

# Changes in the Educational Conditions of Kindergarten

March 2021



*What are some improvements needed from the changes in  
the educational conditions of kindergartens?*

10 policy projects for changing the future education post-COVID-19

## **Changes in the Educational Conditions of Kindergartens**



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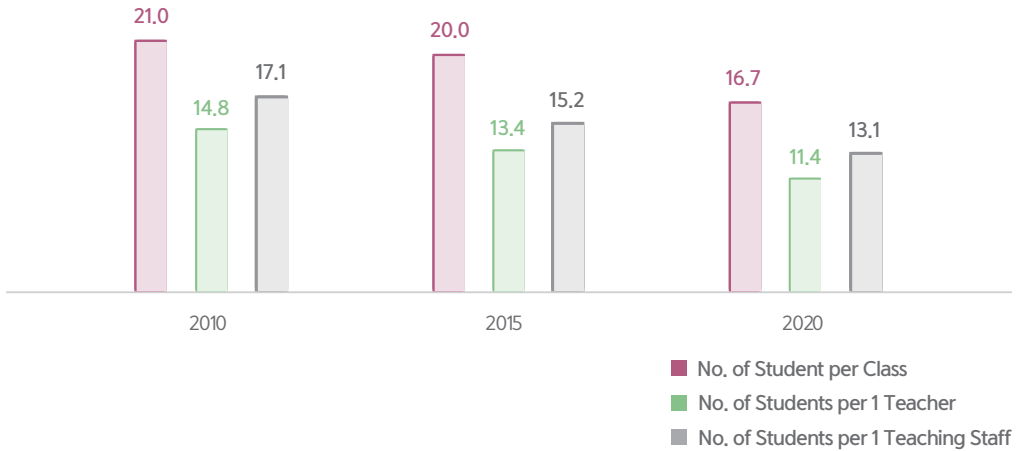
## Changes in the Educational Conditions of Kindergarten

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Expansion of public kindergarten is a major government project for the public interest in early childhood education, and the strengthening of public interest in early childhood education is included in 10 policy projects for changing the future education post-COVID-19. Under such consideration, I intended to look at the changes and improvements in the educational conditions of kindergarten in local communities from 2010. The data are in 5-year intervals from 2010, meaning 2010, 2015 and 2020, and they include number of students per 1 teacher, number of students per class, and number of students per 1 teaching staff. Number of students per 1 teaching staff include not all teachers, but general teachers, classroom teachers and contract teachers. As such, number of students per 1 teaching staff refers to the number of students responsible by 1 teaching staff who interacts with students in classroom. Therefore, as compared to the number of students per 1 teacher, this index considers the students' actual experience more. By looking at the changes in the educational conditions of kindergartens according to region and establishment type during the past 10 years, I intended to consider neglected, or blindspots of, kindergarten education in community units, as well as understanding the status of public interest of early childhood education currently being implemented.

