the quality of school education depends mainly on the quality of teachers. Quality teachers are needed in every school and school managers should be interested in their recruitment, employment, and development (Runhaar, 2017). School managers should apply effective and efficient practices in employee resourcing to ensure the school has the quality teachers it needs (Huber & Schneider, 2021).

The article discusses the current challenges of school managers in employee resourcing in regional schools to define possible ways to deal with the issue of retaining teachers and teacher turnover. The findings show some challenging tendencies in employee resourcing for school managers who are responsible for employing teachers as well as other employees. The findings show that managing teachers and other employees to perform their jobs and achieve desired results is one of the most important responsibilities of school managers. A systematic concept of employee resourcing should help school managers to meet the current challenges of employee resourcing, especially employee retention and turnover.

1. Literature review

The purpose of employee resourcing in the organization is to ensure the organization has the employees it needs to achieve expected objectives (Rodjam *et al.*, 2020). Employee resourcing in the organization is the essential responsibility of line managers (Fedorova, 2016) who manage other employees to perform their jobs and achieve desired results. The responsibility of line managers for employee resourcing in the organization includes such activities as human resource planning, employee recruitment, selection, and adaptation, or retention planning and managing employee turnover (Ngwenya & Aigbavboa, 2017). These activities help line managers to ensure that the organization has quality employees and achieves expected objectives through achieving desired results of employees (Stankeviciene *et al.*, 2017). The better line managers in employee resourcing, the better employee and organizational performance (Radjenovic, 2018).

Employees, because of their abilities and motivation to perform their jobs and achieve desired results, are considered the most important source of the organization (Kucharčíková *et al.*, 2015). Quality employees determine the success of the organization (Volchik *et al.*, 2018). They help the organization to satisfy customers and other stakeholders by producing valuable goods and services and so achieve expected objectives (Kuzminchuk & Pevnaya, 2016).

The principal concept of employee resourcing in the organization is that organizational performance depends on employee performance (Jasim, 2020) and that the positive impact of employee resourcing on the organization's objectives is determined by the employees' results (Karman, 2020). This general concept of

employee resourcing in the organization can be also applied to employee resourcing in regional schools. School managers responsible for achieving the expected objectives of regional schools, especially the expected quality of education (Egic et al., 2010), need to be involved in employee resourcing to ensure the regional school has quality teachers and other employees it needs (Huang, 2011). To achieve the expected regional school's objectives by achieving desired employees' results, the school managers also need to perform different employee resourcing activities (Cheng & Lee, 2016). Performing these activities should be the essential responsibility of all school managers, including headteachers and deputy headteachers (Brauckmann & Schwarz, 2015).

The survey on the number and qualification of teachers in Czech regional schools conducted by the Ministry of Education, Youth and Sports of the Czech Republic in January and February 2019 (MEYS, 2019) showed that, in the Czech Republic, there were 5,287 nursery schools with 32,233 teachers, 4,172 primary schools with 77,573 teachers, and 1,290 high schools with 77,573 teachers. The average age of teachers in Czech regional schools was 47.2 years. In Czech regional schools, there are still more female than male teachers. Men made up about a fifth of the teachers. The average age of teachers was 47.2 years. There was a shortage of qualified teachers in all types of schools. The schools would need around 6,000 new teachers. In the next five years, it could be over 11000 new teachers. Schools face the challenge of attracting and retaining qualified teachers and have to deal with a high teacher turnover, especially young teachers. In the future, labor shortages in most qualified professions are going to be a problem for many developed European countries (Grencikova & Spankova, 2016a), especially when employers prefer skilled and experienced workers (Kobylinska & Rollnik-Sadowska, 2017).

The teacher turnover seems to be a long-term problem of Czech regional schools. However, this problem can be considered a general issue of regional schools in many other countries all over the world, such as Australia (Kline & Walker-Gibbs, 2015), Belgium (Dupriez *et al.*, 2016), Brazil (Camelo & Ponczek, 2021), Canada (Whalen *et al.*, 2019), China (Wei & Zhou, 2019), England (Allen *et al.*, 2018), Finland (Makela *et al.*, 2014), Norway (Tiplic *et al.*, 2015), South Korea (Ryu & Jinnai, 2021), Sweden (Blossing & Liljenberg, 2019), Russia (Kurbatova *et al.*, 2020), South Africa (Shibiti, 2020), Turkey (Ozoglu, 2015), United States (Grissom & Bartanen, 2019), or Zimbabwe (Gomba, 2015). The problem concerns mainly young teachers, who look for more attractive employment opportunities and working conditions, as well as other young people (Frankowska *et al.*, 2015). The main reasons for leaving are demanding work and low salaries (Rozkovcová & Urbánek, 2017). That shows that the difficulty of young people to find and keep a job is related, in particular, to the subjective factors (Mursa *et al.*, 2015). However, regional schools also lack other employees, especially cleaners and cooks. That's why the biggest challenges of school managers in managing people in regional schools involve recruiting and retaining teachers as well as other employees.

