

Consultancy Study on the Effectiveness of the Provision of Quality Kindergarten Education in Hong Kong under the Kindergarten Education Policy

Executive Summary

February 2022

The Hong Kong Education Bureau implemented the new kindergarten education policy (KG policy) starting from the 2017/18 school year with the aim to enhancing kindergarten (KG) education in Hong Kong and providing good quality and highly affordable education for kindergarten children.

PURPOSE

1. This Executive Summary is associated with the Final Report for the “Consultancy Study on the Effectiveness of the Provision of Quality Kindergarten Education in Hong Kong under the Kindergarten Education Policy”. It provides a summary of findings from the Pre-policy phase (from June to September 2017), Wave 1 (from November 2017 to September 2018), Wave 2 (from April 2019 to September 2019), and Wave 3 (from June 2020 to November 2020) of this longitudinal study.
2. The multi-method, multi-informant design was guided by theories of implementation research and the Theory of Change (see Figure 1). The study had 3 overall objectives:
 - (i) to examine the effectiveness of the provision of quality KG education in Hong Kong under the KG policy;
 - (ii) to identify good practices and areas for improvement for KGs; and
 - (iii) to investigate school factors that are conducive to the development of quality KG education.

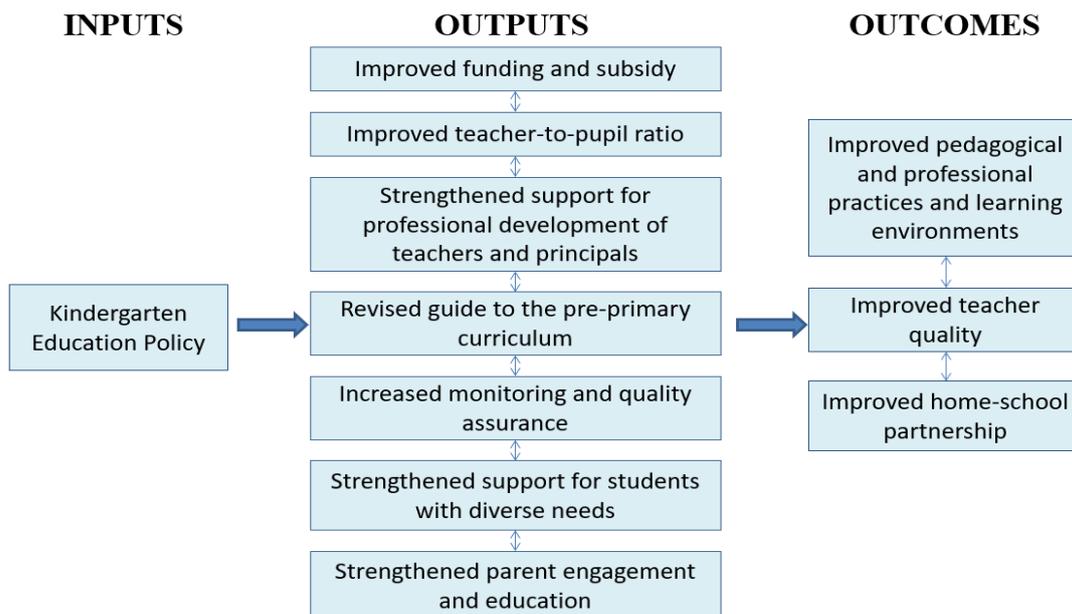


Figure 1. Theory of Change

- This summary concludes findings from (i) classroom observations; (ii) principal, teacher, and parent questionnaires; and (iii) principal, teacher, and parent interviews from all phases of the study.

BACKGROUND OF THE STUDY

- KGs joining the KG education scheme (Scheme) were eligible for participation in the study. The sample of KGs was stratified by district and random sampling with replacement was used to ensure number of KGs meeting the selection criteria by school size and additional support to cater for students' diverse needs, specifically additional grant for support to non-Chinese speaking (NCS) students (NCS Grant) and participation in the On-site Pre-school Rehabilitation Services¹ (OPRS).
- In Wave 1, a total of 121 KGs agreed to participate in the study. In order to increase the likelihood that 100 KGs participated in all three waves of the study, we recruited 20 KGs in addition to our original target of 100 KGs. The principals (Wave 1: 121 KGs, Wave 2: 114 KGs, Wave 3: 106 KGs) and teachers (Wave 1: 1522 teachers from 121 KGs, Wave 2: 1446 teachers from 114 KGs, Wave 3: 1313 teachers from 108 KGs) completed the questionnaires across waves. Figure 2 presents the implemented research design and number of participants for Study 1.