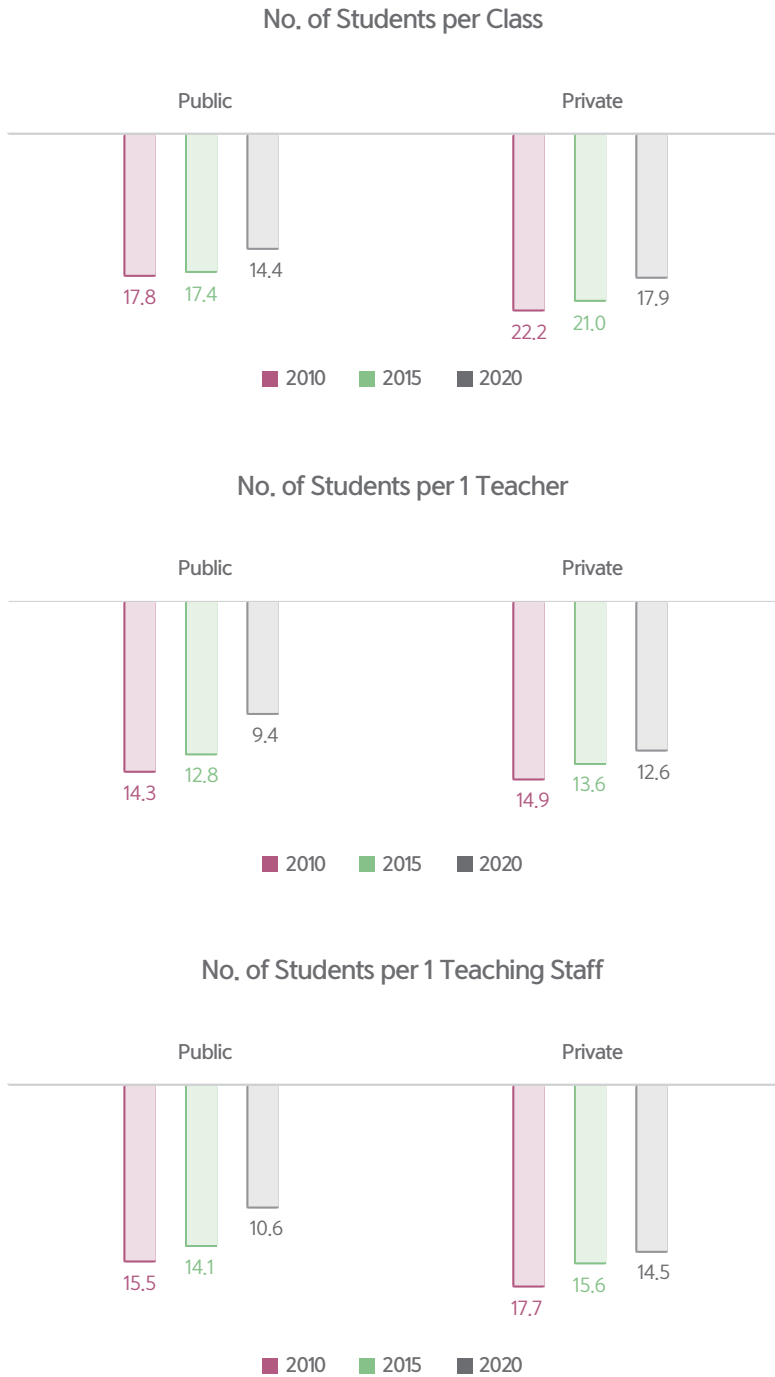
[Diagram 1] indicates number of students per class, number of students per 1 teacher and number of students per 1 teaching staff to show the changes in the educational conditions of kindergartens during 2010~2020. During the past 10 years, the overall educational conditions of kindergarten has improved, but the status of number of students per 1 teacher is relatively good, as compared to the number of students per class, which needs improvements. On the other hand, the number of students per 1 teacher and per 1 teaching staff shows a difference of 2~3 people, but this is due to how a teacher is defined. It only considered teachers, classroom teachers and contracted teachers (excluding hourly teachers), who interacts directly with students in classrooms. The number of students per 1 teacher and 1 teaching staff has increased continuously from 2010 to 2020. This reflects the results from policy to improve the quality of early childhood education, including increasing the number of teachers and improving their expertise, as well as public interest in early childhood education from physical aspects, such as expanding public kindergarten, etc..

[Diagram 1] Changes in Educational Conditions of Kindergarten  
(2010, 2015, 2020)



