GOLA!

GLOBAL ONLINE LEARNING ALLIANCE

REPORT ON GOLA VIDEO CONFERENCE – 9 JULY 2020

EDUCATION POLICY & FINANCE

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GOLA Report

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SECTION 1. Format & Participants

1.1 Introduction

This report of the Global Online Learning Alliance (GOLA!) of the private government video conference on policy, collaboration and finance followed in the footsteps of the previous events that discussed the challenges and efforts to find solutions in response to the worldwide school closures due to COVID-19.

Earlier findings of policy makers addressing both short-term continuity and long-term sustainability of education could be grouped into three main themes:

- Teaching, Pedagogy & Assessment
- Policy, Collaboration & Financing
- ICTs and Digital Learning

Here we address point number two: policy, collaboration, and finance. Participants were asked to discuss how COVID-19 has been a catalyst to affect change in education policy and accordingly the scope for greater collaboration between education stakeholders and cross-border collaboration between countries.

Furthermore, the issue of sustainable education financing is of key importance. In our previous report on teaching and assessment it was found that that COVID-19 has already impacted the thoughts of policy makers and educators in reforming teaching and pedagogical infrastructures. Such reforms, borne out of the greater requirement for "out of classroom" learning will include investment in more blending and hybrid learning; upgrading of ICT infrastructures to improve access and ensure equity; upskilling of teachers in ICT for education and digital learning; investing more in summative assessment; and the greater participation of families and communities in the learning of students. All these investments are set against a background of increasing debt burden of governments and a reduction in tax receipts (in the short-term) due to the impact of COVID-19.

Hence, the GOLA video conference of 9 July 2020 was organised with two key opening statements from Andreas Schleicher, Director of the Directorate for Education and Skills, OECD and Robert Hawkins, Senior Education Specialist, World Bank. These opening statements were followed by breakout sessions with the discussions split into two areas:

POLICY: How has COVID-19 been a catalyst for policy revision?

FINANCING: What is the impact on short-term continuity and long-term sustainable financing for education?

In advance of the video conference several issues were outlined for participants to discuss:

- Prioritising new competencies and learning outcomes and policies for online teaching.
- Regulatory frameworks for the safeguarding of learners.
- New guidelines for the delivery of online content.
- New policies for embedding hybrid and blended learning into education systems and pre-service qualification for teachers.
- Recommendations for new and innovative recovery policies.
- New technologies to improve and accelerate recovery in education.

Sustainable long-term agreements with telecommunications operators to better deliver access and equity.

Zero-rating of education content.

Industry partnerships needed for technology and knowledge transfer to the benefit of educators.

Cross-border collaborations between national ministries of education to share content and leverage regional purchasing power

The impact of COVID-19 on current available funding sources

Ring-fencing national education budgets

Including education and ICT in the spending and recovery programs

Immediate availability of emergency response funds for education from multilateral agencies

New funding mechanisms involving the private sector

Establishing offset and universal service funds especially purposed for education

These issues represent a sample of the meeting that endeavoured to produce appropriate policy recommendations and response strategies as educators tackle the challenge of reforming education infrastructures

1.2 Format of Video Conference & this Report

In section 1.3 we list the participants of this GOLA! video meeting. The most immediate lesson of online conferencing is to ensure that every participant has a voice. Small groups are essential. There were 87 participants and so the video conference was structured to ensure that the bulk of the time was dedicated to small breakout groups – giving everyone their voice. The following was the conference structure.

Part A: Introductions & welcome from the organisers

Part B: Opening Statements:

Andreas Schleicher, Director of the Directorate for Education and Skills, OECD

Robert Hawkins, Senior Education Specialist, World Bank

Part C. Private Breakouts for Invited Officials. Discussion of the key issues and policy recommendations.

Part D: Summary of breakout discussions by expert synthesisers:

Lord Jim Knight, Former UK Schools Minister & Chief Officer TES

President of ARC Education & Research Professor at Boston College

Part E: Closing comments: Giancarlo Brotto, Cofounder & Executive Director, Catalyst & GOLA Founding Partner

The total time of the video conference was 110 minutes

After introducing the participants in 1.3, the format of this report is structured around the key findings. During the private breakout groups we record and transcribe everything which is then disseminated into this official report. **None of the quotes in the breakouts is made attributable to any one person.** The participants hold senior positions in government, multilateral agencies and IGOs across the world.

In section 2.1 we give an abstract of the key findings of this GOLA! video conference and the remainder of the report further examines these issues according to the experiences of the meeting participants.

