

The effect of overcrowded classrooms on teachers' performance

تأثير الفصول الدراسية المزدحمة على أداء المعلمين

KERMA Mokhtar*

Faculty of foreign languages;

University of MOHAMMED Ben Ahmed Oran2; Algeria

Date de Reçu le : 11/02/2019 date de Accepté le : 19/03/2019 Date de publication : 16/06/2019

Abstract The purpose of this research was to probe the impact of overcrowded classrooms on teachers' performance in the Algerian primary school. An empirical analysis based on mixed methods was used to collect data in 15 primary schools in West Algeria. The data collection process was achieved through interviews, questionnaires and observations. The findings showed teachers' deep concern about classroom overcrowding and its impact on teachers' pedagogical duties. It emerged that most respondents failed to cope with overcrowded classrooms. They identified some psychological and professional problems which destroy the teaching and learning environment and thus prevent teachers from delivering quality education.

Keywords: overcrowding, competency, primary school, quality learning, teacher's perception

الملخص باللغة العربية يهدف هذا البحث الى استطلاع تأثير الفصول الدراسية المزدحمة على أداء المعلمين في المدرسة الابتدائية الجزائرية. تم استخدام تحليل تجريبي يعتمد على طرق ما يستقى بالبحوث المختلطة لجمع البيانات في 15 مدرسة ابتدائية في الغرب الجزائري. ارتكزت عملية جمع البيانات الميدانية على المقابلات والاستبيانات

* - kerma.mokhtar@gmail.com

والملاحظات. وأظهرت النتائج القلق العميق لدى المعلمين من ظاهرة الاكتظاظ في الفصول الدراسية وتأثيرها على واجبات المعلمين التربوية. كما تبين أن معظم المشاركين في البحث فشلوا في التعامل مع الفصول المزدحمة. فقد حددوا بعض المشاكل النفسية والمهنية التي تدمر بيئة التعليم والتعلم وبالتالي منع المعلمين من تقديم تعليم يعتمد على الجودة.

كلمات مفتاحية: الاكتظاظ، الكفاءة، المدرسة الابتدائية، جودة التعليم، وتصورات المعلمين

1- Introduction

Classroom overcrowding is an issue where teachers and educators have less control over students' management. Recent years have seen increased research on the challenges of overcrowded classroom as an essential aspect impeding effective teaching and learning (Carbone, 1998; Carpenter, J. M. (2006) Sargent et al., 2009; Parveen Khan et al., 2012; Good & Lavigne, 2017; Marais, 2016). It is becoming more and more evident that the oversized classrooms negatively impacts the teaching and learning process. Teaching a large class is a real challenge. In the classroom, large enrollments can increase student disengagement and feelings of withdrawal, which can erode students' spirit of responsibility and guide to behaviours that both reveal and support lack of commitment. Teachers may face many barriers when striving to teach in an overcrowded classroom which incorporate psychological and pedagogical management, assessment and discipline problems. Overcrowding is becoming a sensitive issue for teachers and students alike in the Algerian primary school. The main goal of this study was to explore teachers' challenges when teaching in overcrowded classrooms. Besides, the researcher strived to look for the factors that either impede or improve quality learning in large classes.

2. Literature Review

The overcrowded classroom is a universal problem presenting some difficulties for many teachers all over the world. This urged researchers to look for the relationship between non-crowded and overcrowded classrooms and its impact on the teaching learning process on the one hand and students' quality learning on the other hand (O'Sullivan, (2006; Pedder, 2006; Bahanshal, (2013; Heppner,2007; Yaman, 2009; Cakmak, 2009; Shamim, 2012; Khan, P., & Iqbal, M., 2012; Shirley, 2017). The literature review explores the global scholars' views about teachers' conceptions and beliefs towards the overcrowded classrooms, what scholars

have identified as challenges affecting teachers' classroom management Çelik (2002) and practices, how these challenges influence effective teaching and learning, and also how teachers in those studies dealt with the classroom challenges. I also looked at different views about overcrowded classrooms practices as well as the context of large classroom management in the Algerian primary school.