2. Aim, methodology, and data

The article aims to discuss the current challenges of school managers in employee resourcing in regional schools and define possible ways to deal with the issue of retaining teachers and teacher turnover. The methods used to achieve the aim include the analysis of previous studies on managing human resources and the authors' questionnaire survey on employee resourcing in Czech regional schools (including preschools, elementary schools, and high schools) with the focus on the teachers' adaptation as a critical tool for retaining teachers and dealing with the teacher turnover.

The questionnaire survey was carried out by authors (Jana M. Šafránková, Martin Šikýř, & Renata Skýpalová) in the second half of the school year 2018/2019 and in the first half of the school year 2019/2020. The questionnaire applied ten questions aimed at the approach of surveyed regional schools to employee resourcing and the teachers' adaptation: 1) the importance of employees and the role of employee resourcing, 2) the overall approach to employee resourcing, 3) the importance of applied practices in employee resourcing, 4) the contribution of applied practices in employee resourcing, 5) the teacher turnover over the past year, 6) the teachers' adaptation plan, 7) the length of teachers' adaptation, 8) the organization of teachers' adaptation, 9) the leadership of teachers' adaptation, 10) the barriers of the teachers' adaptation.

Managers from a total of 600 regional schools were addressed, including 200 preschools, 200 elementary schools, and 200 high schools. The answers were obtained from 116 out of 600 addressed schools (19%), including 53 (46%) preschools, 51 (44%) elementary schools, and 12 (10%) high schools.

Based on the obtained data, relative frequencies of responses were calculated and dependencies of responses on school size in terms of teacher numbers (10 or fewer teachers, 11-49 teachers, 50 or more teachers) were evaluated. Following the research focus, five hypotheses concerning teacher turnover and adaptation were tested to show that teacher turnover is a problem and that well-managed teachers' adaptation could be the key to solving that problem. The hypotheses tested were as follows:

H₁: The teacher turnover over the past year does not depend on school size.

H₂: The teachers' adaptation based on an adaptation plan does not depend on school size.

H₃: The length of the teachers' adaptation does not depend on school size.

H₄: The teachers' adaptation with the use of an adaptation brochure does not depend on school size.

H₅: The leadership of teachers' adaptation by the headteacher does not depend on school size.

To test the hypotheses H₁, H₂, H₃, H₄, and H₅, the method of chi-square goodness of fit test was used. The test procedure based on the creation of the relevant pivot table started with the formulation of the null (H₀) and alternative

(H_A) hypotheses. The significance level (α) was set at 0.05. The chi-square statistic (χ^2) was calculated using the formula $\chi^2 = \sum \left[\frac{(O_{r,c} - E_{r,c})^2}{E_{r,c}} \right]$, where (O) represents observed frequencies, (E) represents expected frequencies, (r) represents the number of rows in the pivot table, and (c) represents the number of columns in the pivot table. The calculated chi-square statistic (χ^2) was compared to the selected critical chi-square value $\chi^2_{\alpha}(f)$, where (f) represents the number of degrees of freedom. If the chi-square statistic (χ^2) was higher than the critical chi-square value $\chi^2_{\alpha}(f)$, the null hypothesis (H₀) was rejected in favor of the alternative hypothesis (H_A).

3. Empirical results and discussion

Both the theory and practice show that managing people determines the ability of the organization to achieve expected organization's objectives by achieving desired employees' results. When it comes to the question of the importance of employees and the role of employee resourcing, all respondents agreed that employees are the most important source of their schools and 90 % of them agreed that employee resourcing is an important part of school management. Concerning the overall approach to employee resourcing, 81% of school managers confirmed that they define employee resourcing strategies and policies, 83% of school managers confirmed that they apply employee resourcing plans, and 88% of school managers confirmed that they monitor the contribution of applied employee resourcing practices to objectives of their schools. The results showed that employee resourcing in surveyed regional schools is approaching the desired systematic approach.