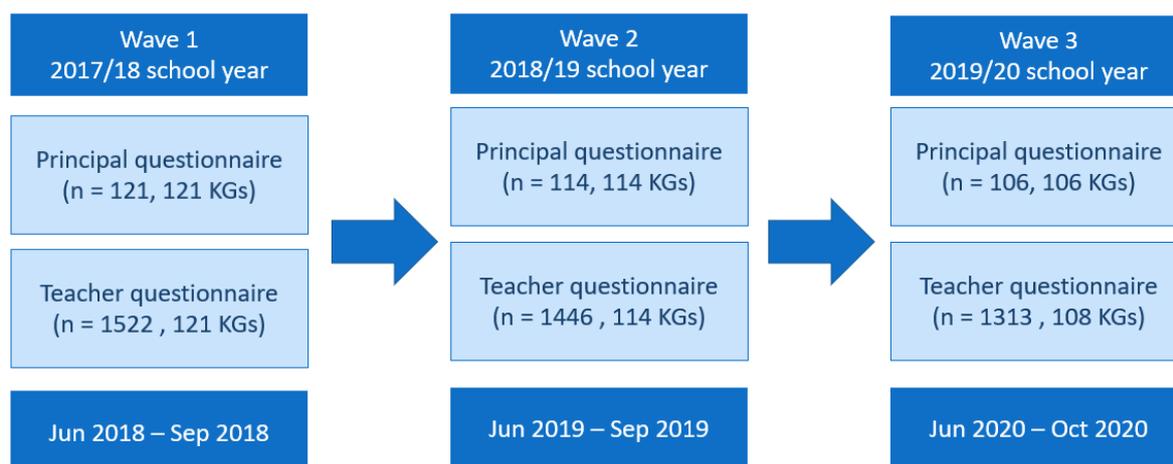


Figure 2. Implemented research design and number of participants² for Study 1

- A sample of 25 KGs was drawn from the initial sample of 100 KGs used for Study 1 (i.e. the KGs before the oversample) for intensive study in Study 2. To understand the general situation before the implementation of the KG policy, 15 K3 classes in these 25 KGs were observed in the Pre-policy phase. From Wave 1 to Wave 3, classroom observations were conducted in two class levels in 25 KGs during each Wave (Wave 1: 25 K1 and 25 K2

¹ The Pilot Scheme on On-site Pre-school Rehabilitation Services was launched by the Government in 2015 and was later regularised in the 2018/19 school year. Inter-disciplinary service teams from the non-governmental organisations provide on-site services for pre-school children with mild disabilities and studying at the participating kindergartens and kindergarten-cum-child care centres. Inter-disciplinary service teams also render support services to teachers/child care workers and parents/carers.

² We collected 121, 114, and 106 principal questionnaires from 120, 113, and 106 principals in Wave 1, Wave 2, and Wave 3 respectively. This was because 2 of the participating KGs had the same principal in both Wave 1 and Wave 2.

classes, Wave 2: 25 K1 and 25 K3 classes, Wave 3: 25 K2 and 19 K3 classes). In the Pre-policy phase, principals from each of the 25 KGs completed a questionnaire and were interviewed. In each wave (from Wave 1 to Wave 3), individual interviews were conducted with the principals of these 25 KGs; 1 teacher from each class observed (50 interviews from 50 classes) and 1 parent from each class observed (50 interviews from 50 classes). Parents of children from classes that were observed completed questionnaires (Wave 1: 879 parents, Wave 2: 798 parents, Wave 3: 431 parents). Figure 3 presents the implemented research design for Study 2.