Carlson (2000) stated that quality learning was not possible when a huge number of students were gathered in small classrooms. He claimed that teachers faced serious problems in the visited schools located in Florida. He proclaimed that more than 40 children were packed into classrooms designed for no more than 35 kids. They were sitting down so closely together that they were not able to work or move. Mweru (2010) claimed that most schools in Kenya were ill-equipped to deal with such large numbers and could not cope. Teachers suffered morally and physically as they tried to control the large influx of children in overcrowded classrooms. Barretto (2005) recognised that overcrowded classrooms in Brazil make it difficult to implement the educational and social project in which education is compulsory. Teachers confront the challenge to use alternative spaces to assist students, and therefore, this help is frequently not viable. Yaman (2009) affirmed that overcrowded classes both hinder the accomplishment of the course objectives and reduce the efficiency of the class activities in application-focused Turkish courses. Students' skills and competencies cannot be fully developed due to overcrowding in Turkish classes. Khouya, (2018) asserted that crowded classrooms in morocco were the main demotivators in learning environment among classmates and classroom atmosphere. The findings indicate that there was discomfort and less discipline among students. This result may be a reflection of the bad learning environment that most of Moroccan schools suffer from.

2.1 The Algerian Context

Algeria, like most developing countries, endeavours to improve the quality of education. High rates of school enrolment and rapid growth in numbers for the different educational levels visibly marked the actual history of Algeria. Besides, The massive expansion of schooling and basic education are milestone involvement in guaranteeing all Algerian children access to compulsory schooling cycles from ages 6 to 16 (Executive Decree No.02-10). However, the performance of students in mastering knowledge at primary school remains poor. A survey conducted by the NATIONAL STATISTICS OFFICE, (Office National des Statistics) (ONS), revealed that the primary education system in Algeria has significantly expanded over the

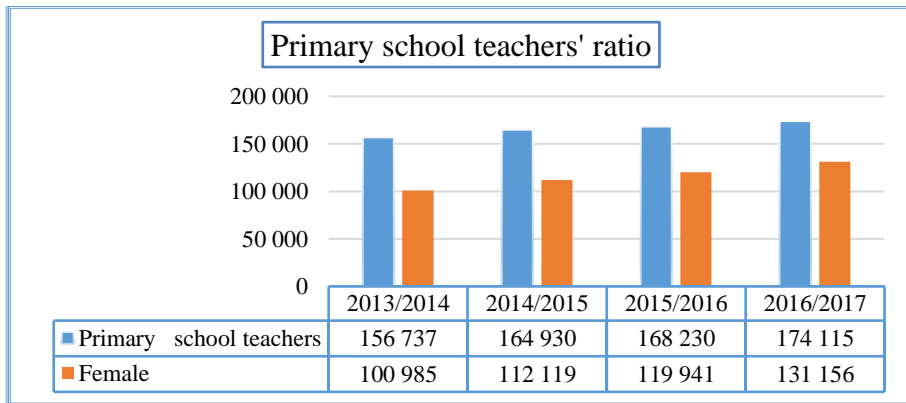
past few years, resulting in the establishment of hundreds of schools and classrooms; and thousands of teachers are employed at the primary school to satisfy the needs of millions of pupils.

Table 1. Students' enrolment in primary school.

Primary education				
School year	2013/2014	2014/2015	2015/2016	2016/2017
enrolled students	3 730 460	3 886 773	4 081 546	4 231 556
Including girls on %	47,68	47,71	47,69	47,65

Table 1. shows the systematic increase of the enrolled students in Algerian primary schools from the year 2013 to 2017. Similarly, figure1 shows the growing number of primary school teachers especially the huge ratio of female teachers.

Figure1. Primary school teachers' enrolment.



But despite all these efforts, the focus of public opinion on school deficiency, the failure of the education system to effectively provide students with adequate teaching and learning resources and the overcrowding classes issues hold much of the discourse through mass-media, social and political circles. The decision makers affirmed that oversized classroom management failed to provide efficient learning

that requires students to demonstrate higher-level thinking skills. Therefore, narrowing pupils' potential to low-level skills, and distorting the impetus shaping their learning futures. Teachers limited their instructions to a number of cognitive functions and skills related only to memory and students' ability to recall material learned out of context (Van Dyke, 2014; Letina, 2015).

The Algerian primary school teachers have experienced repeated theoretical and pedagogical shifts from content-based instruction to objective-based approach, and currently, competency-based approach and have been required to adopt these changes into their classroom practices. Different training programs were designed for teachers as a pedagogical support. But the designers failed to diagnose the classroom problem, especially at the overcrowding classes level, which is a real phenomenon characterising the Algerian educational system. The Minister of Education clearly declared that her department will start intensive and advanced training. She revealed that the national symposium on school reforms, held on 2015 tended to fix the education system weaknesses, emphasizing the priority given to the primary school.

