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eCitizen Education 360 (2022):
An extension of the Learning and Assessment for Digital Citizenship Project

**The Cumulative Impact of Recurring School
Suspensions under the New Normal:
Positive Action Insights for Students, Parents,
Schools and Communities**

***Presented by the Centre for Information Technology in Education (CITE),
Faculty of Education, The University of Hong Kong
3 November 2022***

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The First Release of Research Findings

The Cumulative Impact of Recurring School Suspensions under the New Normal: Positive Action Insights for Students, Parents, Schools and Communities

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About eCitizen Education 360

- First e360 study conducted in June 2020 to understand the impact of extended school suspension (Feb – early June 2020) on students, parents, and schools
- e360 (2022) builds on the conceptual and methodological foundations of the baseline (2020) – a comprehensive 360-degree, action-oriented survey study
- To understand the impact of multiple waves of prolonged intermittent school suspensions and provide evidence-based recommendations to stakeholders
- Goal: promote equitable quality education for all
- Acknowledgement: (1) Wide support from schools, education professionals, parents, academics and community organizations; (2) The D. H. Chen Foundation as the Growth Partner and Funder of this project; (3) Support from all the participating schools.

Project Team

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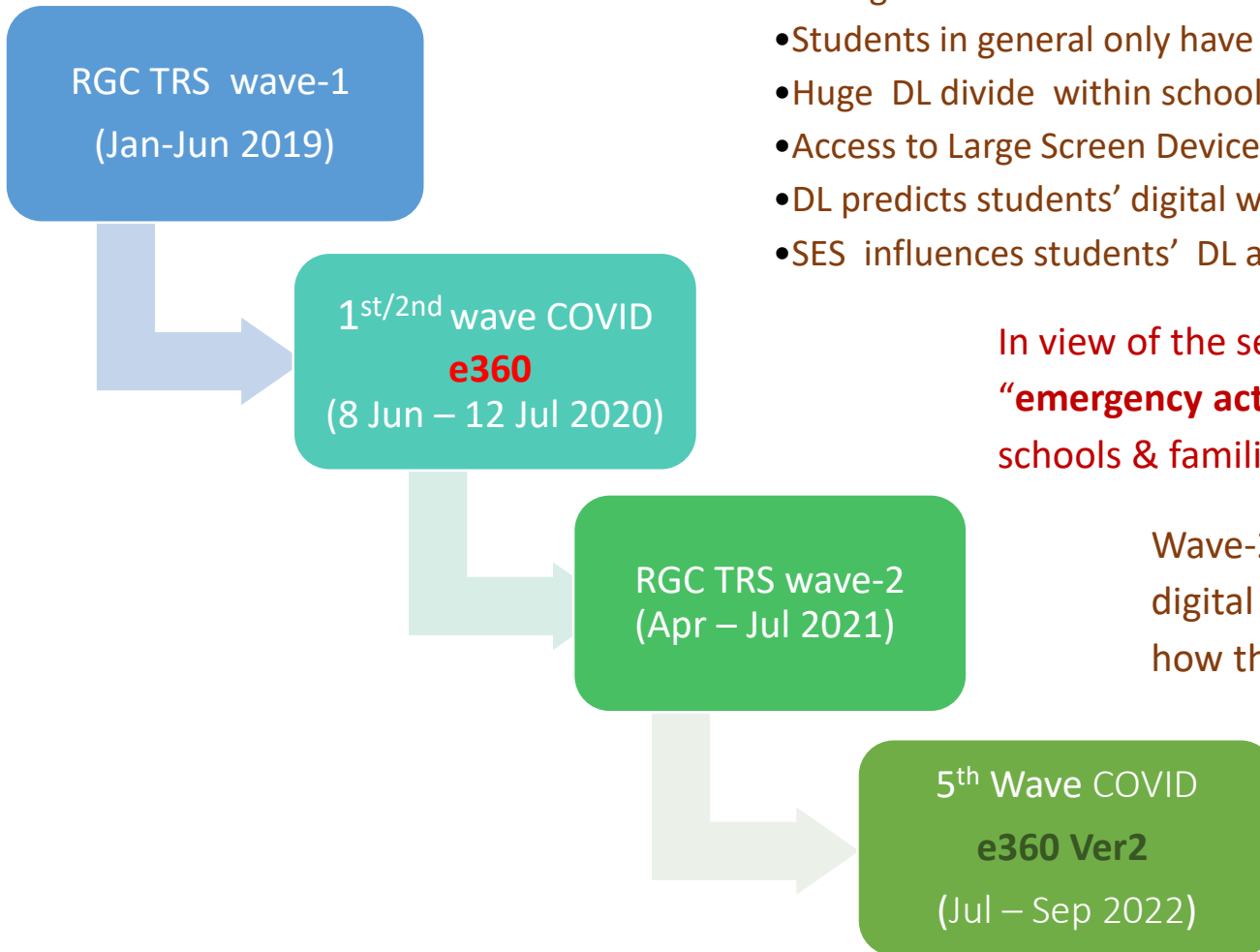
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Genesis of a Sequence of Four Studies



Findings:

- Students in general only have basic digital literacy (DL)
- Huge DL divide within schools and between schools
- Access to Large Screen Devices (LSDs) at home vital to DL development
- DL predicts students' digital wellbeing (internet addiction, cyberbullying exp)
- SES influences students' DL achievement

In view of the serious digital divides revealed in wave-1 findings, an **“emergency action-focused study”** to understand how students, teachers, schools & families are affected by the sudden school suspension.

Wave-2 is a longitudinal follow-up to track students' growth in digital competence & factors that influence them, as well as how these affect students' wellbeing.

How has 2.5 years of waves of school suspension impacted students' learning, and what are effective strategies to help address the learning gap?

Dates indicated are the time period for data collection

Key findings of e-360 (2020) published in 6 bulletins

eCitizen Education 數碼素養 360

Bulletin 1 (July 2020)

From outcomes and challenges of online learning to enhanced digital preparedness for the **NEW NORMAL**

Effort of schools and parents to sustain learning paid off

Pre-suspension e-learning preparedness crucial to effective online learning transition

The cumulative negative effects due to **socio-economic and digital divides** on disadvantaged students need attention


About eCitizen Education 360


The prolonged period of fight against COVID-19 and school suspension has posed huge challenges to every member of the education community. The tremendous effort of schools and parents in sustaining learning online has not only overcome limits presented by social distancing, but also inspired a new chapter of educational transformation as schools resume.

This project is a comprehensive 360-degree survey study with widespread support from academia, parents, professionals and community organizations. By gathering information about the experiences and needs of primary and secondary schools during the periods of school suspension and resumption, we aim to enhance our comprehensive capacities to act as a community to improve the education opportunities, digital competence and well-being of students. These would also enable them to cope with various aspects of life in a fast-changing world in which digital technology plays a pervasive role.