1.3 Participants & Acknowledgement

We would like to thank all those for participating and providing such outstanding contributions. The opportunity for them to openly converse in small break-out groups provides us with a discerning judgement on the key issues, immediate policy recommendations and their own insights into future sustainability. It is an honour for the organisers to host such a distinguished gathering and equally we wish to thank those who moderated, and those behind the scenes taking notes and providing tech support. Everyone committing their time during such a testing period is a true testament to their desire to ensure the primacy of education. Participants are listed by country, alphabetically:

ARGENTINA: Sebastián Tomaghelli, Vice-Minister of Administration, Ministry of Education

ARGENTINA: Oscar Ghilione, Teachers Schools Director, Ministry of Education

ARGENTINA: Manuel Álvarez Trongé., President, Proyecto Educar 2050

ARGENTINA: Ignacio Ibarzabal, CEO, Teach for Argentina

ARGENTINA: Mercedes Ottavino, Technical, Administrative and Legal Coordinator, Buenos Aires Unit for the Comprehensive Evaluation of Educational Quality and Equity

ARGENTINA: Victor Volman, Technical Director, Argentinos por la Educacion

ARGENTINA: Maria del Huerto Pini, Advisor to the Government of Santa Fe. *GOLA Organiser*

AUSTRALIA: Dr Phil Lambert, Director Phil Lambert Consulting, University of Sydney & Former General Manager Australian Curriculum. *Moderator*

AUSTRALIA: Louka Parry, Founder & CEO, The Learning Future & Executive Committee Member, Karanga. *Moderator*

AUSTRIA: Dominic Regester, Program Director Salzburg Global Seminar & Executive Committee Member at Karanga. *Moderator*

BELGIUM: Bart Verswijvel, Senior Advisor, European Schoolnet. *Moderator*

BOTSWANA: Lois Ngope, Director, ICT and Media Services, Ministry of Basic Education

BOTSWANA: Ravi Srinivasan, Pro Vice Chancellor (Internationalisation), Botho University

BRAZIL: Marcelo Ribeiro, Director Teaching Policies, Professao Docente

CAMEROON: Claudette Ndayi, Inspector of Pedagogy, Ministry of Basic Education

CAMEROON: Chief Fozao Tangmoh Cellestine, Regional Pedagogic Inspector in charge of Computer Science and ICT, Ministry of Secondary Education

CANADA: Martyn Beckett, Former Special Advisor, Ontario Ministry of Education. *Moderator*

CANADA: Sebastian Franks, Director Lead, Strategic Initiatives, Strategic Policy and Programs Division, Ontario Ministry of Education

CANADA: Jeff Johnson, Executive Staff Officer, Alberta Teachers' Association and Ulead

CANADA: Jennifer Adams, CEO, Educating Leaders Consulting & Executive Member, Karanga. *Moderator*

CANADA: Giancarlo Brotto, Cofounder & Executive Director, Catalyst. *Moderator*

EGYPT: Dr Inas Sobhy, E-Learning General Director, Ministry of Education

FINLAND: Prof Katariina Salmela-Aro, Department of Education, University of Helsinki

FRANCE: Andreas Schleicher, Director of the Directorate for Education and Skills, OECD. Key-note speaker

HONDURAS: Doris Gutiérrez, Advisor to the Ministry of Education, Ministry of Public Education

HUNGARY: Adam Horvath, Division Director, Centre for Digital Pedagogy & Methodology

HUNGARY: Adam Collis, Cofounder & Director of Innovation, Catalyst. *Moderator*

INDIA: Vikram Bhat, Consultant, Office of Deputy Chief Minister, Delhi Government

JORDAN: Dr Najwa Qbelat, Secretary General for Administrative & Financial Affairs, Ministry of Education

JORDAN: Dr Yosef Aboushaar, Director of the Directorate of Planning & Educational Research, Ministry of Education

JORDAN: Reem Bsaiso, Founder & Managing Partner Global Outreach & Head of Middle East Government Relations, Brains Global

KENYA: David Njengere, Advisor to Minister & Head of Curriculum, Ministry of Education

KENYA: John Kimotho, Director of Educational Media, Kenya Institute for Curriculum Development

LEBANON: Bilal Nasser, Senior Finance Officer, Ministry of Education and Higher Education

LEBANON: Pierre Abi Aoun, Project Implementation Manager, Ministry of Education and Higher Education

MALDIVES: Hon Abdulla Rasheed, Minister of State, Ministry of Education

MEXICO: Hon Esteban Moctezuma, Minister of Public Education, National Ministry of Public Education

MEXICO: Hon Yoloxochitl Bustamante, Minister of Public Education, Guanajuato Ministry of Public Education

MEXICO: Hon Juan Carlos Flores, Minister of Public Education, Jalisco Ministry of Public Education

MEXICO: Fernando Valenzuela, CEO, EDLATAM Alliance

MEXICO: Elisa Bonilla, Senior Officer, BOTH Praxis

MEXICO: Prof Marco Fernandez, University TEC and Coordinator Mexico Evalua, TEC de Monterrey University