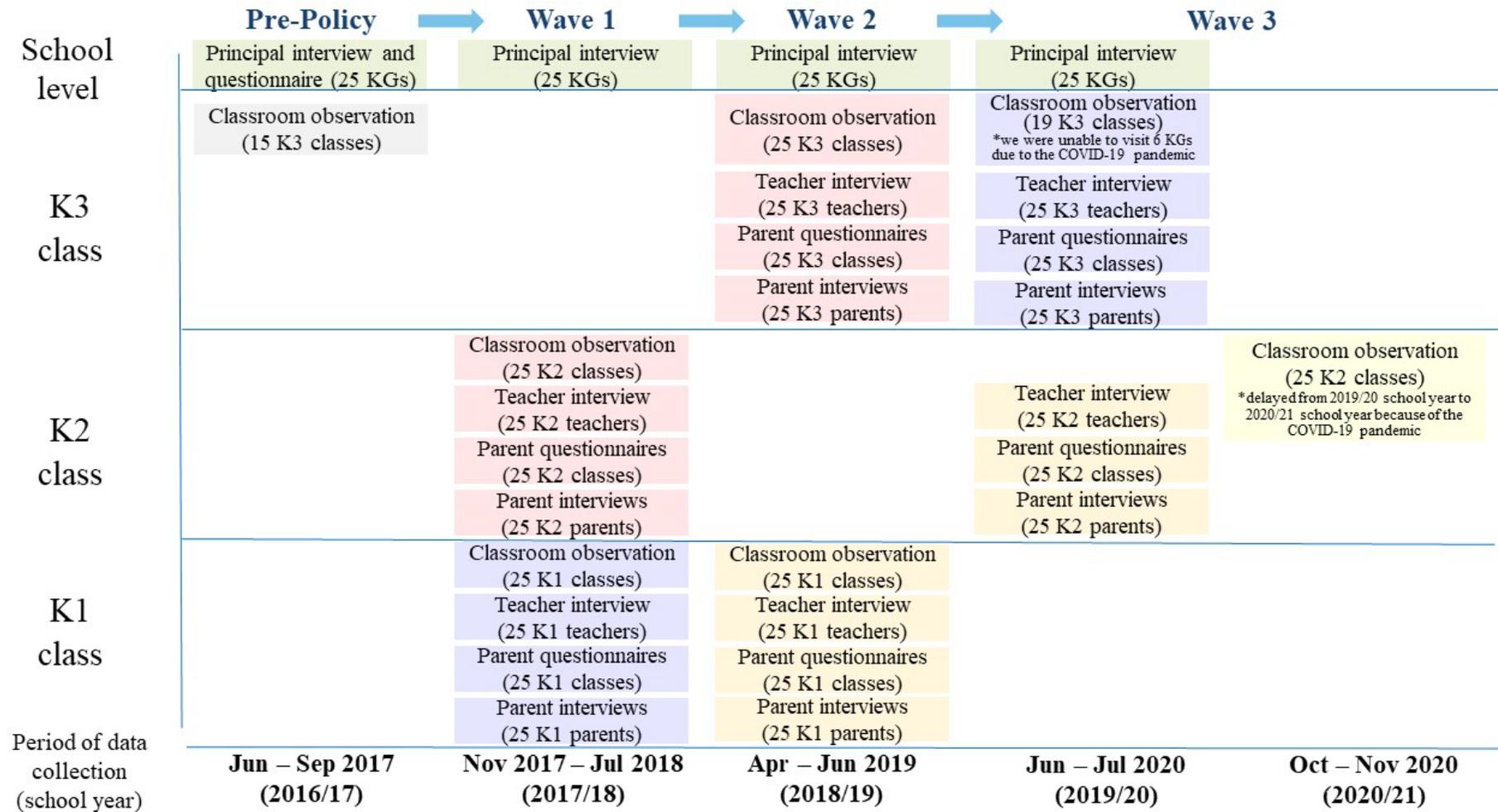


Figure 3. Implemented research design for Study 2

7. The analysis of classroom observations included data from 4 phases, namely Pre-policy and Wave 1, Wave 2 and Wave 3 and allows a comparison between phases. It should be noted that we observed different classes in Wave 1 (K1 and K2 classes), Wave 2 (K1 and K3 classes), and Wave 3 (K2 and K3 classes). One would expect that KGs would prepare children in K3 classes for the transition to primary school and teachers would be responsive to maturational changes in children. The study's design to observe different class levels was to ensure that it is possible to identify differences in the impact of KG policy between the years, and to allow us to make comparisons across class levels over time.
8. The following classroom observational rating scales were used to measure curricular aspects of quality, global and domain-specific quality of stimulation, and the quality of practices that support children's skills in sustained shared thinking from Wave 1 to Wave 3: *Early Childhood Environment Rating Scale- Extension (ECERS-E)*³, the *Measure of Early Learning Environment (MELE)*⁴, and the *Sustained Shared Thinking and Emotional Well-being Scale (SSTEWS)*⁵. We also used the full scale of the *Early Childhood Environment Rating Scale-Revised (ECERS-R)*⁶ for K3 classes in Pre-policy and 4 domains of ECERS-R in Wave 3. The data from the 4 phases (Pre-policy; Wave 1; Wave 2; Wave 3) and 3 reliable observational rating scales (ECERS-E; MELE; SSTEWS) used in all waves were subject to a factor analysis which permits a more parsimonious interpretation of changes. We obtained 4 factors from the analysis, suggesting that 4 dimensions of quality were being measured by the 3 rating scales. We compared the scores on the following 4 factors/dimensions⁷ across waves:
- Factor 1: Supporting socioemotional and cognitive development
 - Factor 2: Learning environment, catering for learner diversity and free-choice indoor activities
 - Factor 3: Nature and living
 - Factor 4: Inclusiveness, group activities and teacher-child interaction