An Action Focused Post-COVID-19 Study for Equitable Quality Education for All

More information is available at <https://ecitizen.hk/360>

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Bulletin 2 (August 2020)

Online-learning preparedness for schools

Preparedness for quality online learning experiences and outcomes


e-learning team members, roles and functions


Prioritizing teacher professional learning and support

Technology infrastructure & pedagogy for student empowerment

What matters for e-learning at school level

Hong Kong launched its first IT in Education (ITE) Strategy in 1998, which thereby marking the first official policy in which Information and Communication Technology (ICT) is treated as an integral part of the whole curriculum to support learning and teaching, beyond simply a segregated school subject. The second ITE Strategy launched in 2003 formally highlighted a major role of ITE in achieving the overall curriculum reform goals announced the year before. In 2011, the Education Bureau (EDB) funded 21 e-learning pilot projects, many of which were joint ventures involving several schools, for the purpose of fostering e-learning good practices that promote student-centered, transformative learning. Thus, over the past two decades, for ICT use in education at the policy level, there has been a gradual shift to focus on e-learning, i.e. the use of digital technology with the emphasis on supporting student learning. During this time, schools have developed different digital infrastructure, curriculum priorities and support structures for e-learning. These prior developments and experiences for e-learning also laid the foundation for online learning during the COVID-19 pandemic which triggered school suspension. In this Study, we collect data about schools' e-learning policy and implementation to investigate the key features that constitute **preparedness** for quality **online learning** experiences and outcomes.

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eCitizen Education 數碼素養 360

Bulletin 3 (November 2020)

Online-learning preparedness for teachers

Encourage the use of online learning platforms and digital resources for student-centered interactive learning

Promote teacher sharing and collaboration on online pedagogy to nurture "Progressive Innovators"


Focus teacher professional learning provisions on fostering higher-order thinking, e-assessment and digital feedback


Progressive innovative teachers and online preparedness for the new normal

In the **first release of research findings** from the eCitizen Education 360 study, we reported that pre-suspension e-learning preparedness was crucial to effective online learning transition during the COVID-19 induced school suspension period. e-Learning Preparedness of a school include having an e-learning strategy well-integrated into the school's overall development plans and giving a high priority to student-centered e-learning pedagogies. Further, it was found that schools that participated in the BYOD program generally had higher levels of e-learning preparedness.

In **bulletin 2**, we explored in detail schools' e-learning policy and implementation to investigate the key features that constitute preparedness for quality online learning experiences and outcomes. There was a huge diversity across schools in the number of staff members, their roles and functions involved in e-learning coordination. Further, e-learning coordination and the school's vision for e-learning have a major impact on the experience and perceived outcomes of online learning reported by teachers and students.

In this bulletin, we report on the in-depth analysis of the teacher survey data to understand what constituted the key characteristics of teachers who were most prepared for the shift to fully online learning, and what factors contribute most to such teacher preparedness.

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More information is available at <https://ecitizen.hk/360/> 

Key findings of e-360 (2020) published in 6 bulletins

eCitizen Education 數碼素養 360


Bulletin 4 (February 2021)

Multi-level School Leadership for online learning preparedness

Building a school culture of trust, collaboration and openness to innovation

In **Bulletin 1**, we reported the importance of pre-school-suspension e-learning preparedness, including priority to student-centred pedagogies and integration of e-learning strategies into schools' overall development plans, to effective transition to online learning during the COVID-19 induced school suspension period. In the **second bulletin**, we zoomed into the e-learning coordinator survey and investigated key features of schools' online learning preparedness. We discovered that the membership and roles of the e-learning coordination team, and teacher professional development provisions constitute the most important school-level implementation factors. In the **third bulletin**, we identified four typical groupings of teachers on e-learning innovation. Findings also showed that teachers' engagement in online teaching related collaboration in school is the best predictor of their Online Teaching Preparedness.

In this bulletin, we examine the role of specific leadership practices in promoting Online Teaching and Learning (T&L) Preparedness. Findings suggest that a school-wide culture of collaboration, mutual trust, and openness to innovation are key conditions for online teaching and learning preparedness. In addition, leaders' overall school development priorities and strategies are the strongest predictors of positive school culture and forward planning for online T&L in 2020-21. In implementing these plans, senior leaders and non-academic middle-level managers are more optimistic and confident in the face of challenges, and often see failure as "room for improvement".



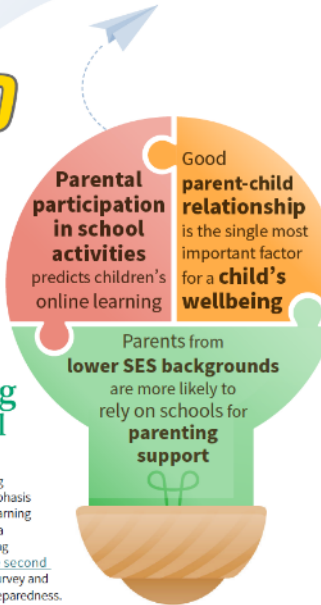
More information is available at <https://ectizen.hk/360/>

eCitizen Education 數碼素養 360

Bulletin 5 (August 2021)

Parent-Child Communication and Relationship are Key to Students' Wellbeing at Home and in School

In **Bulletin 1**, we reported the importance of e-learning preparedness before school-suspension, including emphasis on student-centred pedagogies and integration of e-learning strategies into schools' overall development plans, on a school's ability to transition effectively to online learning during the COVID-19 induced school suspension. In the **second bulletin**, we zoomed into the e-learning coordinator survey and investigated key features of schools' online learning preparedness. We found that the membership and roles of the e-learning coordination team, and teacher professional development provisions constitute the most important school-level implementation indicators. In the **third bulletin**, we identified four typical groupings of teachers based on their perceptions and attitudes towards online learning and teaching innovations. Findings show that teachers' engagement in online teaching related collaboration in school is the best predictor of their online teaching preparedness. In **Bulletin 4**, we examined the role of specific leadership practices in promoting online teaching and learning (T&L) preparedness. We reported two typical groupings of school leaders based on their general leadership orientations and three types of school leaders derived from an analysis of their e-learning related perceptions. In this bulletin, we shift our attention to examining parenting practices and their relationships with students' well-being. The specific questions we investigate are:



More information is available at <https://ectizen.hk/360/>

eCitizen Education 數碼素養 360

an Action Focused Post-COVID-19 Study for Equitable Quality Education for All

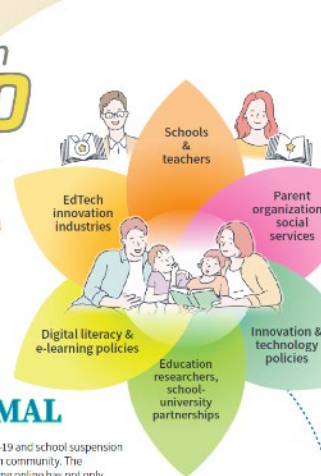
Bulletin 6 (November 2021)

From evidence-based community-wide collaborative action to recommendations for a BETTER NEW NORMAL


Since early 2020, the prolonged period of fight against COVID-19 and school suspension has posed huge challenges to every member of the education community. The tremendous effort of schools and parents in sustaining learning online has not only overcome limits presented by social distancing, but also inspired a new chapter of educational transformation as schools resume.

The eCitizen Education 360 research team led by Prof. Nancy Law, Deputy Director of the Centre for Information Technology in Education of the Faculty of Education, the University of Hong Kong, carried out a comprehensive 360-degree survey study with widespread support from academia, parents, professionals and community organizations. By gathering information about the experiences and needs of primary and secondary schools during the periods of school suspension and resumption, we aim to enhance our comprehensive capacities to act as a community to improve the education opportunities, digital competence and well-being of students. These would also enable them to cope with various aspects of life in a fast-changing world in which digital technology plays a pervasive role.


The research team conducted a research study during June and July 2020, on the online learning experiences since the first school suspension from February last year. Study findings have been released in stages under five themes, each serving as a focal point for collective action from supporting partners in different sectors: education, parent organizations, social work, education technology, and charities. These community efforts have contributed to the learning and well-being of students during the periods of school suspension and resumption, demonstrating positive advances and new possibilities in digital learning in an age of uncertainty, along with the power of evidence-based collaborative community action. New challenges have also emerged that need to be addressed. This latest issue of bulletin summarizes the achieved advances, emerging challenges and opportunities in the past year and a half, and put forward action and policy recommendations for different stakeholder groups to co-construct a Better New Normal.