3. Data and Methods

The researcher tried to examine the interrelationships between the teachers' personal beliefs and overcrowded classroom management literacy construct. He also attempted to investigate the teachers' oversized classroom literacy level and its associated impact on teachers' practices. The researcher further examined the influence of the teachers' background characteristics on their classroom management acquaintance. That is, how teachers manage the overcrowded classroom in Algeria is important because such understandings are likely to influence how they cope with different problems resulted from large classrooms. **Two main questions framed the present study:**

- 1) How do primary school teachers perceive overcrowded classrooms?
- 2) What is the influence of large classes on teachers' classroom instructions?

The study attempted to determine teachers' views about classroom overcrowding, areas of classroom practices that are utilized or under-utilized, and whether teachers' perceived skills match the frequency with which they use adequate practices to improve learning and instruction. It looked at the extent to which primary school teachers in Algeria perceive and use different teaching methods and tools to relieve overcrowding problems and to promote quality learning.

A survey conducted in 2016 by the researcher revealed that 62.6% of students suffered a reduction of skill development and had repeated at least a grade. Repetition could be interpreted either as a weakness in teachers' classroom practices, as a failure of the schools to effectively teach the students or inadequate teaching and learning resources. Besides, teachers have always been blamed for carrying classroom practices and procedures likely to hinder the students' development.

3.1. Sample of research

The population of the study included 360 teachers, all from the public schools at the primary level in West Algeria. Sampling is an important constituent in field research because it is often neither possible nor desirable to collect data from the entire population Best & Kahn (2006). The researcher designated individuals and sites that can best supply relevant information needed to answer the research questions raised Creswell (2008). Patton (2002) and Suri (2011) argue that the logic and power of purposeful sampling derive from the emphasis of in-depth understanding. The sample consists of 360 randomly selected primary school teachers from 60 schools located in the western region of Algeria. In the selection procedure of the sampling, geographical regions and type of residence (urban, suburban and village) were taken into consideration. Of the participants, 290 (75%) were female, 90 were (25%) male, 130 (36%) were 5th grade, 120 (33 %) were 4th grade, 110(31%) were 3rd grade classroom teachers and only 26 (7%) out of 360 previously obtained in-service seminars and workshops on oversized classroom management.

Figure 2. Population sampling

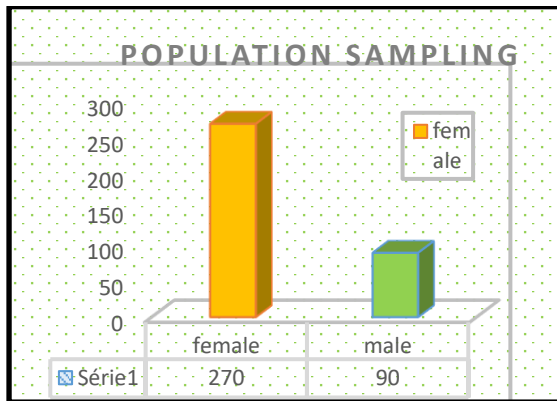
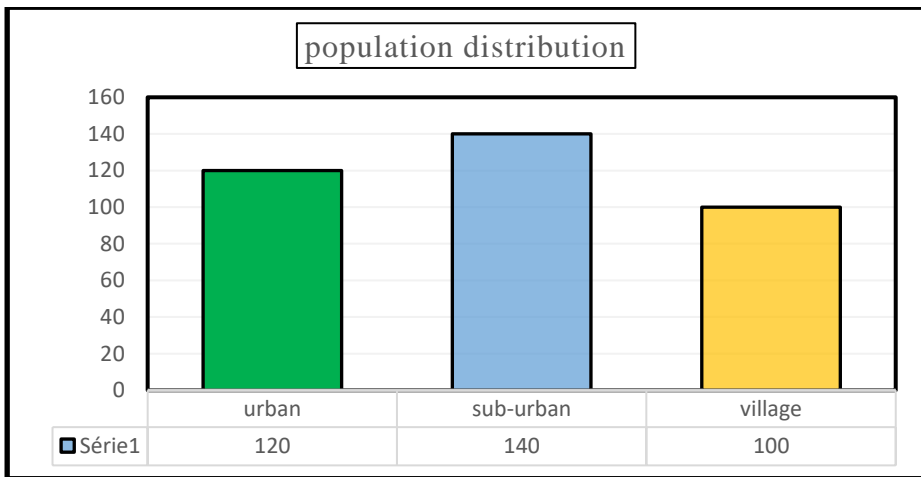