9. During the course of this study, Hong Kong experienced unexpected suspension of face-to-face classes because of the social unrest and pandemic. Unforeseen circumstances caused the sample size to be much smaller than planned in Wave 3 and some of our findings were not in keeping with expectations. The findings from our study are authentic but we do not feel that the classroom observation data from Wave 3 provide a fair evaluation of the KG Policy. While observation data showed a trend for improvement from the Pre-policy phase to Wave 2, there was a decrease in some positive trends from Wave 2 to Wave 3. We believe that these changes are a reflection of prolonged class suspension and extra hygiene and physical distancing requirements placed on KGs and it would be unfair to fault KG teachers for providing fewer activities in Wave 3 than in preceding waves. Survey data indicated

³ Sylva, K., Siraj-Blatchford, I., & Taggart, B. (2010). *Assessing quality in the early years: Early Childhood Environment Rating Scale-Extension (ECERS-E): Four curricular subscales*, rev. 4th ed. New York: Teachers' College Press.

⁴ Measuring Early Learning Quality and Outcomes (MELQO) Project. (2016). *Measure of Early Learning Environments (MELE) Module*. UNESCO. Washington, DC.

⁵ Siraj, I., Kingston, D. & Melhuish, E. (2015). *Assessing Quality in Early Childhood Education and Care: Sustained Shared Thinking and Emotional Well-being (SSTEWS) Scale for 2-5-year-olds Provision*. London, United Kingdom: Trentham Books.

⁶ Harms, T., Clifford, R. M., & Cryer, D. (2005). *Early Childhood Environment Rating Scale - Revised Edition*. New York, NY: Teachers College Press.

⁷ Factor names are adopted with reference to the domains of classroom observation tools (ECERS-E, MELE, SSTEWS, ECERS-R) concerned as well as the guiding principles and relevant learning areas, such as Nature and living, of the Kindergarten Education Curriculum Guide.

that, in comparison to Wave 2, there was increased communication between KGs and parents but fewer activities for parents in Wave 3. Again, these trends are likely to be due to suspension of face-to-face classes.

SUMMARY OF FINDINGS

In the following, we present the summary of findings under the 6 research questions.

Q1. What are the impacts on the learning and teaching of the students (e.g. in curriculum planning, teaching methods, students' engagement in learning activities, etc.)?