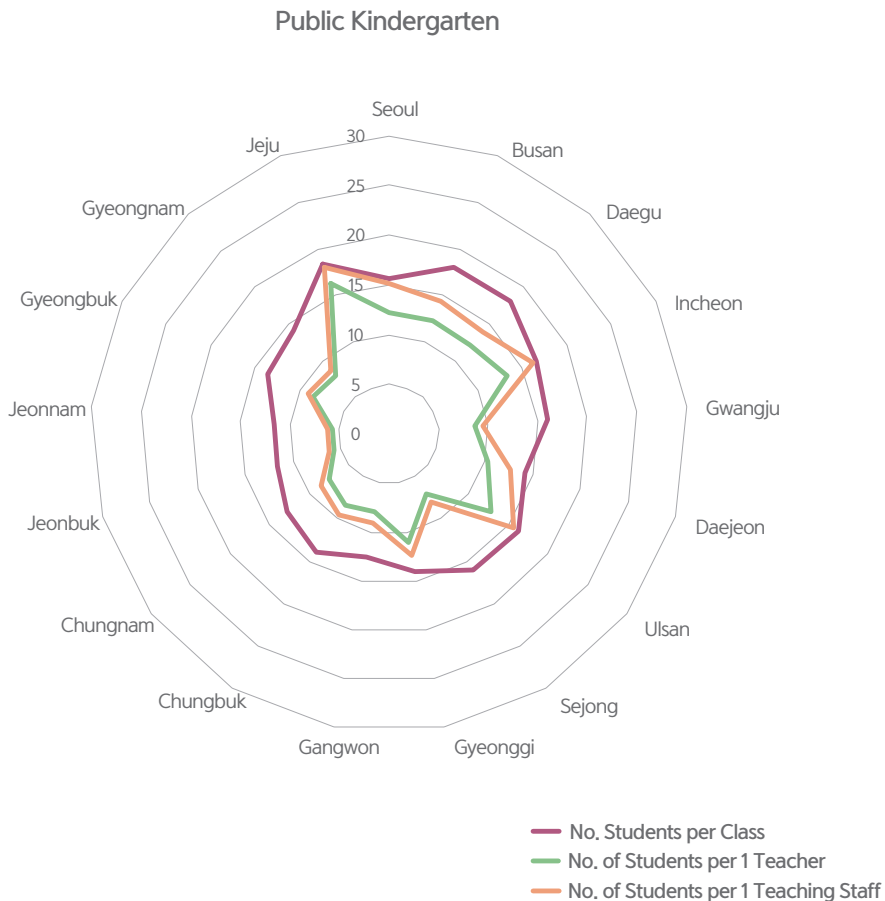
[Diagram 2] shows the changes in educational condition by the establishment type. First, the number of students per class for public kindergarten remain similar with 17.8 in 2010 and 17.4 in 2015. However, in 2020, the number decreased by 3 students, to 14.4 students. Private kindergartens also showed positive changes of number of students decreasing by 3.1, from 22.2 in 2010, 21.0 in 2015 and 17.9 in 2020. However, the number of students per class still needs to improve for private kindergartens, as compared to public kindergarten. The number of students per 1 year showed a difference of 0.6 between public with 14.3 students and private with 14.9 students, in 2010. In 2015, public was 12.8 and private 13.6, and in 2020, the public was 9.4 and private 12.6. During the most recent 5 years, the number of students per 1 teacher between the kindergarten type has increased by approximately 4 times. The number of students per 1 year for the public kindergarten has decreased 5 in 2010, as compared to 2010. However, the number for the private kindergarten was 2.4. Meaning, the difference is a result of improving the number of students per 1 teacher for the public kindergartens, as compared to private kindergartens during the past 5 years. The difference in the number of students per 1 teaching staff between public and private kindergartens has increased from 2.2 in 2010 to 3.9 in 2020. This is due to the fact the improvements in public kindergartens outpace that of private kindergartens. The improving the number of students per 1 teaching staff shows difference of 2 times, where the public kindergarten is 31.6 but their private counterparts only 18.0%.

[Diagram 2] Changes in Educational Conditions of Kindergarten by establishment type (2010, 2015, 2020)



[Diagram 3] shows the educational conditions of kindergartens by type and region. It can be determined that the educational conditions are better when area according to the regional connections of the number of students per class, per 1 teacher and per 1 teaching staff are smaller, which can estimate the educational conditions. Overall, it was confirmed that the public kindergartens had smaller areas and better educational conditions, as compared to private kindergartens. On the other hand, the private kindergarten's area of number of students per 1 teacher and 1 teaching staff is oval-shaped, whereas that of the public kindergarten is star-shaped. This indicates that the educational conditions of number of students per 1 teacher and 1 teaching staff is better overall, as compared to private kindergartens; however, the difference in educational conditions of public kindergartens between regions needs to be reviewed.