Figure 2 presents the sampling population under study. Attempts were made to ensure teachers were selected with varied qualifications, overall teaching experiences, age groups and gender. These variations enabled a broad range of perspectives to be sought about overcrowded classes when presenting the main themes in the analysis and discussion. Of all participants 120 (33 %) are working in the urban area, 140 (39 %) in suburban area and 100 (28 %) in villages as presented in Figure 3.

Figure 3. Population distribution sampling



3.2. Instrument and data collection

A survey design was used to gather descriptive and comparative data for the purpose of describing the characteristics of primary school teachers Mertens (2010). Surveys can be a powerful and a useful tool for collecting data on human characteristics, such as their beliefs, attitudes, thoughts, and behavior (Biemer, Paul P., and Lars E. Lyberg, 2003; Groves, R. M., E. Singer, and A. Corning, 2000; Gay, Mills, & Airasian, 2009; Mertens, 2010). The survey design fits well within the framework of this study and interprets people’s social actions, beliefs, thoughts and perceptions.

Reliability Statistics

Cronbach's Alpha	N of Items
.073	13

The survey includes two parts: the teachers' demographic knowledge items including their personal, professional and qualification status; and the classroom methods including their level of familiarity with the competency-based approach syllabi and their level of training and experience dealing with oversized classroom education related to the Algerian context. A face validated Likert type questionnaire with a Cronbach alpha reliability of 0.73 was administered to 360 teachers. Cronbach's alpha is a tool used to measure internal consistency. It is generally used when we have multiple Likert questions in a survey that form a scale and we wish to determine if the scale is reliable.

Table 2. Cronbach alpha reliability

The scale comprises 13 items about their conceptions, beliefs and management of large classes. A descriptive analysis was applied for surveying data. Each item in the scale was assigned with a value from 1 (strongly disagree) to 5 (strongly agree). Then, frequencies, percentage rates, means, and standard deviations were calculated using the SPSS 20.0 software for all items. The point-ranges for the selected items in the scale are put as follows: "strongly agree" 5 (4.21–5.00), "agree" 4 (3.41–4.20), "undecided" 3 (2.61–3.40), "disagree" 2 (1.81–2.60), "strongly disagree" 1 (1.00–1.80).

4. Results and Discussion

Table 3 presents the means and standard deviations of all items in the scale for primary school teachers in Algeria as far as overcrowding is concerned. It is clear from table 3 below that the target teachers are not satisfied with the teaching and learning environment in overcrowded classrooms. 92% of my respondents revealed that they are teaching under pressure. They claimed that it is difficult for them to move easily in their classrooms due to the large number of students.

The outcomes reveal that the respondent teachers strongly agreed on the fact that heavy classes prevent them to give quality education (4.53), impact teachers' classroom management(4.47), hinder students' learning opportunities (4.23), disruptive behaviours sweep large classes(4.47), teaching under pressure (4.30); whereas they agreed that oversized classes prevent students from concentrating on the lessons(3.60), hinder student performance(4.00), create discipline problems(3.93), and restrict teachers movements (3.80)

Table 3. The means and standard deviations of all items in the scale for primary school teachers (N=360)

Descriptive Statistics				
N°	Items	N	Mean (1-5)	Std. Deviation
1	Heavy classes hamper teachers deliver quality education	360	4.53	.619
2	Overcrowding impact teachers' classroom management	360	4.47	.619
3	Noise making is very rampant in your schools	360	4.33	.790
4	Large classes hinder student performance	360	4.00	.818
5	Oversized classes prevent students from concentrating on the lessons	360	3.60	.954
6	Overcrowding hinder students' learning opportunities	360	4.23	.884
7	Overpopulated classes create discipline problems	360	3.93	.930
8	Disruptive behaviours sweep large classes	360	4.47	.619
9	teachers' movement in crowded classes is very restricted	360	3.80	.834

10	Large classes prevent teachers to differentiating instruction	360	4.13	.958
11	Teachers' questions cannot spread round the class	360	3.93	.855
12	Teachers face feedback and assessment issues in large classes	360	4.27	.681
13	Teaching under pressure in oversized classes	360	4.30	.691

The analysis of table3 reveals that primary school teachers may be classified

under two categories:

1. Teachers strongly agreed that classroom overcrowding has negative impact on the teaching and learning process (items 1,2,3,6,8,12,13). They consider that such problems impeding the implementation of effective instruction in primary schools.