10. **Improvements were found in certain aspects of classroom quality across waves.** Scores on Factor 1 (Supporting socioemotional and cognitive development), Factor 2 (Learning environment, catering for learner diversity and free-choice indoor activities), and Factor 4 (Inclusiveness, group activities and teacher-child interaction) increased progressively between Pre-policy and Wave 2, and then decreased slightly in Wave 3. Across time, scores on Factor 3 (Nature and living) were the highest in Wave 1, before decreasing slightly in Wave 2 and then more substantially in Wave 3. This suggests that, up to Wave 2, classroom quality improved in terms of most aspects, including interactional quality that supported children's socioemotional and cognitive development, the physical environment and catering for learner diversity and inclusiveness. The decline in Wave 3 may be related to the COVID-19 pandemic measures that restricted activities and interactions.
11. **Changes were identified on school curricula following the introduction of KECG.** Strengthening the element of free exploration in play and promoting learning through play were the most frequent (around 90%) and consistent changes reported by principals. Other changes on school curricula such as reinforcing catering for learner diversity, strengthening the promotion of moral education and promoting an inclusive culture were also identified.
12. **Teachers reported that the impact of the KECG on their teaching increased across waves.** Analyses of the responses of the 510 teachers who completed the questionnaire in all three waves indicated that they felt the impact of the KECG was greater in later waves. The majority of the teachers acknowledged the benefits of learning through play and stated that a playful learning environment had promoted children's learning.
13. **The increased importance of learning through play was evident from questionnaires and interviews.** An analysis of responses to the questionnaires indicated that the majority of principals and teachers endorsed the importance of play across waves. A large proportion of principals and teachers interviewed reported that they had made changes in accordance with the KECG. Changes to the timetable were made in order to allocate more time for free play, exploration, physical activities, music, and free choice time. More activities including storytelling, picture book reading, role-playing, card games, and "free play day/week" were adopted to facilitate shifting from teacher-led to child-led learning modes and to provide more opportunities for free exploration and learning through play. Some KGs also reorganised physical space for play on campus and increased the number of learning corners for children to choose. Some also added new materials and resources, such as big toys, building toys, special types of blocks, big wheels, recyclable materials, to the learning environment to promote learning through play. The KGs had added new materials to the learning environment to enhance the elements of play and authenticity in learning corners. Some principals and teachers reported having reduced homework and writing tasks for

children or having modified the format of homework. As revealed in interviews some parents noted that writing had been reduced and more play time was given to children. While learning through play is now much more commonly seen in KGs, some principals and teachers were not sure how the play-based pedagogy could be implemented in the classrooms.

Q2. What are the impacts on catering for students' diverse needs (e.g. teachers' understanding of their specific needs, support to their learning, collaboration with relevant experts / external organisations, teachers' training in this regard, etc.)?

14. **More KGs provided additional support to NCS students across waves.** Additional support was provided to NCS students, which include assigning designated teachers or teaching assistants to support NCS students, participating in school-based support programmes, teachers using in-class strategies, and purchasing services by external bodies. The additional support was reported mostly among KGs that received the NCS Grant. Across the waves, a greater proportion of teachers and principals reported in the questionnaires that they had provided support for NCS students, including developing school-based materials, adapting curriculum activities, creating a rich Chinese language environment, encouraging interaction between NCS and Chinese speaking students, and contacting parents to understand children's needs. KGs had provided a more extensive range of support for NCS students across waves as compared with the Pre-policy phase. Among the NCS parents who reported that their children had received support at their KGs, most of them reflected that the support was somewhat useful or very useful.
15. **On the whole, more support was provided for students with special needs.** From the longitudinal analyses of teachers and principals who completed questionnaires in all three waves, we found that a greater percentage of teachers and principals reported providing certain support for students with special needs across waves. Among the different forms of support, contacting parents to understand students' needs, introducing external support, providing appropriate support and creating inclusive environment are the most frequent ones. Across the waves, more principals reported receiving support from OPRS and acquiring services from school social worker, during interviews. Principals and teachers interviewed reported working with external professionals in supporting students with special needs. This suggests that KGs had greater opportunities to work with external professionals to support the development and learning of students with special needs. Among the parents who reported that their children had special needs in questionnaires, a greater percentage of them reported that they received support through the KGs over time. Most of them found the support very useful or somewhat useful. In Wave 2 and Wave 3, there was also evidence of higher quality on inclusiveness and diversity from classroom observations in certain aspects. This outcome may be a result of interactions among multiple factors put forward in the Theory of Change.
16. **Teachers reported being more confident in supporting children with diverse needs across waves.** Items on the questionnaire for teachers and questions posed in the teacher interviews were aligned to the objectives of the KG policy and/or related to factors undergirding teacher effectiveness. Analyses of the responses from the 510 teachers who completed questionnaires in all three waves of the study enable us to determine changes in their perceptions and reported experiences. The majority of teachers reported being fairly or very confident in terms of supporting students with diverse needs (e.g. at risk of