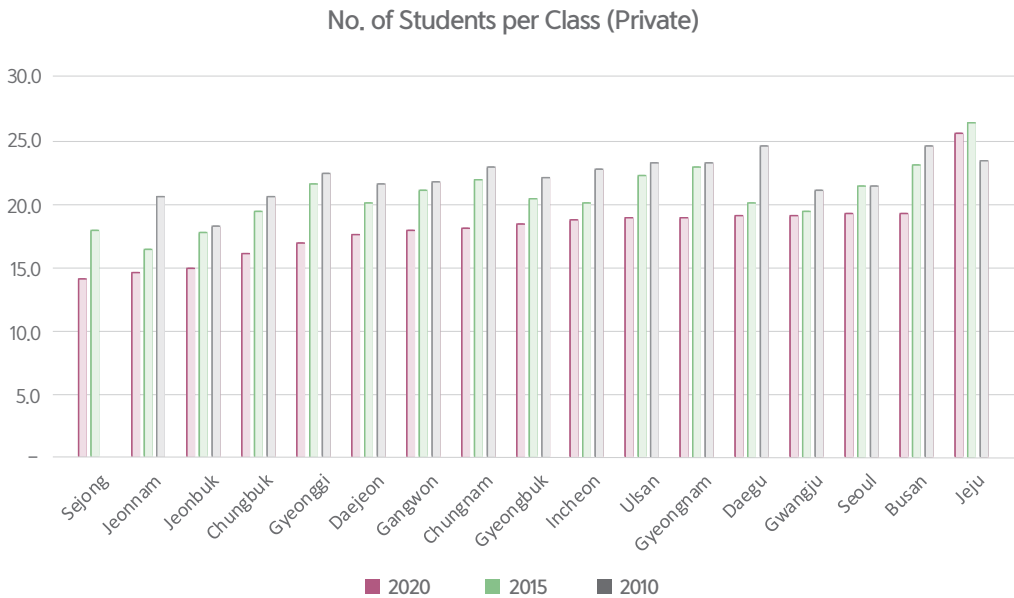
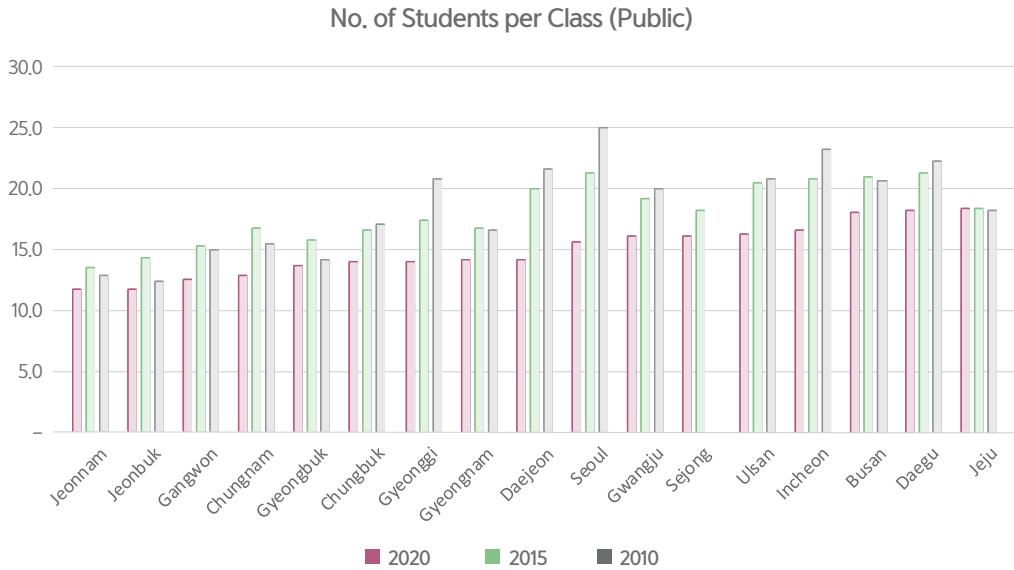
[Diagram 3] Educational Conditions of Kindergarten by Type and Region(2020)





