ENSINO, SAÚDE E AMBIENTE

Remanejo emergencial: Impactos no desempenho discente

Emergency Relocation: Impacts on student performace

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Palavras-chave:
Transferência escolar. Educação. Educação básica. Escola pública.

RESUMO: A transferência escolar trata da transferência do aluno de forma voluntária ou como medida disciplinar. Por outro lado, são recorrentes nos sistemas de ensino do Brasil uma forma alternativa de transferência escolar ainda não caracterizada: o remanejo. O remanejo é a transferência em massa de alunos (podendo ou não incluir docentes e administração) de uma unidade escolar para outra, sendo uma transferência planejada ou emergencial. Os fatores que ocasionam o remanejo incluem obras (planejadas ou não), acidentes naturais, sub ou superlotação da unidade escolar e greves. No contexto do ensino básico no Brasil, que já sofre muito com falta de recursos, o remanejo emergencial (RE) é comum e tem o potencial de desidratar a qualidade da educação, que já é baixa. Neste sentido, o objetivo deste trabalho foi verificar os efeitos de um caso de RE no desempenho do corpo discente. Para isto, foram avaliadas as notas dos alunos do ensino médio do Centro Integrado de Educação Pública 057 – Doutor Nilo Peçanha (CIEP) antes e após o RE de todo o corpo discente, docente e administrativo do Colégio Estadual Dr. Thiers Cardoso (CETC) para mesmo prédio onde operava o CIEP. A coexistência do CIEP e do CETC após o RE resultou em queda significativa no desempenho dos alunos do CIEP, principalmente nas matérias de química, física, biologia e matemática. Desta forma, o RE surge como um novo tópico a ser discutido e avaliado pelos educadores e cientistas da educação.

Keywords:
School Transfer. Education. Basic education. Public school.

ABSTRACT: School transfer deals with the transfer of the student voluntarily or as a disciplinary measure. On the other hand, an alternative form of school transfer is still recurring in Brazil's education systems, which has not yet been characterized: relocation. The relocation is the mass transfer of students (whether or not they include teachers and administration) from one school unit to another, being a planned or emergency transfer. Factors that lead to relocation include refurbish (planned or unplanned), natural disasters, sub or overcrowding of the school unit, and strikes. In the context of basic education in Brazil, which already suffers from a lack of resources, emergency relocation (ESR) is common and has the potential to dehydrate the quality of education, which is already low. In this sense, the objective of this work was to verify the effects of a case of ESR on student performance. In order to do so, the scores of the high school students of the Integrated Education Center 057 - Doctor Nilo Peçanha (CIEP) before and after the ESR of the entire faculty, teaching and administration of the State College Dr. Thiers Cardoso (CETC) to the same building where CIEP operated. The coexistence of the CIEP and CETC after the ESR

resulted in a significant decrease in the performance of CIEP students, mainly in chemistry, physics, biology, and mathematics. In this way, ESR appears as a new topic to be discussed and evaluated by educators and education scientists.

INTRODUCTION

Public primary education (PSE) in Brazil suffers from a critical lack of resources (CARREIRA and PINTO 2007). This shortage of investments in schools is evidenced by student overcrowding, reduced teaching staff, infrastructure problems and lack of inputs (Medeiros, et al., 2014). The high number of absences and the lack of interest in the program content also contribute to the detriment of student learning (CANESTRARO, 2008; GUSMÃO, 2009).

The National Education and Guidelines (LDB) Act establishes that each school must adapt its political-pedagogical project to the social environment in which it is inserted (REF). In this way, the broad understanding of educational problems must take into account that each school has a distinct local identity (VALENTINE, 2010). Article 10 of Diário da República, 1st series Nº 149 of August 2, 2012 deals with the regular school transfer (PST) of primary school students (PSS). That is, it deals only with student transfer (Figure 1). In this article, it is established that during each cycle or level of education transfers of students are not allowed, except in the case of disciplinary measures, expressed intention of the person in charge of education or of the student (when of legal age) or opting for subjects or courses that do not exist in the attended school. According to Silva (2014), ESR adversely affects the student's school performance by creating social and emotional issues, as well as possible curricular changes. Therefore, maintaining school performance will depend on overcoming these issues arising from ESR.

Additionally, in the educational field, it is possible to identify a more harmful form of transfers, called relocation (Figure 1). The relocation can be planned or emergency (PST and ESR, respectively). Since the ESR is not planned, it has greater impact in the teaching quality. Unlike PST, the relocation usually involves large groups of students (which can reach the administrative and teaching staff) and may result from emergency/planned reasons or not, such as refurbish, strikes, redistribution of students in school systems, closure of classes and schools, overloading or underutilization of schools, and accidents.

Student transfers may cause duplication of series or a series of gaps if school history is not properly issued prior to transfer (FLACH, 2016). Events of large transfers, such as relocations, can lead to conflicts in the classroom, highlighting the embarrassment that arises among the transferred students. This scenario may favor noncompliance with the political-

pedagogical project and cause losses in the quality of classes (PIRES, 2016), especially in the ESR.