developmental delays, special needs, and NCS students) and teachers' levels of confidence in supporting students with diverse needs increased across the waves.

Q3. What are the impacts on school management and organisation (e.g. transparency, holistic planning in resource deployment, school culture and atmosphere, etc.)?

17. **Principals reported using the grants in different ways to enhance the quality of teaching and learning during interviews.** These included hiring extra staff, supporting the daily operation of the KGs, upgrading equipment and facilities, purchasing toys and teaching materials, organising activities for students and teacher professional development. Revisiting the implementation of the Scheme 3 years after it started in the 2017/18 school year, some principals reported that they were able to hire additional teachers and staff and teachers received higher salaries, and that they had capacity to allow teachers to prepare for teaching, participate in professional development activities, and communicate with parents.
18. **Principals, teachers, and parents were positive about the school culture and atmosphere.** Principals and teachers reported that the KGs had involved teachers in decision making to some extent. In general, parents appreciated that the teachers were caring and loving, took good care of their children and followed up with parents on children's needs. Some parents were also appreciative of the environment and hygiene practices in the schools and mentioned that their child had liked going to schools. In Wave 3, more parents mentioned that they liked the teaching aspect of the schools, including the school curriculum or philosophy, teaching activities/strategies, and qualified and experienced teachers.

Q4. What are the impacts on teachers' professional development including school policy relating to teachers' development (e.g. staffing structure/hierarchy)?

19. **More teachers were willing to spend more time to attend professional development activities.** We observed an increase in the proportion of principals surveyed who expected teachers at their KGs would spend more than 20 hours in the respective school year on professional development activities up to Wave 2 (Wave 1 = 62%, Wave 2 = 67%, Wave 3 = 49%). Similarly, teachers who reported that they would spend more than 20 hours on professional development activities increased from Wave 1 (45% teachers) to Wave 2 (53% teachers), and decreased from Wave 2 to Wave 3 (46% teachers). In line with these findings, according to reports in teacher questionnaires of the 510 teachers who completed all three waves, the average expectations for professional development activities increased between Wave 1 and Wave 2, then decreased between Wave 2 and Wave 3. There might have been fewer professional development activities during the COVID-19 pandemic than previous years and there may have been less variability in expectations towards professional development that school year. More than 90% of the teachers in all three waves agreed that professional development activities had suited their needs, benefitted their teaching, and that their schools had been encouraged their participation in these activities.
20. **Most KGs permitted teachers to attend professional development activities during working hours.** Some principals mentioned in interviews that with more staff employed after the implementation of the KG policy allowed them to have the capacity for teachers to participate in professional development activities. More than 90% of teacher questionnaire respondents agreed that their KGs made administrative arrangements to allow them to

participate in professional development activities. This finding is consistent with principal and teacher reports during interviews.