In the case of the importance of applied employee resourcing practices, school managers mentioned employee recruitment and selection (91%), employee retention (82%), employee evaluation (71%), employee planning (70%), and employee adaptation (68%). In terms of contributions of applied employee resourcing practices, respondents agreed or disagreed that applied employee resourcing practices contribute to achieving various objectives of employee resourcing in their schools, including planned amount and structure of staff, needed abilities, and motivation of employees, good adaptation of staff, expected results and behavior of staff, or satisfactory staff turnover (see Table 1).

Table 1. Contributions of applied employee resourcing practices

	Yes	No
Planned amount and structure of staff	95%	5%
Needed abilities and motivation of employees	95%	5%
Expected results and behavior of employees	90%	10%
Good adaptation of employees	95%	5%
Satisfactory staff turnover	88%	12%

(Source: the authors' own contribution)

The purposeful application of individual practices in employee resourcing should reduce teacher turnover which seems to be a serious problem for most of the

surveyed regional schools. Regarding the teacher turnover over the past year, 34% of school managers confirmed that it was 0%, 47% of school managers confirmed that it was up to 10%, and 20% of school managers confirmed that it was over 10% (see Table 2). There was a significant difference in responses depending on school size ($p < 0.05$). The null hypothesis was tested that the teacher turnover over the past year does not depend on school size. Since the chi-square statistic [χ^2] was higher than the critical chi-square value [$\chi^2_{0.05}(4)$], the null hypothesis was rejected in favor of the alternative hypothesis that the teacher turnover over the past year depends on school size. The hypothesis H_1 was not confirmed.

Table 2. What was the teacher turnover over the past year in your school?

School size	0%	Up to 10%	Over 10%	Σ
20 or less teachers	15	12	1	28
21-49 teachers	21	30	16	67
50 or more teachers	3	12	6	21
Σ	39	54	23	116
H_{01} : The teacher turnover over the past year does not depend on school size.				
H_{A1} : The teacher turnover over the past year depends on school size.				
Chi square statistic $\chi^2 = 11.484$				
Critical chi-square value $\chi^2_{0.05}(4) = 9.488$				
The hypothesis H_1 was not confirmed. The teacher turnover over the past year depends on school size.				

(Source: the authors' own contribution)

One of the crucial practices in retaining teachers and reducing teacher turnover is the teachers' adaptation, which introduces new teachers to their jobs, co-workers, and the school. In the case of the teachers' adaptation plan, only 51% of school managers confirmed that they apply an adaptation plan (see Table 3). There was no significant difference in responses depending on school size ($p > 0.05$). The null hypothesis was tested that the teachers' adaptation based on an adaptation plan does not depend on school size. Since the chi-square statistic [χ^2] was lower than the critical chi-square value [$\chi^2_{0.05}(2)$], the null hypothesis was not rejected. The hypothesis H_2 was confirmed.

Table 3. Do you apply an adaptation plan for new teachers?

School size	Yes	No	Σ
20 or less teachers	13	15	28
21-49 teachers	33	34	67
50 or more teachers	13	8	21
Σ	59	57	116
H_{02} : The teachers' adaptation based on an adaptation plan does not depend on school size.			
H_{A2} : The teachers' adaptation based on an adaptation plan depends on school size			
Chi square statistic $\chi^2 = 1.314$			
Critical chi-square value $\chi^2_{0.05}(2) = 5.991$			
The hypothesis H_2 was confirmed. The teachers' adaptation based on an adaptation plan does not depend on school size.			

(Source: the authors' own contribution)

In the case of the length of teachers' adaption, 56% of school managers confirmed that new teachers' adaptation most often takes one year (see Table 4). There was a significant difference in responses depending on school size ($p < 0.05$). The null hypothesis was tested that the length of the teachers' adaptation does not depend on school size. Since the chi-square statistic was higher [$\chi^2 = 15.429$] than the critical chi-square value [$\chi^2_{0.05}(4) = 9.488$], the null hypothesis was rejected in favor of the alternative hypothesis that the length of the teachers' adaptation depends on school size. The hypothesis H_3 was not confirmed.

Table 4. What is the length of new teachers' adaptation?

School size	Less than 1 year	1 year	More than 1 year	Σ
20 or less teachers	12	9	7	28
21-49 teachers	7	42	18	67
50 or more teachers	3	14	4	21
Σ	22	65	29	116
H ₀₃ : The length of the teachers' adaptation does not depend on school size.				
H _{A3} : The length of the teachers' adaptation depends on school size.				
Chi square statistic $\chi^2 = 15.429$				
Critical chi-square value $\chi^2_{0.05}(4) = 9.488$				
The hypothesis H ₃ was not confirmed. The length of the teachers' adaptation depends on school size.				