2. Teachers agreed that large classes generate factors that slow down students' performance. Central to this view, my respondents consider oversized classes as a major challenge related to discipline issues and differentiating instruction following the competency based approach adopted by the Algerian educational system during 2003.

Evidence showed that there is a close relationship between the class size number and the teachers' performance. It has found through different interviews and observations that teachers' classroom control is greatly affected by the huge number of learners put in small classes. According to the literature review, overcrowded classrooms has great influence on teachers' educational performance. In contrast, less crowded classrooms have a direct influence on the effectiveness of teachers in their daily instruction.

Most teachers 69% declared that overcrowded classroom is the major factor responsible for school failure in the target school. Some teachers exhibited bad impressions about the classroom context including seating, learners' density and noise which hinders instruction quality. They contended that in small class teachers have more opportunities for individualized interaction to satisfy students' individual needs in due time and to engage them in authentic learning experiences. In contrast to large classes, teachers failed to pay attention to individual students and to actively involve them in different activities

Generally, it has been observed in overcrowded classes that teachers devote more time to classroom management and discipline. They have less time to organise and use forms of creative instruction required to achieve clearly defined criteria, and to guide students to develop skills and competencies needed to align with the curriculum objectives. Besides, teachers declared that student seem reluctant to take part in classroom activities. All of these factors combined can develop classroom negative attitudes and perceptions and fail to develop students' learning basic skills. Crowded classroom circumstances make it difficult for teachers to focus on their teachings and definitely limit the amount of time they can spend on innovative teaching methods such as cooperative learning and group work leaving teachers stressed and overworked, particularly when faced with students' misbehaviour problems. Teachers seemed discouraged and often disgusted with the space shortage. They have not sufficient classroom space to move freely and to have access to materials and services to diagnose students' strength and weakness in the atmosphere of high degree of stress, anxiety and tension.

5. Conclusion

This research aimed to determine teachers' perceptions of the practices and challenges they are expected to meet when teaching in overcrowded classrooms. The study delineates some features that were classified under two broad inter-related themes that emerged from the content analysis of the gathered data. These are (1) primary school teachers' perception of crowded classrooms challenges, and (2) the influence of large classes on teachers' classroom instructions. The findings of this field research revealed that the primary school teachers in Algeria clearly recognised that classroom overcrowding negatively affected both classroom activities and instructional techniques. My target teachers clearly recognised that students learn at different speeds and in different ways, but at the same time they strongly confirmed that larger classes are the influencing factor behind students' behavioural problems, which destroy the teaching and learning environment and thus deprive learners of a lot of activities that play a constructive role in developing their skills and competencies. The evidence may be interpreted on the fact that primary school teachers are suffering from the bad classroom environment particularly, many behaviour and discipline problems related to stress issues. Results indicate that stress in the classroom environment affects deeply teachers' motivation and engagement since all become more challenging as the number of students increases. This

may be explained that my informants failed to cope with the overcrowded classroom phenomenon and reduces the quality of the teaching and learning process.

This result concurs with several research findings (Carlson, 2000; Barretto, 2005; Yaman, 2009; Mweru, 2010; Khouya, 2018). Most of the target teachers are not satisfied with the classroom conditions. They exhibited a deep feeling of anxiety about the students' learning decline. This alarming situation must urge experts and stakeholders to think over the problem and to propose positive solutions for the improvement of the schooling conditions in Algeria. Efforts should diagnose the strengths and weaknesses of individual learners, and to identify those who are in need of special services. This could be done through building new schools and training more teachers so as to cope with overpopulated classes and to mitigate the strained classroom atmosphere. Primary education needs to adopt innovative reform and practices to reduce the burden over the teachers and to enhance school performance .