MEXICO: Patricia Vázquez del Mercado, Radix Education. *Moderator*
MEXICO: Cristina Cardenas, CEO, 3C Innovation for Human Development. *GOLA Organiser*
MOROCCO: Elarbi Imad, President, Centre for Civic Education

NIGERIA: Prof Ismail Junaidu, Executive Secretary, Education Research Development Council

NIGERIA: Prof Yakubu Ochefu, Secretary General, Association of Vice Chancellors of Nigerian Universities

NIGERIA, KADUNA STATE: Prof Ahmed Iliyasu, Special Advisor to Chief Executive, National Teachers Institute

NIGERIA, PLATEAU STATE: Daser David, Director General, ICT Development Agency

NIGERIA, PLATEAU STATE: Edward Buba, Head of E-Governance, ICT Development Agency

NIGERIA: Vivienne Bamgboye, Principal Consultant, Oye Centre for Learning & Development

PALESTINE: Dr Basri Salmoudi, Deputy Minister, Ministry of Education & Higher Education

PANAMA: Hon Maruja Gorday de Villalobos, Minister, Ministry of Public Education

PANAMA: Elio Abner Aparicio, International Cooperation Director, Ministry of Public Education

PANAMA: Anabella Yepes, National Director for Teaching, Ministry of Public Education

PANAMA: Adlay Defreitas, National Director for Informatics, Ministry of Public Education

PANAMA: Carlos Martinez, Sub National Director for Informatics, Ministry of Public Education

PORTUGAL: Mário Franco, Founder, Millennium@Edu Sustainable Education & GOLA Founding Partner.

RWANDA: Christine Niyizamwiyitira, Head of ICT in Education Department, Rwanda Education Board

SAUDI ARABIA: Jawara Gaye, Lead Education Specialist, Islamic Development Bank

SENEGAL: Aminata Lo, Teacher Trainer - SIMEN, Ministry of National Education

SOMALIA: Deeqo Godah, Senior Principle Education Officer & Delivery and Project Education Management Unit, Ministry of Education, Culture and Higher Education

SOMALIA: Dr Faiza A. Hassan, GPE Country Director, Ministry of Education, Culture and Higher Education

TANZANIA: Viola Muhangi-Kuhaisa, Project Coordinator, UNESCO

TANZANIA, ZANZIBAR: Abdulla Mzee, Deputy Permanent Secretary, Ministry of Education and Vocational Training

TANZANIA, ZANZIBAR: Omar S Ali, Director of ICT in Education, Ministry of Education and Vocational Training

TUNISIA: Prof Mohamed Jemni, Head of ICT for Arab League Educational, Cultural & Scientific Organisation (ALECSO).

UGANDA: Michael Ocero, Assistant Commissioner, Information Technology, Ministry of Information Communications Technology

UGANDA: Jane Kyarisiima Mwesiga, Commissioner Human Resource Management, Ministry of Education and Sports

UGANDA: Ben Mugisha, Lead ICT Specialist, Ministry of Education and Sports

UK: Lord Jim Knight, Former UK Schools Minister & Chief Officer TES. *Expert Synthesiser*

UK: Prof Stephen Heppell, Filipe Segovia Chair of Learning Innovation at the University of Camilo José Cela, Madrid. *Moderator*

UK: Jane Mann, Managing Director, Cambridge. *Moderator*

UK: Justin Blake, Head of Social Responsibility & SMSC, Windlesham House School. *Moderator*

UK: John Glassey, CEO, Brains Global & GOLA Founding Partner. *Conference Chair*

UK: Claire Urie, Head of Government Relations, Brains Global. *Moderator*

USA: Robert Hawkins, Senior Education Specialist, World Bank. *Key-note Speaker*

USA: Andy Hargreaves, President of ARC Education & Research Professor at Boston College. *Expert Synthesiser*

USA: Jennifer Patterson, Assistant Superintendent – Office of Teaching, Learning, & Assessment, Oregon Department of Education

USA: Carla Wade, Digital Innovations Lead, Oregon Department of Education

USA: Stan Freeda, State Educational Technology Director and Digital and Online Learning Specialist, New Hampshire Department of Education