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Key Questions addressed in this report

1. What is the status of students' learning and well-being after multiple waves of school suspension?
2. What challenges do schools and parents in Hong Kong perceive after 2.5 years since the start of the pandemic?
3. How have schools and parents adapted to teaching and learning in the New Normal?

What insight can be gleaned to inform positive action by different stakeholders and policy makers?

Basic information about research design and data collected

Research design:

5 survey instruments distributed to each participating school

Schools Leader survey (leaders include all who contribute to school-based decision-making)

Principal, Vice Principals, Academic Masters/ Curriculum Leader, Subject/ KLA panel chairs, ICT Coordinator, STEM Coordinator, Moral/Civic Education Coordinators, Counselling and Guidance Head, Discipline Masters, Life-wide Learning/ Extra-curricular Activities Coordinators.

e-learning coordinator survey

A person identified as taking key coordinating responsibility for e-learning in a school

Teacher survey

Teachers refer to those with teaching responsibilities only, and does not have a formal decision-making role

Student survey

Students in Primary 3 – 6, Secondary 1 – 6

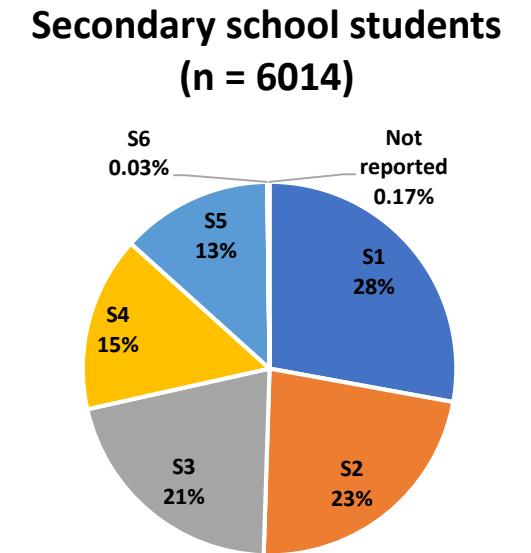
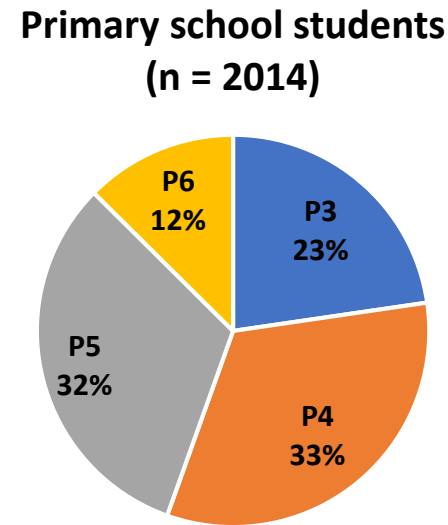
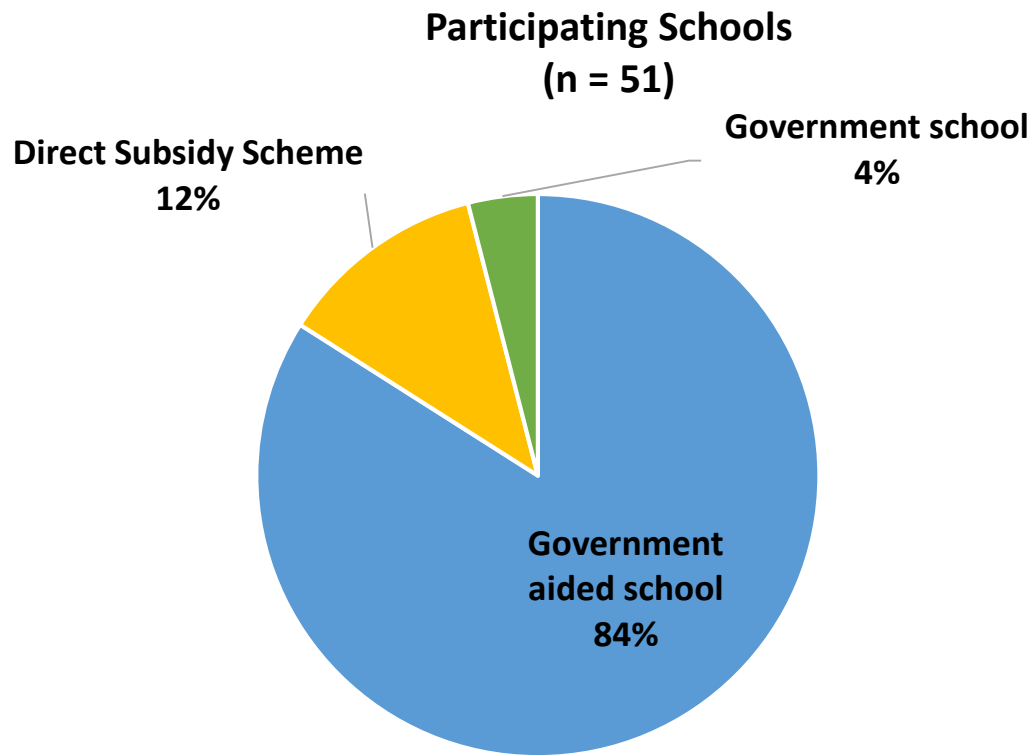
Parent survey

Parents whose children participated in the study

Sampling and participation





- All schools, including those that participated in the 2020 study, were invited to participate.
- Participation was on a voluntary basis. The specific grade levels and classes participating in the study was also decided by the individual schools.
- All teachers and school leaders in the participating schools are invited to respond to the respective surveys.
- Parents of all participating students are invited, with help from the participating schools, to respond to the parent survey.
- **Data collection: July – early September 2022**

School types and grade level distribution



Geographic Distribution of Participating Schools



-  Primary school in 2022
-  Secondary school in 2022
-  Primary school in both 2020 and 2022
-  Secondary school in both 2020 and 2022

Major difficulties for schools in participating:

- Modified school calendar due to special vacation
- Schools are busy during summer
- Period clashes with exams and summer activities

Thanks to all our participating schools!



Distribution of schools which participated in 2020 and/or 2022

	2020	2022	Both (% of 2022 also in 2020)
Primary schools	20	20	9 (45%)
Secondary schools	32	31	14 (45%)
Special school	1	0	0
Total	53	51	23 (45%)

Number of Participating Schools, Students, Parents, Teachers, School Leaders, e-learning coordinators (2022)

	Participating Schools	Students	Parents	Teachers	School Leaders	e-learning coordinators
Primary	20 (39%)	2014 (25%)	1125 (35%)	383 (43%)	125 (46%)	19 (39%)
Secondary	31 (61%)	6014 (75%)	2093 (65%)	503 (57%)	146 (54%)	30 (61%)
Total	51	8028	3218	886	271	49

Findings:

1. Students' Online Learning and Well-being

Students' Online Learning

1. Online learning activities



2. Online self-regulated learning strategies



Proportion of students reporting different online learning frequency (2020 vs 2022)