21. **KGs adopted certain measures to support new teachers.** There were mentoring programmes, induction sessions, class observations, follow-up discussions or appraisal meetings with the new teachers. Some KGs had made personnel arrangements to support new teachers such as partnering the novices with more experienced teachers in the same class. It should be noted that support for new teachers was more frequently reported by principals than teachers, this may be because not all teachers were involved in the support.
22. **Teachers were able to apply their learning from professional development activities to teaching and curriculum development.** Principals interviewed reported that teachers were able to apply what they had learnt from the professional development activities in class teaching. Teachers at some KGs had been asked to share in meetings what they had learnt in the professional development activities, and some also had been requested to share how they put learning into practice. Teachers at some KGs had also been required to produce written reports on their learning. Some principals or senior teachers discussed with the teachers and provided advice to encourage teachers' application of their learning from professional development activities. Some teachers who had received professional development in a particular aspect (e.g., supporting students with special needs) were assigned to be in charge of relevant programmes in schools. Evidence from the teacher interviews also showed that teachers were able to apply what they had learnt from professional development activities in the classrooms. The areas of application included supporting children with special needs, play, music, language and storytelling and areas involving science and maths. The teachers applied strategies learnt to lesson planning like enhancing child-led elements in teaching, improving the classroom environment or incorporating elements of play into different learning domains.
23. **KGs with higher expectations for professional development activities had higher classroom quality in Wave 1 and Wave 2.** Principals' expectations of the number of hours for their teachers' professional development activities were significantly associated with both ECERS-E and SSTEW in Wave 1, with SSTEW only in Wave 2, and not associated with any measures in Wave 3. This showed that participating in more hours of professional development activities may be associated with higher quality of classroom observation in terms of interactions.

Q5. What are the impacts on parents' engagement (e.g. more diverse communication channels, promotion of parent education)?

24. **A positive home-school cooperation culture was generally displayed among KGs across waves.** Most teachers and principals reported positively on their communication with parents in the questionnaires across waves. While parents noted, in the interviews, that they appreciated the positive attributes of teachers, including kindness and being loving and responsible, more parents showed greater appreciation on the teaching aspect of the schools (e.g. teaching activities, school curriculum) in Wave 3.
25. **KGs maintained diverse communication channels with parents.** Besides using conventional ways like parent-teacher conferences, newsletters, phone call/written notes, student portfolios, informal conversation and student handbook to communicate with parents about their children's development and learning, a greater number of principals and

teachers reported the use of electronic means such as Intranet, emails, instant messaging applications in Wave 3 than in previous waves. This is not surprising given class suspension because of the COVID-19 pandemic.

26. **KGs continued to provide a range of topics on parent education and parental involvement activities.** Most KGs had provided regular seminars/workshops, social events, and volunteering several times a year. Common topics for parent education included child and parent emotions, parent-child relationships, transition to primary school, and promoting specific learning areas. Activities included school outings, volunteering, and parent-child events at school. Some parents interviewed reported that through participation in these education and involvement in children activities, they had learnt more about parenting skills or child-rearing, or had a better knowledge of their children's characteristics. This suggests that these activities were able to promote parents' understanding of their children and parenting. Among the 25 KGs that completed questionnaires from Pre-policy phase to Wave 3, there was a small rise in the number of KGs that held parent workshops/ seminars once a month or more, indicating slight increases in the provision of parent workshops/ seminars after the implementation of the KG policy.
27. **KGs continued to improve communication with NCS parents.** Fewer teachers reported having difficulties communicating with NCS parents in Wave 3 as compared to Wave 1 and Wave 2 as they adopted different strategies in daily communication with the NCS parents. Some KGs provided English translation of documents for the parents. The NCS parents interviewed in all three waves reported that they could easily reach the schools when needed, and the schools maintained regular communication with them through class teachers, NCS teachers or school staff. Yet, language barriers still exist which preclude smooth communication between the KGs and the NCS parents, as reflected by certain responses in interviews that the NCS parents needed help in understanding the school circulars and they refrained from participating in parent engagement activities at schools due to language barriers.
28. **Parents' participation in school activities was affected due to different reasons.** Around a quarter of the parents interviewed in Wave 1 and Wave 2 and 36% of the parents interviewed in Wave 3 had not participated in any parent activities. This was mainly because of their lack of time, or for other reasons such as the arrangements under the COVID-19 pandemic in Wave 3. According to NCS parents who were interviewed, participation in school-based activities may be challenging when activities and notices are primarily in Chinese. As noted above, most NCS parents interviewed reported that they had not participated in any parent activities because of language barriers.

Q6. What are the school factors that are conducive to the development of quality KG education?

29. **The number of hours that teachers participated in professional development activities, as reported by principals at Wave 1, was positively associated with overall classroom quality.** Engagement in professional development activities was also associated with specific aspects of classroom quality including supporting children's socioemotional and cognitive development, and their learning of nature and living.
30. **Teachers' perceptions on professional development arrangement in Wave 3 were positively associated with classroom quality.** These perceptions encompassed teachers' views about whether the activities suited their needs, benefited their teaching, and whether

they felt that they had enough training. Teachers' perceptions were also influenced by whether they believed that their schools encouraged them to attend or were able to make administrative arrangement for them to participate in professional development activities.