USA: Marcia McCaffrey, Arts Consultant, New Hampshire Department of Education

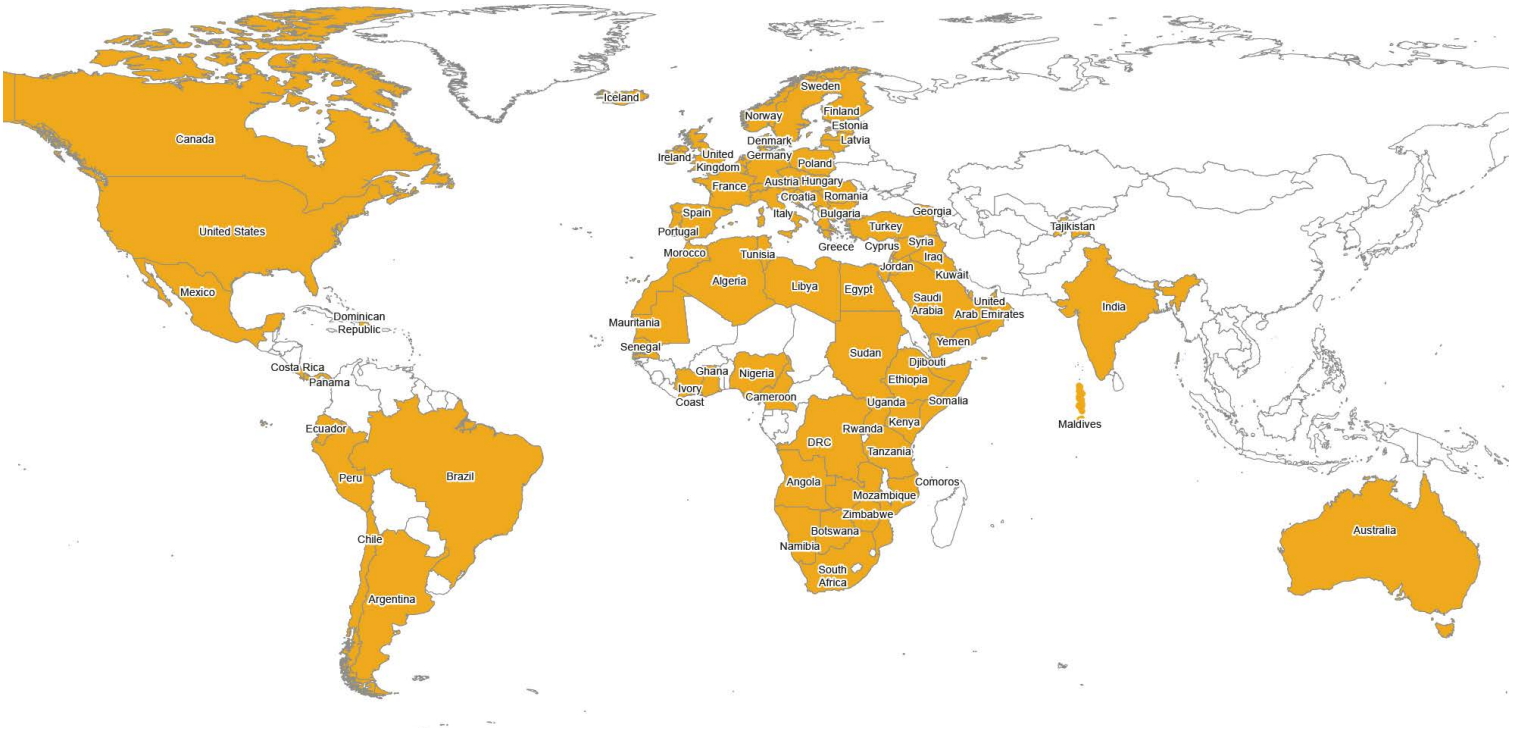
USA: Karen Melin, Deputy Commissioner, Alaska Department of Education & Early Development (DEED)

USA: Brittnay Bailey, Education Specialist II, Alaska Department of Education & Early Development (DEED)

USA: Joanne McEachen, CEO, Learner First & Executive Member, Karanga. *Moderator*

ZIMBABWE: Peter Muzawazi, Chief Director, Junior, Secondary & Non-Formal Education, Ministry of Primary & Secondary Education

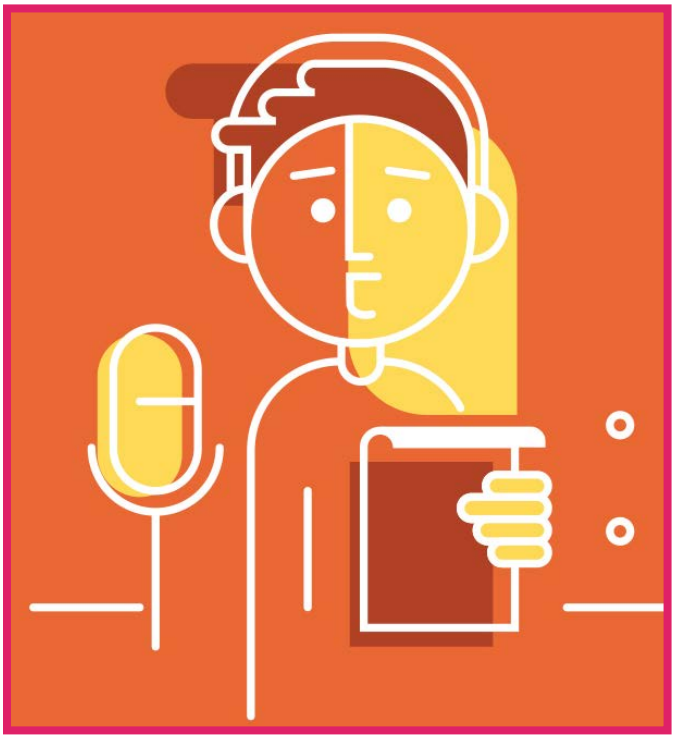
ZIMBABWE: John Dewah, Chief Director, Curriculum Development and Technical Services Department, Ministry of Primary & Secondary Education