In spite of the potential to reduce the quality of teaching and to impair learning, there are few studies in the literature about ESR. Furthermore, studying the impacts of ESR on student learning can help to remedy the process through teacher intervention, adequate teaching resources, and elaborate protocols to ensure the quality of PSE, which already has low investment rates in Brazil (DAVIES, 2012).

The objective of this study was to verify the effects of a case of ESR on the performance of the high school student body of the Integrated Education Center 057 Dr. Nilo Peçanha (CIEP) after the ESR of the entire administrative staff, student and teachers of the State College Dr. Thiers Cardoso (CETC). CETC started to operate in the same building where CIEP already operated. The present study tested the hypothesis that ESR has a negative effect on student performance, with a drop in efficiency (lower grades) in the school subjects of the curriculum.

METHODOLOGY

STUDY AREA

CIEP is a state public school located in the center of the municipality of Campos dos Goytacazes-RJ with 601 students enrolled, 135 in high school (INEP, 2017). The school relocated to the CIEP building was CETC, previously located at Tarcísio Miranda Park (Figure 2) with 919 students enrolled, of which 401 were students in high school (INEP, 2017). The students of these schools comprise several districts of the municipality of Campos dos Goytacazes. The ESR was carried out after heavy rains that compromised the physical structure of CETC, which started refurbishment soon after the beginning of the 2018 school year.

Figure 1. The ESR of the students, teachers, and administration of CETC to CIEP. *The ESR was carried out after heavy rains that compromised the physical structure of CETC, which went into refurbishing soon after the start of the 2018 school year.* ***Source:*** *Online software Google Maps.*

DATA COLLECTION

CIEP is a state public school located in the center of the municipality of Campos dos Goytacazes-RJ with 601 students enrolled, 135 in high school (INEP, 2017). The school relocated to the CIEP building was CETC, previously located at Tarcísio Miranda Park (Figure 1) with 919 students enrolled, of which 401 were students in high school (INEP, 2017). The students of these schools comprise several districts of the municipality of Campos dos Goytacazes. The ESR was carried out after heavy rains that compromised the physical structure of CETC, which started refurbishment soon after the beginning of the 2018 school year.

DATA ANALYSIS

Possible differences in the performance of CIEP students before and after ESR were tested using the Permutation Analysis of Variance (PERMANOVA). A multivariate matrix was created including the subjects (Biology, Physical Education, Physics, Mathematics, Chemistry, Geography, History, Sociology, Portuguese and English) as variables and students as samples (n = 20). The percentage contribution of each subject to percent dissimilarity between the year before and after the ESR was determined by the PERSA (Percentage Similarity Analysis) method.

RESULTS

Possible differences in the performance of CIEP students before and after ESR were tested using the Permutation Analysis of Variance (PERMANOVA). A multivariate matrix was created including the subjects (Biology, Physical Education, Physics, Mathematics, Chemistry, Geography, History, Sociology, Portuguese and English) as variables and students as samples (n = 20). The percentual contribution of each subject to percent dissimilarity between the year before and after the ESR was determined by the PERSA (Percentage Similarity Analysis) method.

Table 1: PERMANOVA result applied with the variables Year (Yr), Bimester (Bi), Class(Cl), where df: degrees of freedom; SA: square average; pseudo-F: the value of F. Values of p in bold indicate statistical significance ($p < 0.05$) obtained by the Monte Carlo permutation test.

Source	df	SS	MS	Pseudo-F	P(perm)	Permutations
Year (Yr)	2	238	119,2	38,1	**0,009**	998
Bimester (Bi)	1	35	34,8	28,4	0,163	38
Class (Cl)	2	51628	25,8	21,1	0,134	60
Yr x Bi	2	28001	14,0	0,7	0,741	999
Yr x Cl	4	91867	23,0	10,7	0,452	998
Bi x Cl	2	24488	12,2	13,8	0,175	999
Yr x Bi x Cl	4	86007	21,5	24,2	**0,007**	997
Res	342	3035	8,9			
Total	**359**	**3590**				

Source by author, 2018.

The chemistry, biology, physics and mathematics subjects contributed the most (50%) to dissimilarity before and after ESR (Table 1 and Figure 2). A drop in student performance was observed in such disciplines (Figure 2).