	Primary					Secondary						
	Not at all	About once a week	2-3 times a week	4-5 times a week	More than 5 times a week	Not at all	About once a week	2-3 times a week	4-5 times a week	More than 5 times a week		
1. Participate in structured real-time lessons <u>WITH interactions</u>	-	-	-	-	-	22%	17%	23%	22%	16%	2020	↓ increase
	18%	23%	22%	20%	17%	13%	18%	21%	28%	20%	2022	
2. Participate in real-time lessons <u>WITH teacher gives the lecture in most of the time.</u>	8%	16%	21%	32%	23%	5%	9%	21%	33%	32%	2020	↓ decrease
	14%	16%	17%	27%	26%	7%	11%	17%	36%	29%	2022	
3. Participate in less structured lessons for <u>social discussion</u>	-	-	-	-	-	22%	24%	25%	17%	12%	2020	similar for primary & secondary
	21%	24%	23%	18%	14%	21%	24%	25%	19%	12%	2022	
4. Watch teachers' pre-recorded video lessons	13%	14%	20%	24%	28%	22%	26%	29%	13%	11%	2020	↓ decrease
	39%	24%	17%	10%	10%	47%	26%	16%	7%	4%	2022	
5. Complete online assignments	3%	8%	13%	25%	51%	14%	27%	33%	15%	12%	2020	↓ Increase for secondary
	5%	13%	17%	22%	43%	4%	8%	20%	24%	43%	2022	
6. Participate in real-time assessments (quiz/exam).	26%	34%	17%	9%	14%	14%	27%	33%	15%	12%	2020	
	21%	36%	19%	10%	14%	13%	33%	34%	10%	10%	2022	
7. Discuss with classmates about schoolwork through social media	32%	14%	16%	11%	27%	11%	13%	27%	19%	30%	2020	
	32%	16%	20%	11%	22%	12%	15%	26%	16%	30%	2022	
8. Collaborate with classmates via digital tools to complete group assignment	50%	16%	14%	8%	12%	25%	20%	27%	15%	13%	2020	↓ Slight increase
	38%	24%	17%	9%	13%	21%	31%	24%	12%	12%	2022	

- These questions were not included in the 2020 survey for primary students

Students' mean levels of online learning self-efficacy (2020 vs 2022)

Group	Primary >	Secondary
2020	3.61	3.09
2022	3.71	3.24

 **increase**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

Students' mean levels of online self-regulated learning strategies in 2022

School type	Primary >	Secondary
Help-seeking	3.43	3.30
Self-evaluation	3.48	3.26
Time management	3.48	3.16

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

Students' Well-being

1. Cognitive emotional regulation strategies



2. Cyberbullying



3. Worries about study



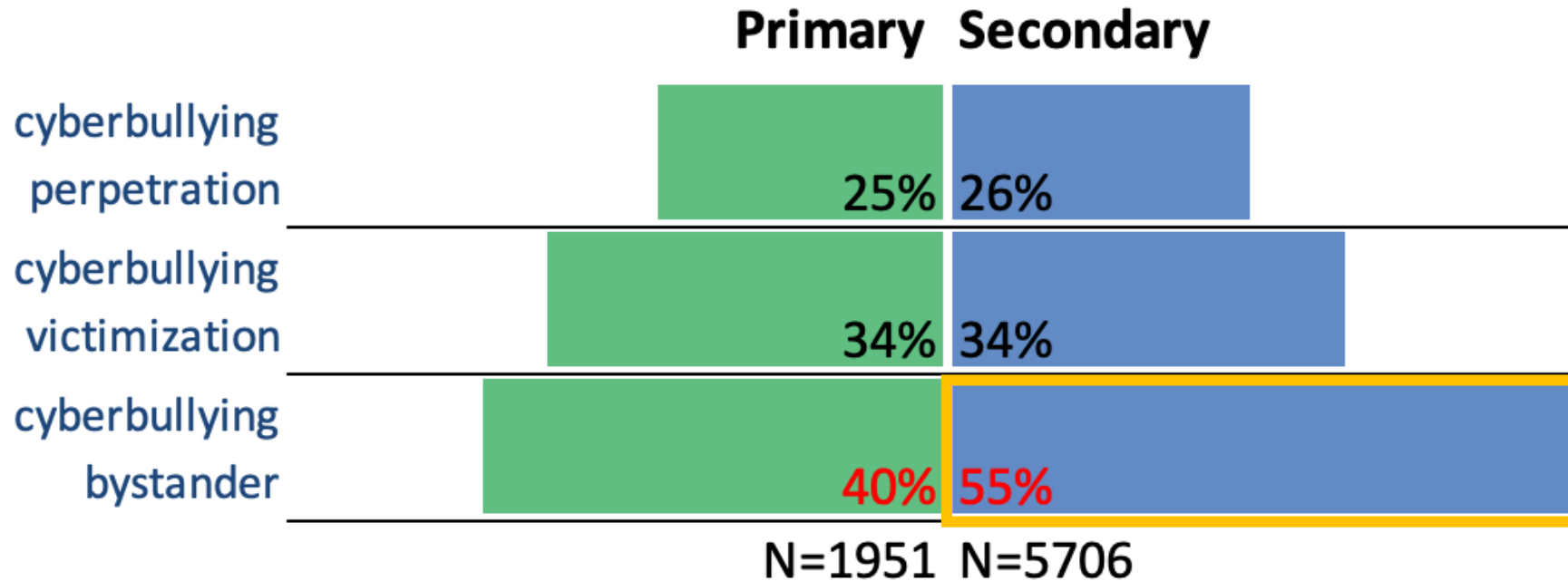
Students' reported use of cognitive-emotional regulation strategies (2022)

Regulation strategy	Primary	Secondary
Refocus on planning	3.29	3.20
Positive reappraisal	3.28	3.16
Catastrophizing	2.77	2.76
Blaming others	2.54	2.54

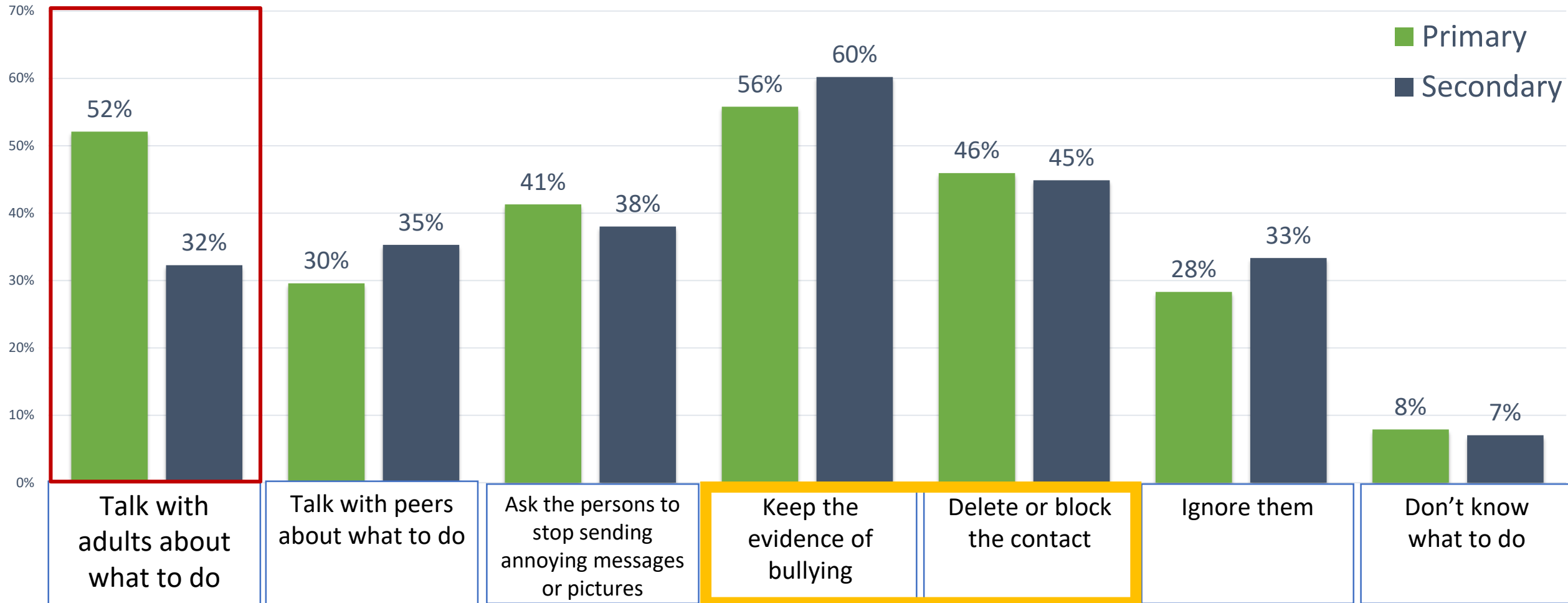
1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always