KEY: Countries represented at GOLA! conferences

OPENING COMMENTS

SECTION 2. Opening Comments



Here we present an abstract of the key findings, a summary of the opening statement and a breakdown of the key discussion areas by subject matter, bearing in mind the overlap between issues and the necessity to retain an overall holistic view of education and teaching. .

2.1 Abstract of Key Findings

As many of the worlds' countries prepare the reopening of their school doors, what rings true is the variability with which this takes from country to country, region to region and even school to school. The need for governments and school systems alike to remain flexible, nimble learning organizations that look at their data and respond with legislation decisions will be critical in ensuring the spread of best practices within their systems. More so is the ability to remain strong to ensure the resulting actions and behaviours align to what is right for kids.

As much as this pandemic has exposed and amplified the inequity that exists within systems, so too has it revealed that education and well-being go hand-in-hand and in many cases countries have chosen and are continuing to prioritize care and compassion before continuity of learning. This truly marks a unique moment in education history for systems to get it (education) right; and by this it means the opportunity to tighten and clarify what is high quality teaching and learning and as well, define more comprehensive digital learning models. For education, COVID-19 is becoming a catalyst for policy change across the globe as we see short-term innovations integrating into long-term plans: where traditional underperforming online methodologies give way to questioning how online learning should work; where digital learning is seen beyond simple replacement of existing classroom practices, assessment practices evolving to a more wholesome representation of student progress; and where outcomes are being redefined to include broader concepts of global competencies, social and emotional learning skills and emphasizing the need to consider the health and wellbeing of all students. Achieving this is not without its struggles.

Dealing with the ever-increasing scale of learning loss or that many may not even return, especially from our most vulnerable populations, remains a top concern for all system leaders. So too is the realization that the success of many of these new initiatives rely heavily on the quality of teaching staff. Not just in their use of digital skills or how technology becomes interlaced with pedagogy to effectively teach online or in blended models, but also in the ability to engage more personally with students, parents and each other and being ready to adapt to unexpected shifts that will arise. This gives rise to rethinking strategies for teacher development as well as setting new standards in pre-service qualifications. These and many new struggles and strains placed on government institutions create new intergovernmental partnerships as well as partnerships between multilateral agencies, vendors as well as private sector partners. So too is it awakening international exchanges between countries as well as intra-national exchanges that have not been common, however provide opportunities for exchanging ideas and in some cases result in value from pooling resources to gain greater purchasing power.

As for funding, it remains at the forefront of the discussion. In many cases budgets are being

reduced, leading to shifts in prioritization of spending but so too there are countries where new funds are being made available to ensure resources are not taken from existing areas of education. Emphasis is especially made to the importance of ring-fencing education financing in order to respond to the new demands of access, connectivity, learning platforms, special education needs, supporting teacher development, as well as mental health and well-being support to enhance equity across the nation … all in an effort to provide assistance to those that are most vulnerable. Partnerships with multilateral agencies such as the World Bank, Inter-American Bank, Islamic Development Bank, UNESCO, UNICEF, and others become paramount to mobilise funds in response. Perhaps the most prevalent theme throughout all topics discussed, centres around ensuring the quality of impact in the context of policy and funding. Countries are considering balancing capital with results – the ability to demonstrate closing the gaps resulting in better conditions for financing. A true testament of how nations are prioritizing doing what is right for kids.

2.2 Opening Statement 1: Andreas Schleicher, Director of the Directorate for Education and Skills, OECD

Note: This opening statement from Andreas Schleicher is in conjunction with the slide presentation reproduced in Appendix A.

The scale of the pandemic has been unprecedented. We have 1.5 billion students locked out of their schools, and one of the things to take away from this crisis is that learning is not a place but an activity and that education must become more resilient and that education and technologies must work better together.

In the future we will see more investment and planning for remote learning, but it has had a hard time addressing the social functions of schooling and often it has been more like 20th century education delivered through technology, rather than the kind of 21st century learning that we could see with technology. We have also seen how technology has amplified inequality in education, put accreditation assessment at stake, because we do not yet have new forms in place, and faced teachers in with huge challenges at the very same time.

We have also seen lots of very innovative environments emerging and that should not be forgotten. Critically, we need to find ways to ring fence education, but we also need to look for ways to use the people, the spaces, and the technology more creatively for a new normal. On the good side, when we surveyed people from 76 countries, one can see that virtually everybody thought how each other has made a big difference and managed the best they could with the facilities at their fingertips. One does not always see this in normal times. If you have an unprecedented momentum for change, where everybody including teachers, parents, school leaders and policy makers are working together to master this challenge.