31. **Parents' involvement and communication with schools in Wave 3 were positively associated with overall classroom quality across waves.** We found that KGs who had teachers who were more likely to agree that parents were actively involved in school activities and that "teachers, parents, and the principal have consistent communication and collaboration" in Wave 3 had higher classroom quality across three waves.

LIMITATIONS

32. **Our observations reflect the activities that took place on the day we visited the KGs and we may not be able to capture all aspects of the programmes.** The teaching on a particular day may depend on the current theme or the activities scheduled as part of the ongoing curriculum. For example, some themes on the community may be more related to the learning areas of Language or Self and Society while other themes on nature may be more relevant to the learning area of Nature and Living. Hence, there may be discrepancies between our measure of classroom quality and the actual teaching and learning taking place in the KGs.
33. **There may be a disconnection between what was reported in the interviews and the questionnaires and what was observed.** Principals and teachers stated that learning through play had become more important across the waves, but this was not captured in classroom observations. This may be because the observational scales used in this study focused on the global and domain-specific measures of quality and were not sensitive enough to capture all changes related to the KG policy.
34. **The time of the year we collected the data in each wave should be noted when interpreting the findings.** Principals, teachers, and parents may have had more experience to share about the school year when they completed surveys or interviews near the end of the school year (e.g. June to August) than at an earlier time. Similarly, classroom quality may depend on the nature of activities and relationships between teachers and the children, which may be affected by whether it is the beginning or the end of the school year. Near the end of the school year, K3 teachers may focus on preparing children for the primary one transition; in these cases, the teaching may deviate from a typical school day.
35. **We are also mindful that activities may be limited due to the restrictions in place because of the COVID-19 pandemic** These activities include classroom teaching, teacher professional development, and parent activities.

KEY FINDINGS AND RECOMMENDATIONS

The following recommendations stem directly from the study findings.

	KEY FINDINGS	RECOMMENDATIONS
I.	Classroom observations indicate an increase in the scores of 3 factors involving most aspects from Pre-policy phase to Wave 2. The scores of Factor 3 (Nature and living) in classrooms, however, decreased across waves.	Further investigate pedagogy related to the learning area “Nature and Living” in KGs.
II.	There was a positive impact of the KECG on learning and teaching. Learning through play, as emphasised in the KECG, was reflected in teaching and learning as reported by principals, teachers and parents. Some challenges remain in the implementation of free play by teachers and parents.	Provide further professional development programmes and support to KGs on free play; identify good practices and encourage sharing amongst KGs.
III.	KGs were responsive to the characteristics of their students. More support was provided in KGs for NCS students and students with special needs. Classroom observations demonstrated higher quality in aspects of teacher-child interactions and catering for diverse needs. Teachers also reported increased confidence in supporting children with diverse needs across waves.	Continue to allocate grants to support KGs in catering for diversity. Further support can be placed on reducing the language barriers between NCS parents and KGs to support smooth communication and home-school cooperation.
IV.	KGs benefited from the utilisation of different grants which supported the teaching and learning environment and experiences for teachers and students.	Continue to assess schools’ needs across the sector and provide various grants to support the quality of teaching and learning in KGs.
V.	KGs placed emphasis on professional development. More teachers attended professional development activities across the waves and KGs made administrative arrangements to support teachers’ participation. Teachers benefitted from professional development activities, which contributed to their confidence in teaching and curriculum development. At the same time, teachers wished to have more opportunities for professional development.	Maintain support for teachers through the provision of professional development activities in diversified modes and, when necessary, review the continuous professional development policy to suit the sector’s needs.
VI.	KGs offered a variety of communication channels and activities to promote home-school cooperation as well as parent education and involvement. Some challenges remain as there is a relatively low rate of parents’ participation in activities arranged by schools.	Promote parent education and involvement across KGs so as to reach parents of all backgrounds, including working parents and NCS parents.