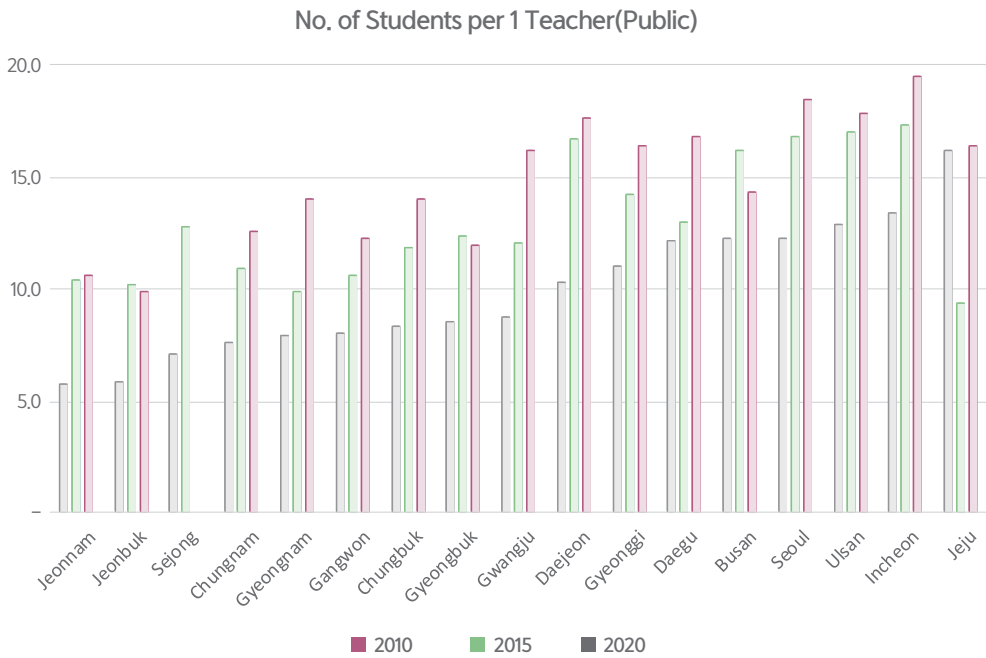
[Diagram 4] shows changes in the number of students per class, and Jeonnam and Jeonbuk, 11.7 people, Gangwon, 12.5 people and Chungnam, 12.8 people, had good number of students per class, in that order, and Jeju, 18.3 people, Daegu and Busan, 18.1 people, and Incheon, 16.5 people, had relatively large number of students per class, in that order. Especially, the difference in the number of students per class between Jeonnam and Jeju was relatively large at 6.7 people. Moreover, the difference in public kindergartens between regions was approximately 3.8 people in 2010 but improved to 2.2 people in 2020; however, in comparison, the private kindergarten's regional difference increased from 1.6 people in 2010 to 2.6 people in 2020. Seoul showed 37.4% improvement, with approximately 9.3 student decrease in the number of students per class in the public kindergartens over the past 10 years, and Gwangju showed 19.5% improvement, with 3.9 student decrease in the number of students per class in the public kindergartens over the past 10 years. Also, overall, the number of students per class in the private kindergartens was larger than that of the public kindergartens. The private kindergartens also showed better number of students per class conditions in Jeonnam, Jeonbuk and Chungbuk regions. Especially, Jeju had the largest number of students per class for both private and public kindergartens.

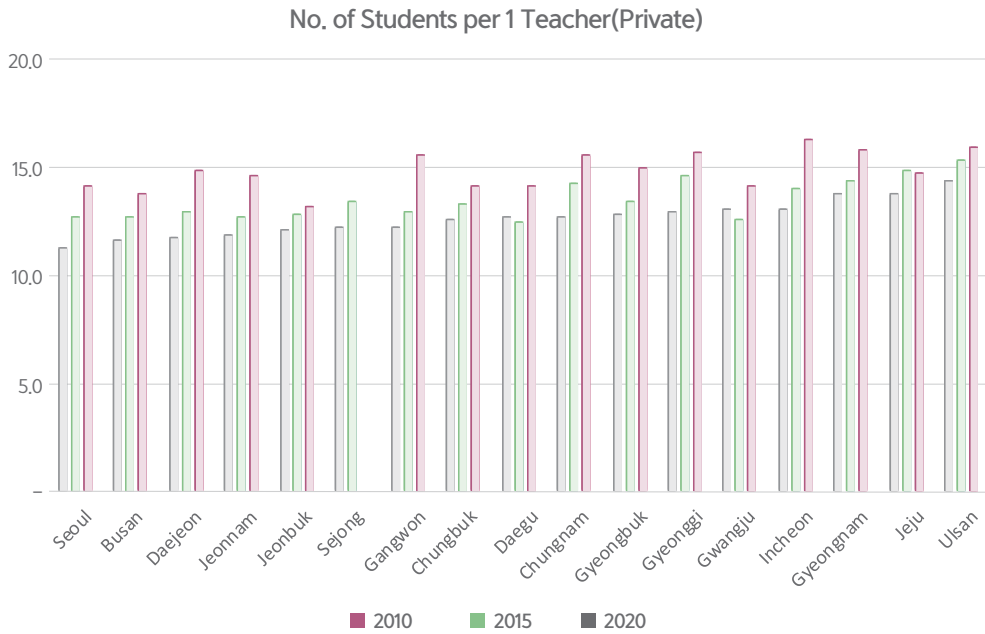
[Diagram 4] Changes in the No. of Students per Class (2010, 2015, 2020)