That is the momentum that we can capture for our transformation. Real change often happens in times of deep crisis. On the technology front, we have seen lots of innovative learning environments emerging. When you see the responses from countries, virtually everyone has been using technology that is become sort of the lifeline for success. This is not about the kind of magic AI based platforms providing learning; it is largely technology, amplifying the work of great teachers, not replacing teachers. We have also seen TV and radio playing a very important role, particularly for the younger students, and mobile technologies are increasing in their use to unprecedented levels.

Of course, technology is only as good as how it is being deployed and the evidence that we have gathered shows that teachers still struggle. On average about every second teacher has used technology frequently or always for classwork in normal times. There is a lot of technology around, but teachers are not always comfortable with it. That is a challenge. That is the kind of bottleneck that we face. On the positive side, many countries such as Finland, Israel, Sweden, and Croatia, we see the share of teachers who are using technology has more than doubled between 2013 and 2018. Thus, there has been a sort of background momentum leading up to the crisis, but still a huge constraint on capacity in our education systems.

Looking forward to the re-opening of schools, what we have all learned is that it is much easier to close schools than to reopen them in a safe environment. What is interesting, is that we have less than a quarter of countries who have said they are to go back to the status quo, not returning to normal scheduling and student attendance. Half of the countries surveyed, are looking towards hybrid models of distance learning, and classroom-based learning. What we are seeing now is a sort of two half worlds. We are doing normal lessons through technology or using a sort of virtual lesson based on teacher presentation, but actually the future is about full integration. It is going to be very challenging for teachers. In our survey, most teachers say, that they are happy to teach in the classroom, or happy to teach online, "but don't ask me to do both." But that is exactly what the future will ask them to do, particularly as there are capacity constraints in schools, social distancing will not allow schools to accommodate all students; so teachers will need to decide who is going to be learning in front of the classroom who's going to be learning at home, at what time for what purpose?

That is going to be the next big challenge, but you can see most countries are looking to that future. 20th century teaching is very familiar to teachers and their methods of classroom management: "I tell students to follow classroom rules, I tell students to listen to what I say and so on." But when it gets to know cognitive activation and kind of learning that this pandemic has put to the forefront, teachers must now give students tasks that require them to think critically. What it requires for some young learners to be successful is to allow them to set their own learning goals, to manage their learning process and to be motivated to have that kind of agency to manage their learning. In regular times, this has not been very prominent in most countries, this includes industrialised countries who are not struggling with money, they have plenty of funding in the system; but still retain a kind of culture of teaching that is far removed from future sustainability

Concluding with a few pointers to what has been the success of PISA (the OECD's Programme for International Student Assessment)? We do not find success in money. We do not even find it in classroom time. But where countries are better in fostering a growth mindset among students, giving they true ownership over how they learn where they learn, when they learn what they learn, we can see they are performing significantly better on the PISA assessment. It is not a straight line, but one can see clear patterns. These include non-cognitive outcomes, like growth mindset becoming crucial drivers for success in education. We can see that growth mindset is related to many of the factors that are key to success in this crisis. Students who have a stronger growth mindset are more likely to be motivated to master difficult tasks. They show a strong sense of self efficacy.

If policy makers want children to be innovative, to be creative, then they must be given room to experiment, to try for themselves, including taking risks and learning about making mistakes. If a national education system is not very good in helping students learn from their mistakes, then it is less likely that we will see very creative students. Also, students with a stronger growth mindset are more likely to set ambitious learning goals as they identify greater intrinsic value. So, student agency has really come to the forefront at the heart of modern education.

We have seen a clear shift from the kind of disciplinary knowledge content knowledge, to deep conceptual understanding, epistemic reasoning. Can you not just learn something in physics and chemistry? Can you think like a scientist? Can you design an experiment? Can you distinguish questions that are scientifically investable from those that are not? Can you think like an historian? History is not just about names in places but about understanding how the narrative of a society has emerged, how it develops and how to advances. Can you think like a mathematician? The OECD PISA results show that this is where our education systems currently do not deliver enough when it comes to skills – the world no longer rewards people just for what they know. Now Google knows everything. The world increasingly rewards people for what they can do with what they know.

Furthermore, we all need to think harder about social and emotional skills, resilience, empathy, courage, curiosity, and in this crisis, where volatility complexity are at the centre. In conclusion this crisis will demand from people the capacity to create a new value to build things of intrinsic purpose first, and that is probably where people have the biggest edge over computers. The capacity to reconcile tensions and dilemmas; the capacity to navigate ambiguity, manage complexity are all crucially important. Last, but not least, to mobilize cognitive, social, and emotional resources to take action. In a nutshell, our education systems have done well to educate second class robots – people are good at repeating what we tell them. But in this pandemic context, we must ask ourselves harder, what is it going to take to make people successful for tomorrow?