- Primary students tended to use positive strategies more often than secondary students, when they experienced negative events (in the past six months).
- Students were more likely to use positive strategies than negative strategies when they experienced negative events.

Students' Cyberbullying Experiences (2022)



Prevalence of strategies used for cyberbullying incidents (%)



N.B. 862 primary students and 2655 secondary students responded on this question

Sources of students' worries (2020 vs 2022)

	Mean (SD)			
	Primary Students		Secondary Students	
	2020	2022	2020	2022
1. Undergoing daily school routine	2.54 (1.27)	2.63 (1.35)	2.73 (1.08)	2.80 (1.04)
2. Catching up with schoolwork	2.27 (1.11)	2.38 (1.24)	2.94 (1.08)	2.81 (1.00)
3. Concentrating on learning in the classroom	2.30 (1.11)	2.43 (1.25)	2.70 (0.98)	2.81 (1.00)
4. Experiencing emotional stress	2.28 (1.17)	2.60 (1.37)	2.90 (1.13)	2.96 (1.09)
5. Preparing for future career	-	-	3.32 (1.05)	3.15 (1.08)

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, - : not asked in this group

In 2020, primary students were generally less stressed than secondary students

Sources of students' worries (2020 vs 2022)

	Mean (SD)			
	Primary Students		Secondary Students	
	2020	2022	2020	2022
1. Undergoing daily school routine	2.54 (1.27)	2.63 (1.35)	2.73 (1.08)	2.80 (1.04)
2. Catching up with schoolwork	2.27 (1.11)	2.38 (1.24)	2.94 (1.08)	2.81 (1.00)
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4. Experiencing emotional stress	2.28 (1.17)	2.60 (1.37)	2.90 (1.13)	2.96 (1.09)
5. Preparing for future career	-	-	3.32 (1.05)	3.15 (1.08)

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, - : not asked in this group

For primary students, they **experience more emotional stress** in 2022.

For secondary students, there was not much difference in terms of worries experienced in 2020 vs 2022.

Section Summary

- To some extent, students are getting more used to online learning from 2020 to 2022. They are collaborating more with classmates and completing more online assignments via digital tools.
- Teachers are employing more interactive and social discussion pedagogy and rely much less on one-way didactic teaching in online classes.
- Notably, primary students reported higher levels of online learning self-efficacy and used more online self-regulated learning strategies than secondary students.
- Secondary students experienced more issues with digital well-being (i.e., when encountering cyberbullying, they are less likely to discuss with adults about what to do and more likely to experience cyberbullying as bystanders).

Findings:

2. Parents and Parenting in the New Normal

Parents and Parenting in the New Normal

1. Challenges perceived by parents



2. Parental involvement



3. Digital parenting



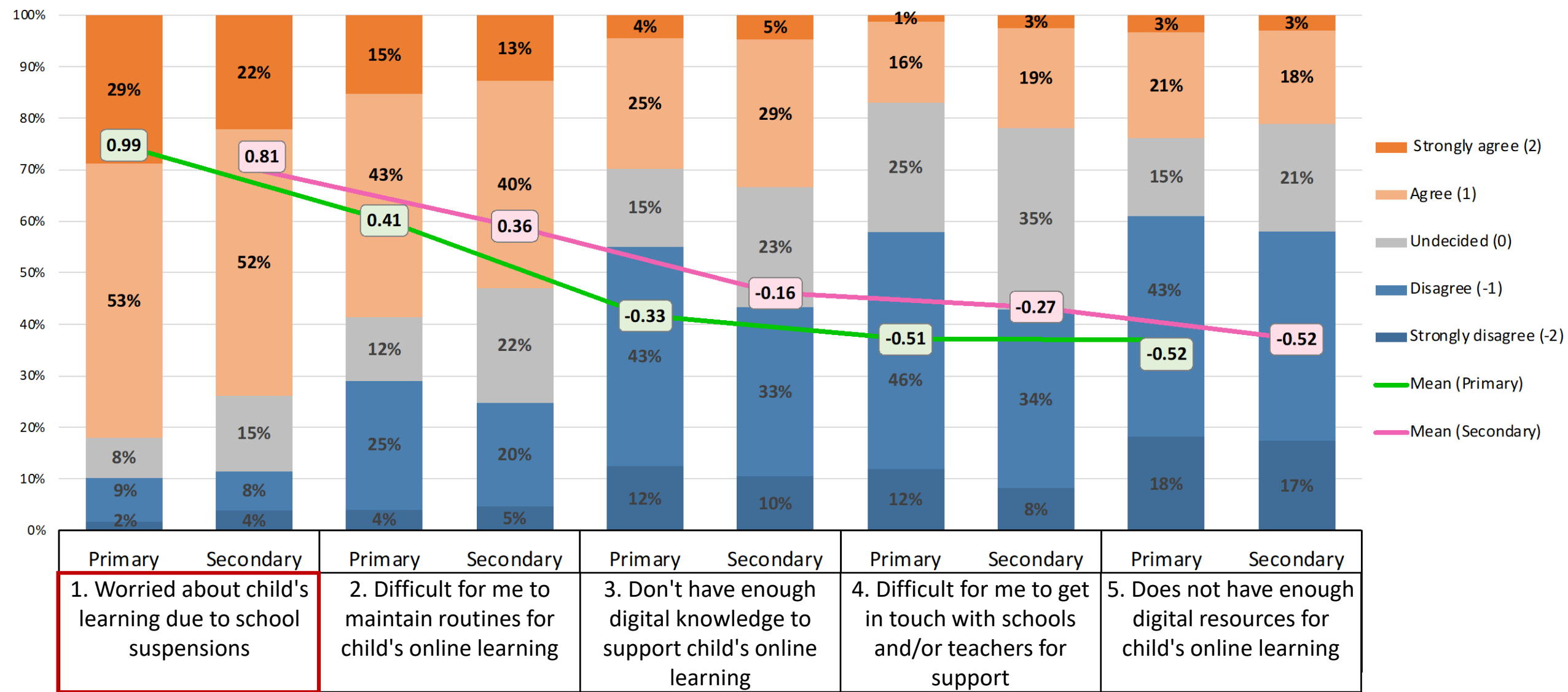
4. Parental self-efficacy



5. Parent-child relationship



Parents' perceived challenges in supporting children's learning in 2022



Mean levels of home-based parental involvement

	2020		2022	
	Primary	Secondary	Primary	Secondary
Parents help with homework	3.21	2.40	3.16	2.57
Parents monitor children's online behaviors	3.51	2.46	3.40	2.42
Communication between parents and children	3.36	2.89	3.29	2.85

1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always

- No significant differences in levels of home-based involvement for primary & secondary parents between 2020 and 2022
- Secondary parents had significantly lower levels of home-based involvement in both 2020 & 2022

Mean levels of school-based parental involvement

	2020		2022	
	Primary	Secondary	Primary	Secondary
Parents participated in school activities	1.65	1.49	1.96	1.79
Parent and teacher interaction	2.63	1.89	2.63	2.20

1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always

- Overall, levels of school-based involvement were low.
- Secondary parents had significantly lower levels of school-based involvement in both 2020 & 2022
- School-based parental involvement increased in 2022 compared to 2020 for both primary and secondary parents.
- There is a higher frequency of parent-teacher interaction than parents' participation in school activities.