(Source: the authors' own contribution)

In the case of the organization of teachers' adaptation, the teachers' adaptation in surveyed regional schools usually consists of initial training in collaboration with a more experienced colleague (75%) or self-study of the recommended literature (73%). The use of an adaptation brochure with all the necessary information for new teachers was confirmed by only 21% of school managers (see Table 5). There was no significant difference in responses depending on school size ($p > 0.05$). The null hypothesis was tested that the teachers' adaptation with the use of an adaptation brochure does not depend on school size. Since the chi-square statistic [χ^2] was lower than the critical chi-square value [$\chi^2_{0.05}(2)$], the null hypothesis was not rejected. The hypothesis H_4 was confirmed.

Table 5. Do you use an adaptation brochure for new teachers?

School size	Yes	No	Σ
20 or less teachers	5	23	28
21-49 teachers	12	55	67
50 or more teachers	7	14	21
Σ	24	92	116
H ₀₄ : The teachers' adaptation with the use of an adaptation brochure does not depend on school size.			
H _{A4} : The teachers' adaptation with the use of an adaptation brochure depends on school size.			
Chi square statistic $\chi^2 = 2.498$			
Critical chi-square value $\chi^2_{0.05}(2) = 5.991$			
The hypothesis H ₄ was confirmed. The teachers' adaptation with the use of an adaptation brochure does not depend on school size.			

(Source: the authors' own contribution)

In the case of the leadership of the teachers' adaptation, 68% of school managers confirmed that the adaptation of new teachers takes place under the guidance of headteachers (see Table 6). There was no significant difference in responses depending on school size ($p > 0.05$). The null hypothesis was tested that the leadership of teachers' adaptation by the headteacher does not depend on school size. Since the chi-square statistic [χ^2] was lower than the critical chi-square value [$\chi^2_{0,05}(2)$], the null hypothesis was not rejected. The hypothesis H_5 was confirmed.

Headteachers usually make new teachers familiar with the values and norms of the school. The factual adaptation of new teachers is guided by more experienced colleagues. Concerning barriers limiting a systematic approach to teachers' adaptation in surveyed regional schools, school managers mentioned demanding administration (69%), lack of time (62%), or lack of means (35%).

Table 6. Is the adaptation of new teachers guided by the headteacher?

School size	Yes	No	Σ
20 or less teachers	19	9	28
21-49 teachers	48	19	67
50 or more teachers	12	9	21
Σ	79	37	116
H_{05} : The leadership of teachers' adaptation by the headteacher does not depend on school size. H_{A5} : The leadership of teachers' adaptation by the headteacher depends on school size.			
Chi square statistic $\chi^2 = 1.584$			
Critical chi-square value $\chi^2_{0,05}(2) = 5.991$			
The hypothesis H_5 was confirmed. The leadership of teachers' adaptation by the headteacher does not depend on school size			

(Source: the authors' own contribution)

The authors' findings show that regional schools, as well as other organizations, should apply a systematic approach to employee resourcing (Runhaar, 2017) based on proven principles and practices enabling school managers to ensure they have quality teachers and other employees they need to achieve school's objectives (Grencikova & Spankova, 2016b).

The authors' findings also confirm that the teacher turnover is an issue for most of the surveyed regional schools and the research evidence shows that the issue of retaining teachers and teacher turnover can be considered a general issue of many other schools in many other countries and that the main causes and effects of the teacher turnover seem to follow similar patterns (Federicova, 2021). Teaching is a very challenging job (Kim *et al.*, 2020) and the uncontrolled turnover of key teachers due to unsatisfactory working conditions and career opportunities (Rasanen *et al.*, 2020) can negatively affect the school's performance, especially the quality of education (Allen *et al.*, 2018) that is determined by the teachers' performance (Shibiti, 2020). This can also lead to significant costs, especially

direct costs of recruiting, introducing, and training replacements, as well as opportunity costs of time spent by school managers in replacement of leaving teachers (Grissom *et al.*, 2016).

The fundamental problem is that quality teachers that the school wants to retain are often the ones most likely to leave (Grissom & Bartanen, 2019). Teachers who belong to high performers naturally look for more attractive employment opportunities and working conditions (Wei & Zhou, 2019). However, there are limits to what any school can do to retain quality teachers and reduce their turnover.