2.3 Opening Statement 2: Robert Hawkins, Senior Education Specialist, World Bank

Robert Hawkins started by sharing his thoughts on the communication of learning in the classroom and the effect on learning outcomes. The World Bank is looking at both the recovery what that implies in terms of resilience and how countries are going to build systems to take the shocks in the future, to inform how to utilise future investments to think differently about education.

There are several areas we at the World Bank are seeing a lot of demand from, leading with five main principles. One is this idea of hybrid learning, the new normal, will not be just physically based, but will be a hybrid of both face to face and distance. We still have a huge learning poverty crisis, and we will be looking at ways in which to use technology to prepare learners with the very basics of numeracy and literacy at the primary level. This incorporates of the key issues referred to by Andreas Schleicher in terms of skills and the changes that can facilitate the development of some of these 21st century skills.

Secondly, it is critical we focus on designing for scale – designing and looking at ways in which to ensure that our interventions reach all children, urban and rural, better off, and less well off, connected and not connected. This crisis has really illuminated a digital access divide; whereas in the past, we had thought that we had addressed the access divide. This has opened up a new access challenge for us all, and with this kind of new access challenge, we are looking at a combination of technologies to reach students from radio to TV to LMS (learning management systems) to mobile to print, and looking at ways in which to not just provide asynchronous delivery but synchronous feedback so that we get the human engagement with the learners.

The third principle is around empowering teachers, and that education is a social endeavour in which engagement between people is essential to the learning process. What we are finding is that that the need to address the role of the teacher is changing which has exposed a lot of inefficiencies in terms of skills, in terms of technology, and the need to train a large number of teachers to address the demands. It has also opened up opportunities of thinking a little bit differently about how we can crowd experts from the science, medicine, and engineering fields, as well as the reality that parents have become de facto teachers during this crisis.

The fourth principle that we espouse engagement of the entire education ecosystem. Ministries of Education cannot do this alone, there needs to be a whole government approach and a multi-stakeholder approach. This includes bringing together telecom companies, publishers, edtech start-ups, radio and TV stations; this is what creates a lot of innovation and ingenuity amongst education ministries – bringing such stakeholders into the discussion and finding out ways in which to leverage their ingenuity and bring their knowledge, skills and services to learners. So, we are now finding that education has really become everyone's responsibility.

The final principle is around being data driven and that ministries need to be learning organizations first and foremost, they need to be able to access data and use such information to design and implement iterative projects and processes within the ministry. Ultimately,

ministries of education will need to be flexible in both their approach and design, which implies a lot of capacity challenges, and a lot of leadership. Let me share with you about how these principles are now being kind of implemented in our portfolio.

In terms of how these principles are being implemented into the portfolio of the World Bank, our fiscal year starts now in July. So, we are preparing the pipeline of projects for this next fiscal year. The World Bank has around 60 projects under preparation, many of which are still being designed and many of which are being redesigned. As of now, about 65% of projects with edtech we imagine that will grow because we still do not have complete information. This is fresh information that we have been putting together over the last couple weeks, but gives a snapshot of how countries are thinking about responding to the recovery phase, the resilience phase, the reform phases, and how project implementation is related to the above five principles.