Mean levels of digital parenting

School type	Digital parenting
Primary	3.45
Secondary	3.19

1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree

Digital parenting measures the extent to which the parent:

- (1) understands what are good digital practices such as how to use online resources productively & minimizing risks,
- (2) model and set rules about the use of media in the family

- Digital parenting can empower children to be good digital citizens who can minimize risks and maximize their own potentials in the digital world.
- Primary parents are found to be more likely to use digital technologies in their parenting and to moderate their children's media use than secondary parents.

Parents' self-reported efficacy in general & digital parenting

Parenting practice type	Primary	Secondary
General parenting	3.87	3.72
Digital parenting	3.52	3.28

1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree

- Parenting self-efficacy on general parenting is higher than digital parenting.
- Parents of primary school students report higher self-efficacy in general and digital parenting (regarding behavior and learning) than secondary.

Mean levels of parent-child relationship

School level of child	Parent-child relationship
Primary	4.32
Secondary	4.02

1 = Definitely does not apply, 2 = Not really, 3 = Neutral, not sure, 4 = Applies somewhat, 5 = Definitely applies

- The parents' reported relationship (*sharing, support, & understanding*) with the child are **generally positive**.
- Parent-child relationship reported by primary parents is significantly more positive.

Section summary

Secondary parents (compared to primary parents) are generally:

- Less involved in their children's learning and lives,
- had lower parenting self-efficacy.

Results in 2022 compared to 2020,

- Parents were more concerned about the impact of school suspensions on their children's learning outcomes.
- There have been increased parent-school/parent-teacher interactions, possibly reflecting more efforts made and more use of digital interactions by both parents and schools.

Implications for the New Normal:

- Primary school parents are more self-efficacious
- Need to help parents (especially secondary school parents) improve their understanding of youth issues and their digital competence
- Need to strengthen support for digital parenting to improve parental self-efficacy

Findings:

3. Schools' Adaptations in the New Normal

Schools' Adaptation in the New Normal

1.Challenges and Impacts perceived by schools



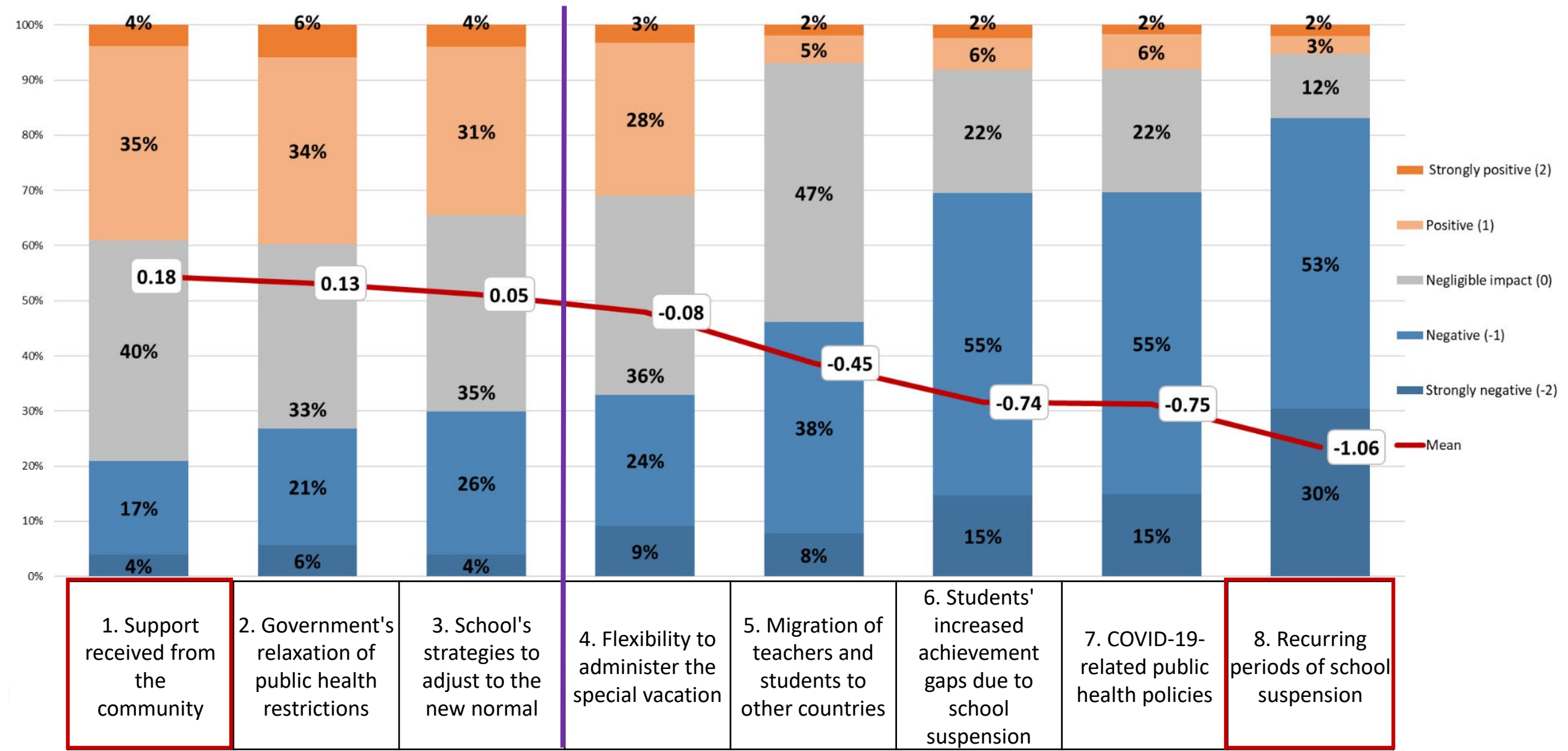
2. Strategies to improve school operation and student learning