The limits of schools to retain quality teachers are especially evident in younger teachers who are generally less stable than older teachers and change their jobs more often (Gomba, 2015). Many schools are usually unable to meet their expectations regarding an interesting and well-paid job with the prospect of personal growth and career advancement (Ozoglu, 2015). Younger and beginning teachers are also much more sensitive to the overall importance and perception of their professional role than their older and more experienced colleagues. To be engaged and committed to their profession and school, they need to feel trust, recognition, and support, especially from their superiors (Tiplic *et al.*, 2015). Younger and beginning teachers are strongly affected by the differences between their professional expectations and the reality of their employment (Harfitt, 2015). The fit between teachers' job expectations and schools' working conditions seems to be a strong predictor of the teachers' job satisfaction, retention, and turnover (Miller & Youngs, 2021). In general, schools where teachers rate their working conditions, career opportunities, and professional status as satisfactory have lower turnover rates (Geiger & Pivovarova, 2018). Turnover rates are high during the first year but gradually decline afterward. The turnover rates are also higher in high schools than in preschools and elementary schools (Dupriez *et al.*, 2016). All these arguments prove why employee resourcing is such an important activity for school managers (Sorensen & Ladd, 2020). They need to learn how to recruit teachers with required professional qualities and reasonable career expectations and how to retain them and avoid their turnover by meeting their expectations (Shibiti, 2019). The key is to reach teachers' sense of professional fit with their schools (Miller *et al.*, 2020).

The authors' findings show that a key tool in retaining teachers and reducing teacher turnover could be a well-managed teachers' adaptation process (Vekeman, *et al.*, 2018). A teachers' adaptation provides new teachers with proper training and support and helps them build a positive relationship with the school. It makes it easier for them to meet their jobs and co-workers (Mikkola & Lehtinen, 2019). In particular, achieving positive working relationships with co-workers and superiors is essential for the successful adaptation of new teachers (Shirrell, 2021). The quality of their working relationships seems to matter more than the number of their social ties (Hopkins *et al.*, 2019). By a planned adaptation process, new teachers can achieve expected performance faster. It also prevents new teacher turnover because of disagreements and disappointments (Rozkovicová & Urbánek,

2017). Experienced teachers should be involved in the teachers' adaptation as coaches and mentors. This should support both the adaptation of new teachers and the development of experienced teachers (Korsakiene *et al.*, 2017). A planned adaptation process helps school managers involved in managing human resources to successfully manage new teachers to achieve expected performance (Blossing & Liljenberg, 2019). It also provides new teachers with opportunities for learning and growth, so it benefits everyone involved, which is the key to long-term successful cooperation.

In addition to the successful teachers' adaptation, school managers should pay attention to other negative factors that could lead to rapid teacher turnover, such as unfavorable working conditions, unpleasant working relationships, unfair treatment, or poor leadership (Grissom & Loeb, 2017). All these factors affect whether teachers leave or stay (Grant, Jeon, Buettner, 2019).

4. Conclusions

The authors' findings on employee resourcing in Czech regional schools showed that surveyed preschools, elementary schools, and high schools can ensure quality teachers and other employees. Surveyed regional schools see quality employees as the most important source and employee resourcing as an important part of the school management. Surveyed regional schools achieve different results through employee resourcing, but their approach to employee resourcing should be more systematic. They should apply proven practices in human resource planning, employee recruitment, selection, and adaptation, or retention planning, and managing employee turnover that could help them to ensure that the school has quality employees and achieves expected objectives through achieving desired results of employees.

To deal with the challenge in retaining teachers and reducing teacher turnover, the surveyed regional schools should improve a teachers' adaptation process. They should apply an adaptation plan for new teachers. The adaptation of new teachers should take place under the guidance of superiors with the help of more experienced colleagues. The initial training of new teachers should apply various methods, such as action learning, mentoring, coaching, or self-direct learning.

Although the presented findings do not allow drawing general conclusions, especially because of the focus on Czech regional schools and the low number of respondents, they show some challenging tendencies in employee resourcing that are worth attention from school managers. The findings bring a new perspective on employee resourcing in regional schools and offer system solutions to conceptual problems in retaining teachers and other employees. The findings challenge the future research activities focused on the creation of more attractive employment opportunities and working conditions to attract and stabilize qualified and motivated teachers and other employees.

Authors Contributions

The authors listed have made a substantial, direct, and intellectual contribution to the work, and approved it for publication.

Conflict of Interest Statement

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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