References

Books

- [1] Biemer, P. P., & Lyberg, L. E. (2003). Introduction to survey quality (Vol. 335). John Wiley & Sons.
- [2] Çelik, V. (2002). Classroom management. Ankara: Nobel Publishing.
- [3] Creswell, J. W. (2008). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (3rd ed.). New Jersey: Pearson Prentice Hall.
- [4] Gay, L. R., Mills, G., & Airasian, P. W. (2009). Educational research: Competencies for analysis and interpretation. Upper Saddle Back, NJ: Merrill Prentice-Hall.
- [5] Heppner, F. (2007). Teaching the Large College Class: A Guidebook for Instructors with Multitudes. San Francisco: Jossey-Bass.
- [6] Shamim, F. (2012). 'Teaching large classes'. In Burns, A. & Richards, J.C. (eds). The Cambridge Guide to Pedagogy and Practice in Second Language Teaching. Cambridge: Cambridge University Press.
- [7] Shirley, M. (2017). The Effects of Overcrowding on Student Academic Performance in Kentucky High Schools.
- [8] Patton, M. Q. (2002). Qualitative research & evaluation methods, 3rd edn.(Sage Publications: Thousand Oaks).

Revue

- [1] Bahanshal, D. A. (2013). The effect of large classes on English teaching and learning in Saudi secondary schools. *English Language Teaching*, 6(11), 49.
- [2] Barretto, E. S. d. S., & Sousa, S. Z. (2005). Thoughts on learning cycle policies in Brazil. *Cadernos de Pesquisa*, 35(126), 659-688.
- [3] Best, J. W., & Kahn, J. V. (2006). *Research in education*, 10th. New Delhi: PHI Learning Private Ltd.
- [4] Çakmak, M. (2009). The perceptions of student teachers about the effects of class size with regard to effective teaching process. *The qualitative report*, 14(3), 395-408.
- [5] Carbone, E., & Greenberg, J. (1998). Teaching large classes: Unpacking the problem and responding creatively. *To improve the academy*, 17(1), 311-326.
- [6] Groves, R. M., Singer, E., & Corning, A. (2000). "Leverage-saliency theory of survey participation: description and an illustration". *The Public Opinion Quarterly* 64(3), 299-308.
- [7] Carpenter, J. M. (2006). Effective teaching methods for large classes. *Journal of Family & Consumer Sciences Education*, 24(2), 13-23.
- [8] Khan, P., & Iqbal, M. (2012). Overcrowded classroom: A serious problem for teachers. *University of Science and Information Technology*, 49, 10162-10165.
- [9] KHOUYA, Y. B. (2018). Students Demotivating Factors in the EFL classroom: The Case of Morocco. *Advances in Language and Literary Studies*, 9(2), 150-159.
- [10] Letina, A. (2015). Application of traditional and alternative assessment in science and social studies teaching. *Croatian Journal of Education: Hrvatski časopis za odgoj i obrazovanje*, 17(Sp. Ed. 1), 137-152.
- [11] Marais, P. (2016). "We can't believe what we see": Overcrowded classrooms through the eyes of student teachers. *South African Journal of Education*, 36(2).
- [12] Mertens, D. M. (2010). "Transformative mixed methods research. *Qualitative inquiry* 16(6), 469-474.
- [13] Mweru, M. (2010). Why are Kenyan teachers still using corporal punishment eight years after a ban on corporal punishment? *Child Abuse Review*, 19(4), 248-258.
- [14] Negash, N., & Shamim, F. (2007). Maximizing learning in large classes: issues and options: British Council.

- [15] O'Sullivan, M. C. (2006). Teaching large classes: The international evidence and a discussion of some good practice in Ugandan primary schools. *International Journal of Educational Development*, 26(1), 24-37.
- [16] Pedder, D. (2006). Are small classes better? Understanding relationships between class size, classroom processes and pupils' learning. *Oxford Review of Education*, 32(02), 213-234.
- [17] Sargent, T. C., & Hannum, E. (2009). Doing more with less: Teacher professional learning communities in resource-constrained primary schools in rural China. *Journal of teacher education*, 60(3), 258-276.
- [18] Shirley, M. (2017). The Effects of Overcrowding on Student Academic Performance in Kentucky High Schools.
- [19] Suri, H. (2011). "Purposeful sampling in qualitative research synthesis". *Qualitative Research Journal* 11(2), 63-75.
- [20] Van Dyke, J. A., Johns, C. L., & Kukona, A. (2014). Low working memory capacity is only spuriously related to poor reading comprehension. *Cognition*, 131(3), 373-403.
- [21] Yaman, H. (2009). Teachers' Views on the Applicability of the Turkish Course Curriculum in Crowded Primary Classrooms. *Educational Sciences: Theory and Practice*, 9(1), 349-359.