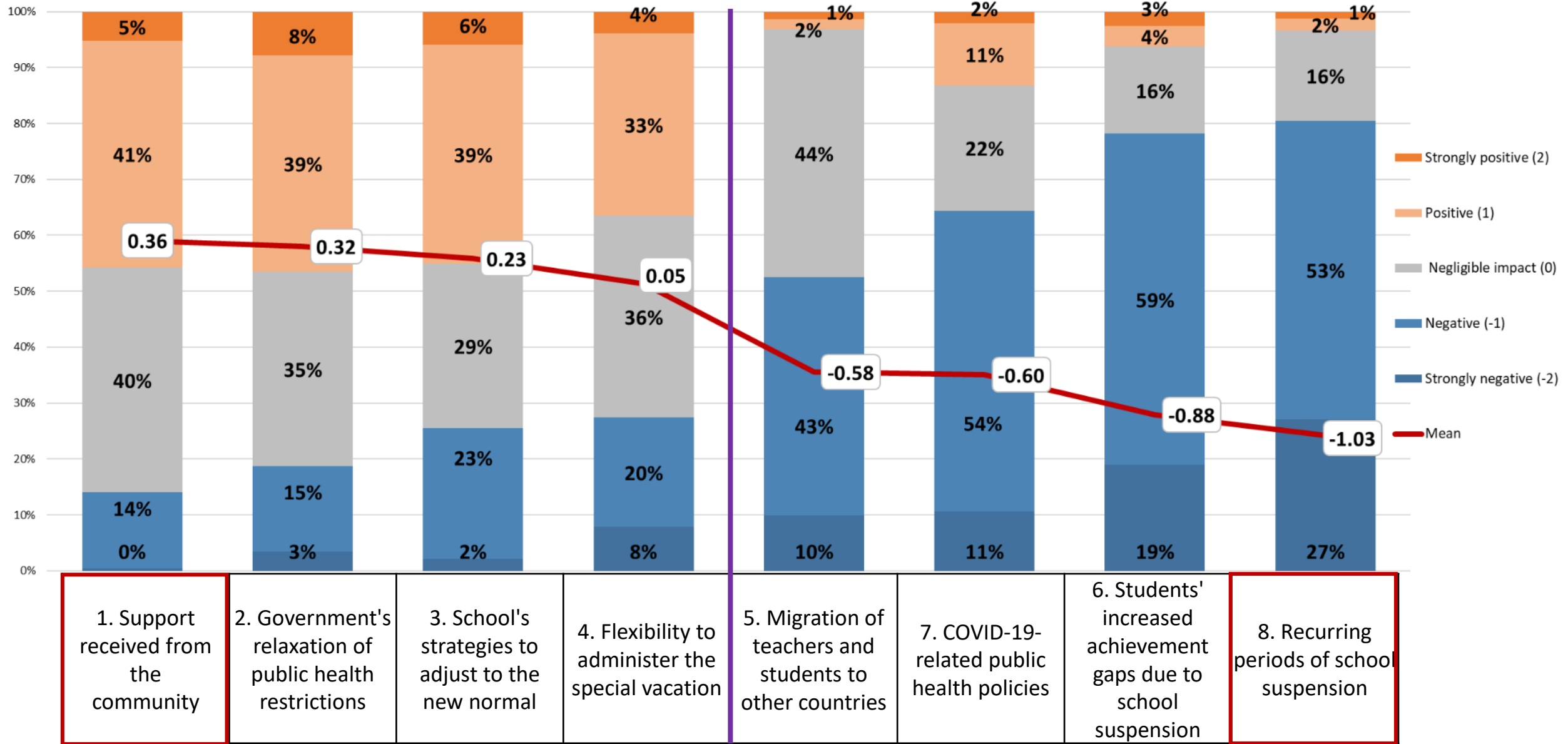
3. Usage of digital technologies in teaching



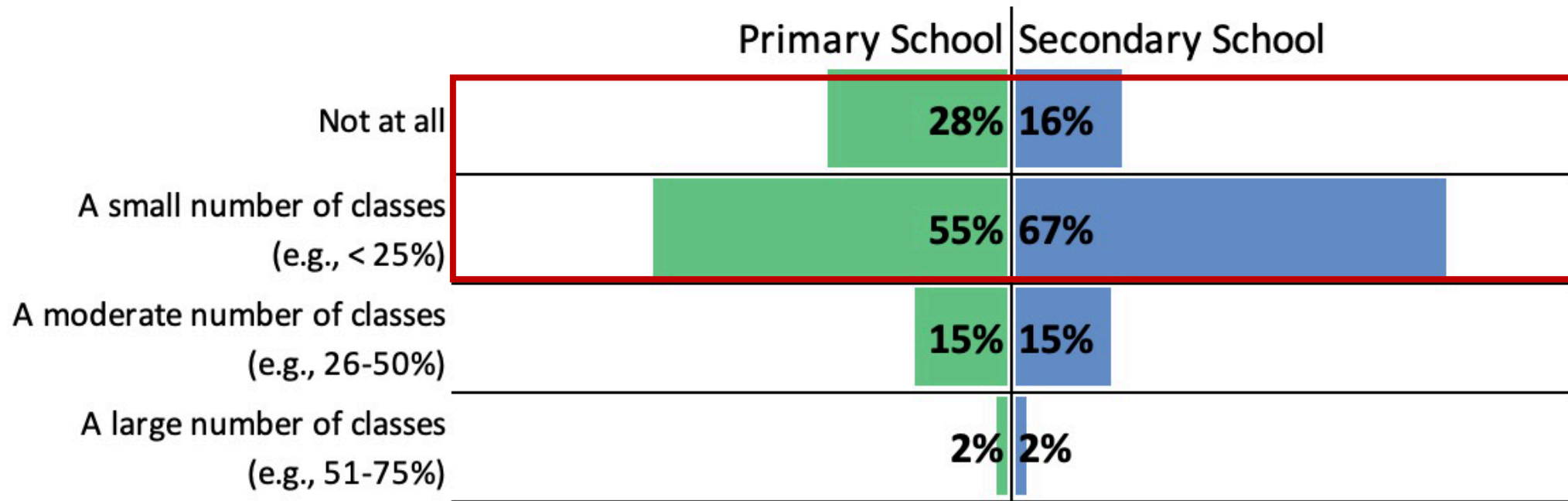
Critical events impacting school operation and student learning in 2022 (Teachers' perspective)



Critical events impacting school operation and student learning in 2022 (School leaders' perspective)



Numbers of Covid-19 disrupted classes reported by school leaders (2022)



Perceived cumulative negative impacts due to extended school suspension (school leaders)

	Negative impact on students	
	Primary school	Secondary school
2020	3.26	3.43
2022	3.91	4.11

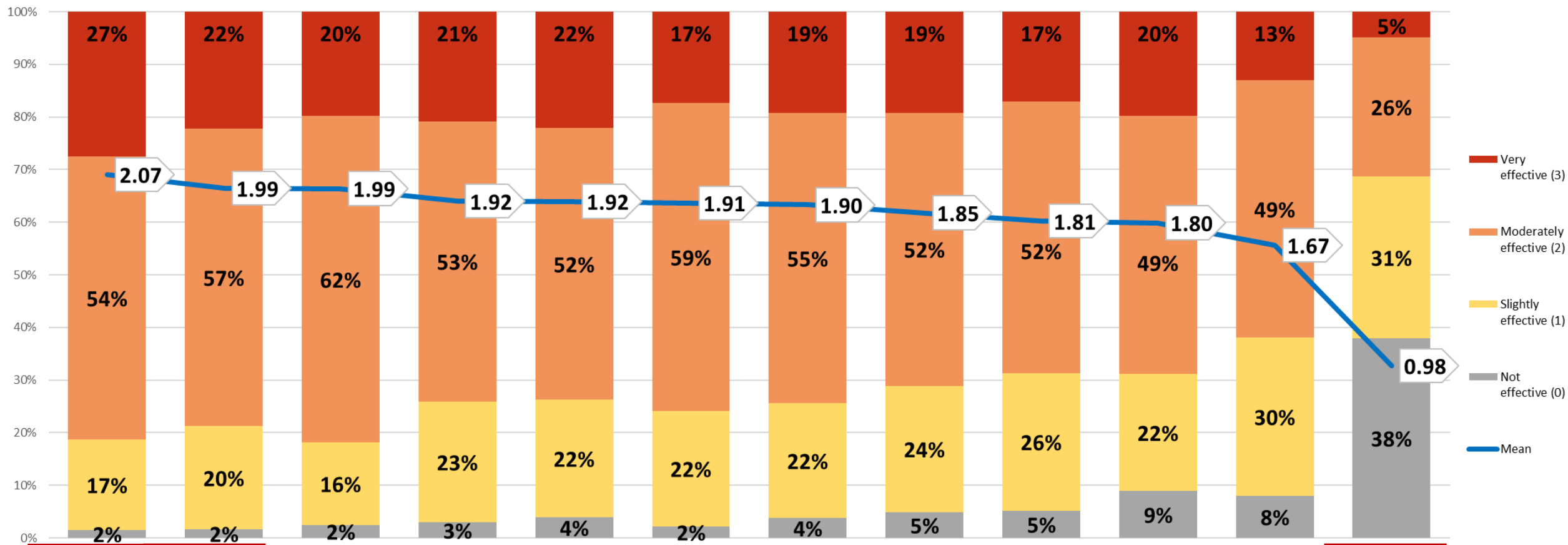
1 = Strongly disagree, 2 = Disagree, 3= Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