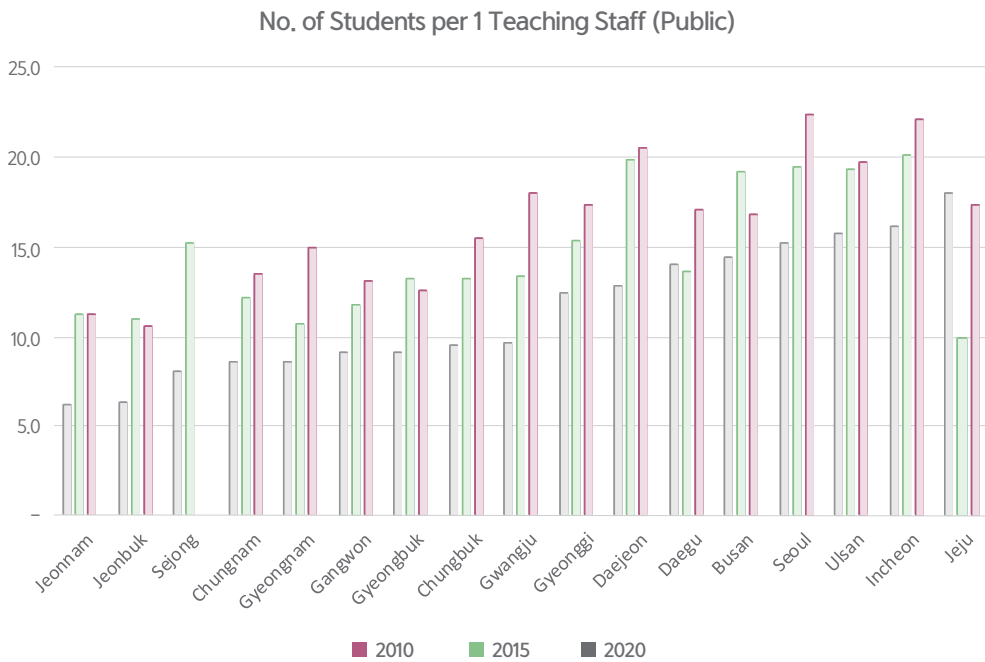
[Diagram 5] indicates the changes in the number of students per 1 teacher, and the differences between region and establishment type are similar to that of number of students per class. In case of the public kindergartens, Jeonnam had the lowest number of students per 1 teacher, with 5.7 students, and Jeju had the largest number, with 16.2 students. The gap in the number of students per 1 teacher between regions for the public kindergartens was 3.0 in 2020, which is similar to that of 2.9 in 2010, and the private kindergartens also did not show much difference, from 0.9 in 2010 to 0.8 in 2020.

[Diagram 5] Changes in the No. of Students per 1 Teacher (2010, 2015, 2020)

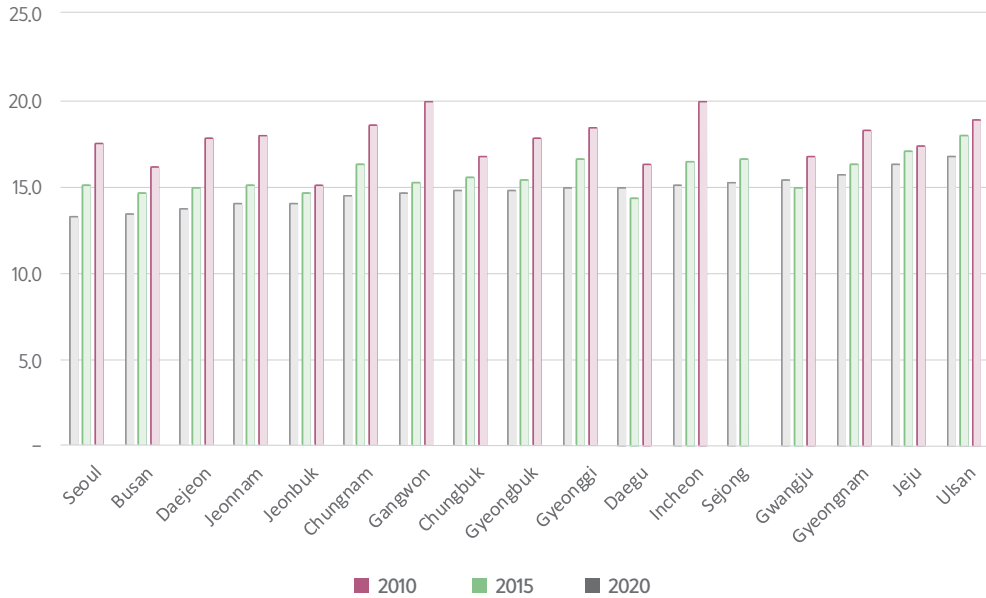




[Diagram 6] Changes in the No. of Students per 1 Teaching Staff (2010, 2015, 2020)



No. of Students per 1 Teaching Staff (Private)



[Diagram 6] shows the changes in the number of students per 1 teaching staff. The regional difference in the number of students per 1 teaching staff at public kindergartens was 3.6 in 2010 and 3.7 in 2020, and the private kindergartens was 1.3 in 2010 and 1.0 in 2020. As compared to the gradual improvement in the gap between the regions for the number of students per class in public kindergartens, the regional gap in the number of students per 1 teacher and per 1 teaching staff is improving more gradually.