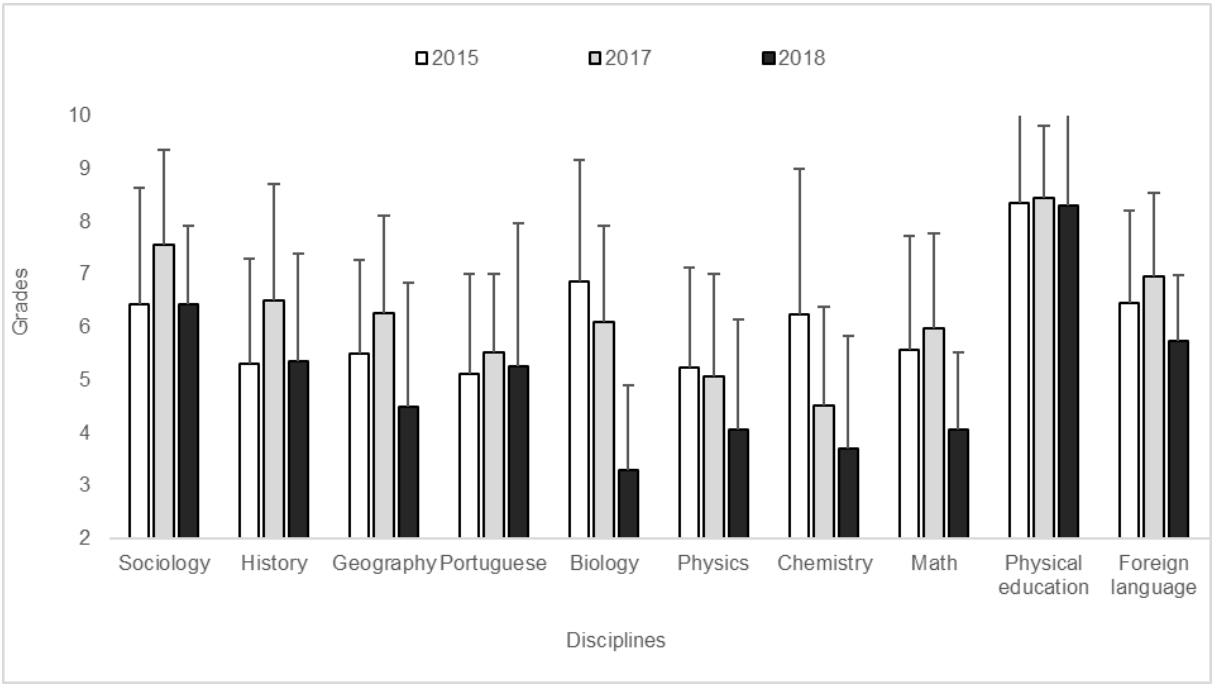

Figure 2. The disciplines more and less affected by ESR . Physical education was the one that suffered least from performance losses and is highlighted by the high utilization. **Source** by author, 2018.

DISCUSSION

The results of this study show that the ESR leads to a reduction in student achievement, confirming our hypothesis. The disciplines that obtained the worst results after ESR (Biology, Chemistry, Mathematics and Physics) are those that require more concentration in face-to-face classes and a continuous study to fix content (MENEGOTTO *et al.,* 2008). On the other hand, the subjects that had the best averages (physical education and sociology) are typically high-income, since students have higher affinity and can use previous knowledge during the face-to-face assessments (DARIDO, 2004). The same does not occur with disciplines that students have a history of difficulty, such as mathematics, chemistry, and physics, where the years before ESR were already accumulating low averages (Figure 2). In this way, the ESR seems to aggravate the teaching of students in disciplines that they already have difficulty or less affinity.

The ESR modifies the entire physical and social organization of the students present in the school unit. This stress changes the behavior of the students, who become more agitated and even aggressive, behaviors observed in the CIEP after the ESR (personal observation). Teachers are the main mediating agents, maintaining the dialogue between the parties involved and understanding the specific demands of the affected students (MORGADO and GALZERANO, 2007). Thus, one of the factors that also affect the students is the dissatisfaction of the teacher with the teaching activity, since these professionals are not valued in Brazil (BELOTTI and FARIA, 2010). In this way, we suggest that teacher

demotivation further aggravates the learning context during ESR, a period that requires an increase in the teacher's performance.

Another problem already described in the literature is that high school students are the ones who lose the most enthusiasm for the school (SPOSITO and GALVÃO, 2004). Consequently, students' performance should be monitored with caution by teachers and counselors, since in high school it is the final moment of preparation to access the higher level education, being constantly targeted for school dropout (SARANDY, 2010). In this context, ESR in high school may have more negative effects on student performance than in elementary school, although this hypothesis has not yet been tested globally.

In the local context, schools are located in regions with distinct social influences that can generate problems of conviviality. These issues can be further aggravated by organized crime, particularly by the domain of different criminal factions where each school is inserted. In these cases, the school acts to protect the student from the social environment in which they live, jeopardizing their political-pedagogical project and aggravating the negative effects of ESR (e.g. conflict between students from different regions) (SARANDY, 2010).

CONCLUSION

In conclusion, the ESR had negative effects on student performance, particularly in those subjects that require more dedication and concentration, with below-average grade point history. The effects of the ESR can be exacerbated by the discouragement of teachers known to be devalued in Brazil, the lack of enthusiasm of high school students and regional conflicts related to the domain of different criminal factions in the region where schools are located. The following measures are recommended to ESR: (1) monitoring activities in support of teaching during ESR (DE CARVALHO, et al. 2010) and (2) professional psychological monitoring of students and volunteer teachers.

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