Perceived negative impacts include:

- falling students' academic standards for at least the next two years,
- discipline problems due to lack of routines for prolonged periods of time,
- difficulties in organizing learning due to diversities in student achievement,
- students requiring socioemotional support

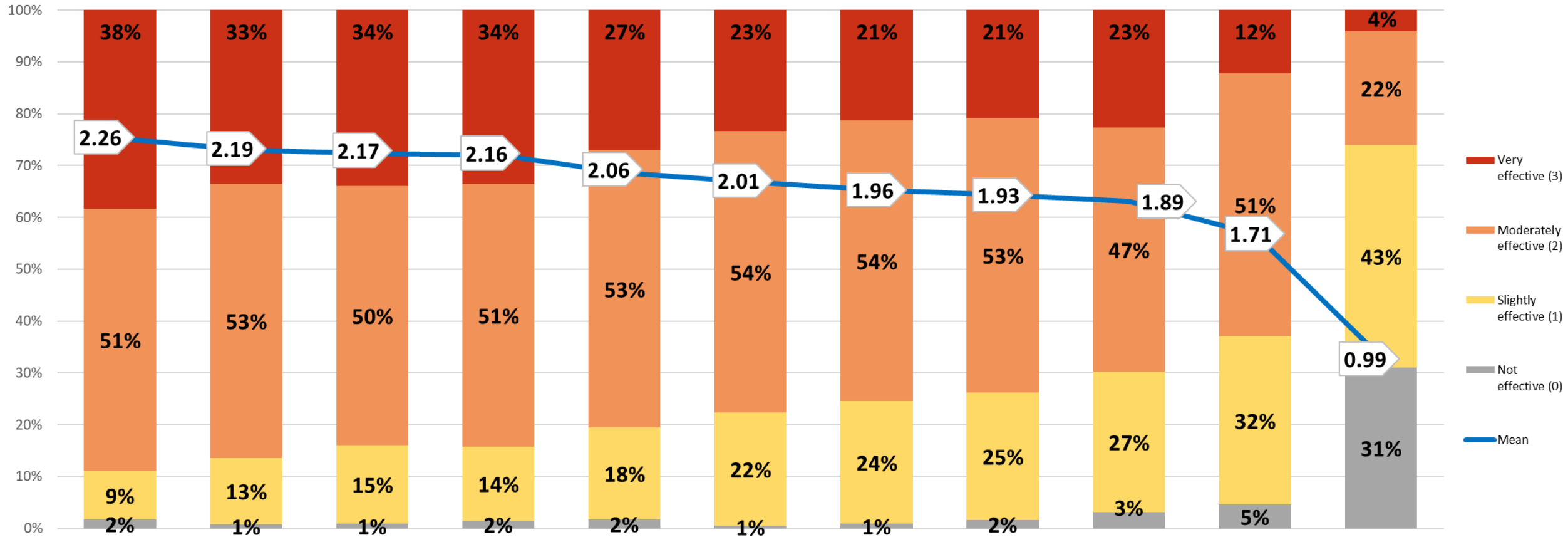
- Perceived negative impacts have increased significantly from 2020 – 2022
- The level of perceived negative impacts was higher by secondary school leaders for both years

Effectiveness of strategies to improve school operation and student learning in 2022 (Teachers' perspective)



T1. Provide teachers with professional training in online teaching and learning.	T2. Encourage teachers to work collaboratively for conducting online lessons.	T3. Adapt the curriculum to include hybrid modes of lessons	T4. Provide mental health related programs to students.	T5. Provide teaching assistants to support teachers in online lessons.	T6. Organize online special interest groups for students to address their personal learning needs.	T7. Invite volunteers who can provide online tutorials for students to help students with learning difficulties.	T8. Provide online platforms to engage parents	T9. Provide online courses during the special vacation.	T10. Implement staff-care programs to improve teachers' well-being.	T11. Involve multiple stakeholders in decision making process.	T12. Shorten summer break
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Effectiveness of strategies to improve school operation and student learning in 2022 (Leaders' perspective)



L1. Provide technical support for both teachers and students for online lessons	L2. Develop more flexible teaching schedules	T1. Provide teachers with professional training in online teaching and learning	L3. Develop its own learning management system to support online teaching and learning	T3. Adapt the curriculum to include hybrid modes of lessons	T9. Provide online courses during the special vacation	T4. Provide mental health related programs to students	T8. Provide online platforms to engage parents	T10. Implement staff-care programs to improve teachers' well-being	T11. Involve multiple stakeholders in decision making process	T12. Shorten the summer break
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Mean levels of digital technology use by school leaders and teachers

	Primary		Secondary	
	School leaders	Teachers	School leaders	Teachers
2020	2.87	2.87	2.85	2.90
2022	3.09	3.27	3.10	3.29

1 = Never, 2= Rarely, 3 = Sometimes, 4 = Always

- The levels of primary and secondary school leaders and teachers increase from 2020 to 2022, indicating that they use digital technology more frequently in 2022 than in 2020.
- Teachers' usage of digital technologies increase more than school leaders.

Section summary

- Both school leaders and teachers reported more digital technology use in 2022 compared to 2020; indicating much wider adoption of digital practices for teaching and learning as well as school administration.
- From the perspectives of schools and teachers, recurring periods of school suspension affected school operations to a large extent; and students' academic achievement might be strongly affected by school suspension.
- Schools had instituted a variety of strategies to support teachers and students during the New Normal, and teachers have found the provision of professional development for online teaching and learning and school-based teacher collaboration to be most effective.
- Support received from the community have been found to have the most positive impact by school leaders and teachers.

Preliminary recommendations

For students:

- Provide more support service to enhance student learning, cyberwellness, and socioemotional wellbeing
- More attention need to be paid to support secondary students.
- Need further research to investigate the cumulative impact on students' academic outcomes.

For parents:

- Need more parenting support, particularly on digital parenting to support children's learning & wellbeing.
- Special attention should be given to parental education and support for secondary parents.

For schools:

- More focus on the **provision of professional learning opportunities** and to **foster a collaborative culture among teachers** on effective online, blended, and hybrid teaching and learning to support student-centered learning and wellbeing.
- More efforts to leverage community resources and support for school development.

For the community and policy makers:

- The strategies and efforts of school leaders and teachers to enhance e-learning & communication with parents should be applauded and recognized.
- Current community support efforts should be continued and strengthened.

Q&A