<Table 1> 10 Lowest Regions for Educational Conditions of Kindergarten

Public						Private					
No. of Students per Class		No. of Students per 1 Teacher		No. of Students per 1 Teaching Staff		No. of Students per Class		No. of Students per 1 Teacher		No. of Students per 1 Teaching Staff	
Yeonje-gu, Busan	21.5	Jeju-si, Jeju-do	17.2	Nam-gu, Busan	20.5	Jeju-si, Jeju	25.7	Seongju-gun, Gyeongbuk	17.3	Ongjin-gun, Incheon	30.0
Gangseo-gu, Busan	21.0	Nam-gu, Busan	16.4	Jeju-si, Jeju	19.5	Mungyeong-si, Gyeongbuk	24.7	Haenam-gun, Jeonnam	16.4	Seongju-gun, Gyeongbuk	23.0

Public						Private					
No. of Students per Class		No. of Students per 1 Teacher		No. of Students per 1 Teaching Staff		No. of Students per Class		No. of Students per 1 Teacher		No. of Students per 1 Teaching Staff	
Gijang-gu, Busan	20.7	Yeonsu-gu, Incheon	16.0	Yeonsu-gu, Incheon	18.9	Seogwipo-si, Jeju	24.2	Buk-gu, Ulsan	15.9	Goseong-gun, Gangwon	22.0
Dalseong-gun, Busan	20.2	Buk-gu, Ulsan	15.0	Buk-gu, Ulsan	18.4	Yeonje-gu, Busan	23.6	Geochang-gun, Gyeongnam	15.7	Seogwipo-si, Jeju	20.4
Yeonsu-gu, Incheon	20.0	Gijang-gun, Busan	14.5	Busanjin-gu, Busan	17.8	Seongju-gun, Gyeongbuk	23	Okcheon-gun, Chungbuk	15.4	Yeongcheon-si, Gyeongbuk	20.1
Suyeong-gu, Busan	19.9	Seo-gu, Incheon	14.4	Seo-gu, Incheon	17.5	Boryeong-si, Chungnam	22.4	Milyang-si, Gyeongnam	15.3	Haenam-gun, Jeonnam	19.7
Jeju-si, Jeju	19.8	Yangcheon-gu, Seoul	14.3	Jung-gu, Incheon	17.4	Yongsan-gu, Seoul	22.4	Samcheok-si, Gangwon	15.2	Okcheon-gun, Chungbuk	19.6
Nam-gu, Daegu	19.5	Busanjin-gu, Busan	14.2	Gangdong-gu, Seoul	17.3	Seodaemun-gu, Seoul	22.3	Gangseo-gu, Busan	15.1	Boeun-gun, Chungbuk	19.0
Buk-gu, Ulsan	19.4	Seongdong-gu, Seoul	13.8	Yangcheon-gu, Seoul	17.3	Dalseong-gun, Daegu	22.2	Ongjin-gun, Incheon	15.0	Sokcho-si, Gangwon	18.9
Busanjin-gu, Busan	18.8	Seogwipo-si, Jeju	13.8	Gangseo-gu, Busan	17.1	Goseong-gun, Gangwon	22.0	Gyeongju-si, Gyeongbuk	14.9	Samcheok-si, Gangwon	18.8

<Table 2> 10 Best Regions for Educational Conditions of Kindergarten

Public						Private					
No. of Students per Class		No. of Students per 1 Teacher		No. of Students per 1 Teaching Staff		No. of Students per Class		No. of Students per 1 Teacher		No. of Students per 1 Teaching Staff	
Uiseong-gun, Gyeongbuk	5.4	Yangyang-gun, Gangwon	3.1	Yangyang-gun, Gangwon	3.1	Goheung-gun, Jeonnam	6.4	Pyeongchang-gun, Gangwon	5.3	Namwon-si, Jeonbuk	7.1
Yangyang-gun, Gangwon	5.8	Imsil-gun, Jeonbuk	3.4	Imsil-gun, Jeonbuk	3.6	Jincheon-gun, Chungbuk	6.6	Namwon-si, Jeonbuk	5.6	Pyeongchang-gun, Gangwon	8

Public					Private						
No. of Students per Class		No. of Students per 1 Teacher		No. of Students per 1 Teaching Staff		No. of Students per Class		No. of Students per 1 Teacher		No. of Students per 1 Teaching Staff	
Hampyeong-gun, Jeonnam	6.1	Boseong-gun, Jeonnam	3.6	Hampyeong-gun, Jeonnam	3.6	Ongjin-gun, Incheon	7.5	Ulleung-gun, Gyeongbuk	6	Ulleung-gun, Gyeongbuk	9
Danyang-gun, Chungbuk	6.3	Hampyeong-gun, Jeonnam	3.6	Boseong-gun, Jeonnam	3.7	Boseong-gun, Jeonnam	8	Wando-gun, Jeonnam	7.8	Jung-gu, Busan	9.7
Gunwi-gun, Gyeongbuk	6.6	Gokseong-gun, Jeonnam	3.6	Uiseong-gun, Gyeongbuk	3.9	Pyeongchang-gun, Gangwon	8	Goheung-gun, Jeonnam	8	Wando-gun, Jeonnam	10.3
Boseong-gun, Jeonnam	6.8	Uiseong-gun, Gyeongbuk	3.7	Gangjin-gun, Jeonnam	3.9	Cheongyang-gun, Chungnam	8.2	Boseong-gun, Jeonnam	8	Goheung-gun, Jeonnam	10.7
Gangjin-gun, Jeonnam	6.9	Gangjin-gun, Jeonnam	3.8	Namwon-si, Jeonbuk	4.2	Namwon-si, Jeonbuk	8.3	Yeongwol-gun, Gangwon	8	Boseong-gun, Jeonnam	10.7
Gokseong-gun, Jeonnam	7.1	Namwon-si, Jeonbuk	3.9	Gokseong-gun, Jeonnam	4.2	Ulleung-gun, Gyeongbuk	9	Jung-gu, Busan	8.1	Gochang-gun, Jeonbuk	10.8
Imsil-gun, Jeonbuk	7.1	Hwasun-gun, Jeonnam	3.9	Gimje-si, Jeonbuk	4.2	Dongducheon-si, Gyeonggi	9.2	Cheongyang-gun, Chungnam	8.2	Yangyang-gun, Gangwon	10.9
Pocheon-si, Gyeonggi	7.2	Danyang-gun, Chungbuk	4	Sinan-gun, Jeonnam	4.3	Yeongwol-gun, Gangwon	9.3	Taebaek-si, Gangwon	8.3	Taebaek-si, Gangwon	11

<Table 1> and <Table 2> shows the best and worst 10 regions in terms of the number of students per class, per 1 teacher and per 1 teaching staff by the type of kindergartens based on 229 regions in 2020. First, in case of the public kindergartens, the regions with the largest number of students per class are Yeonje-gu, Busan, Gangseo-gu, Busan, and Gijang-gun, Busan, in that order, and followed by Dalseong-gun, Daegu and Yeonsu-gu, Incheon. Busan accounted for half of the 10 worst regions. Jeju-si, with 17.2, Nam-gu, Busan, with 16.4, and Yeonsu-gu, Incheon, with 16.0, had the largest number of students per 1 teacher. Regions with the largest number of students per 1 teacher also had largest number of students per 1 teaching staff. The 10 worst regions requiring improvements for the public kindergartens included larger cities, such as Busan, Incheon, Daegu, Ulsan and Seoul. On the other hand, the regions with

better educational conditions for public kindergartens were mostly smaller cities. This is reflective of the difference in the number of students and density of the urban and rural areas.

We looked at the number of students per class, per 1 teacher and per 1 teaching staff over the past 10 years, and confirmed that changes and improvements in the educational conditions of kindergartens have continued. However, the difference in educational conditions of kindergartens depending on the type and region still need to be improved, as compared to 10 years ago. The Ministry of Education has set a target of 40% enrollment rate for the public kindergartens by 2024, so we expect a continued policy to expand public kindergartens. However, it is necessary find a region-based policy in order to decrease the educational conditions of kindergartens between regions in order to strengthen the public interest of early childhood education, that is more practical.