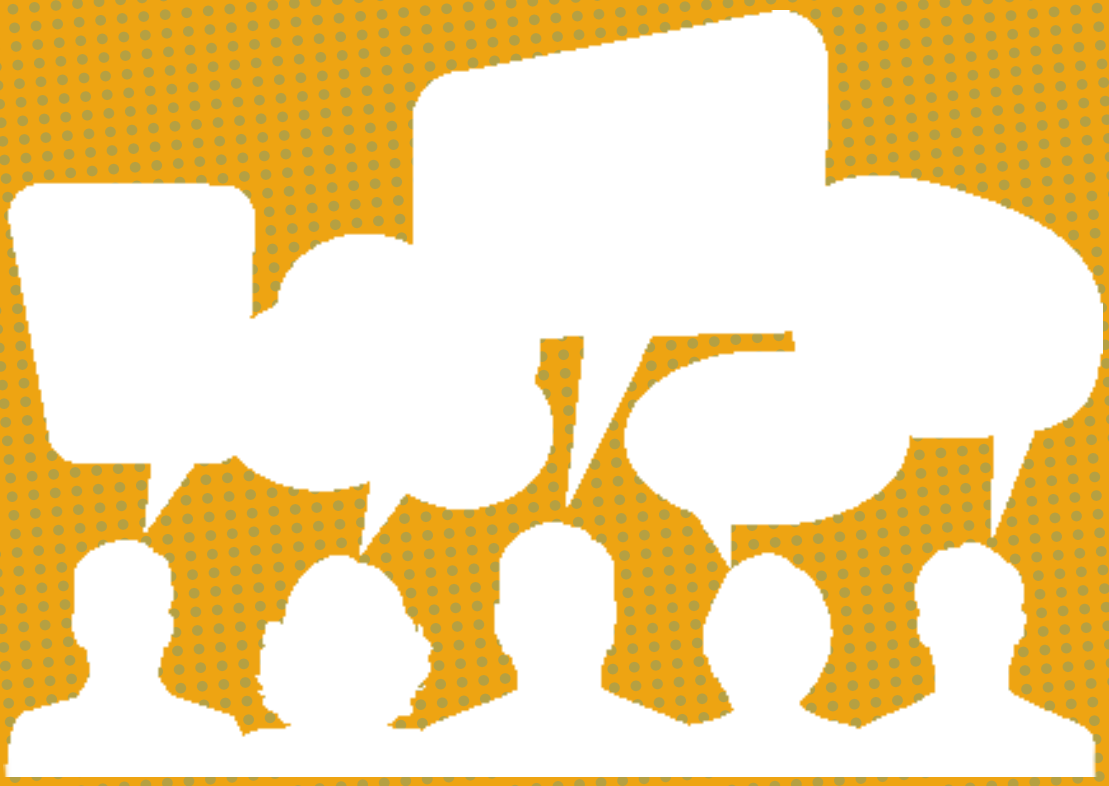
We see a lot of distance learning projects, and this is the reform issue of looking at hybrid approaches going forward and building resilience into the system. Skills: there is a huge demand for skills, digital skills, of the 21st century skills as well as STEAM skills.

In regard to designing for scale, we are seeing a lot of this multimodal delivery utilising TV, radio, Mobile and LMS components. 65% of World Bank projects in Africa have some combination of this multimodal delivery to reach all their students. Many countries are looking at ways in which to combine new forms of digital content, and design digital content that can be delivered over any one of these modalities. This approach includes assessing ways to reduce the length of content, such that it is more digestible and modular, as well as adaptive learning content and assessment, which will be a very important issue, especially in bringing students up to speed with their grade level.

The issues around formative versus summative assessment are strongly debated. If one uses technology more effectively for teachers, including focusing on pedagogy, focusing on ways in which technology can bring more teachers into the system and really ramp up and scale, teacher capacity building, both pre-service and CPD.

On engaging the entire ecosystem, a new digital divide has been exposed, with many countries looking at ways in which to improve connectivity, including schemes in which to bring more devices to students along with cloud services. Of course, what we are finding is challenges around procurement as we begin to look at infrastructure as a service as opposed to just an input. This involves assessing ways in which ministries of education can look at their budgets for supporting such costs, as well as public-private partnerships to support investments.

Finally, there is the data driven approach to education policy. In all of the projects, we see some form of education management information system. A big challenge is to properly standardise and coordinate systems, where in countries we may see up to 45 different systems that are collecting data, some within the ministry, some in other parts of government, some in the private sector that don't talk to each other. So open data interoperability, open API's are all very important themes that the World Bank is working on with countries. We are also seeing more and more around blockchain projects as a means in which to facilitate the transfer of resources and value. Over 70% of World Bank projects are results-based financing, and half of those resources go just to verification. So, if we can use technology more effectively to verify results, with data technology utilising blockchain, we can find a lot of efficiencies. The World Bank has several resources that can be viewed on their website and the key message is that we must all pull together to build resilient education systems.



DISCUSSION

SECTION 3. Discussion

3.1 Interventions, Partnerships & Collaboration

Interventions in most countries follow a common thematic process: school closures and methodologies to deliver content (TV, radio, online); planning for re-opening with increased sanitary and health protection (hand washing stations, PPE); quickly adapted partnerships with telecoms operators to zero-rate educational content; adjustments to school rotas and accordingly the content in the curriculum; ensuring no student is harmed and certainly not downgrade in their assessment; examinations only applying for the important qualification years such as grade 12; and the implementation of stricter measures for school re-openings to give parents confidence.

Panama, like many countries has used TV and radio media to deliver content and has also intervened with more rapid development of the e-learning platform produced in partnership with the Panamanian agency for innovation. The pan is to still re-open high schools on 20 July. Access to the learning platform is critical to the success of school re-openings and the Panamanian government is keen to know the opportunities for partnerships with providers.

Hungary, like many countries, in their COVID-19 response initiated digital working for schools while they were closed. As plans are being made for school re-openings they have decided that this option for online learning is retained by schools, to cover the eventualities of either part openings or the danger of a return to closures due a second wave of the pandemic. The fundamental principle is that no child should get left behind and hence schools should have the choice of the means of delivery. The full impact of COVID-19 is still being analysed so the ministry of education has started a full-scale survey of teachers, students, and parents – particularly to assess learning loss and from that what immediate actions need to be taken.

Cameroon immediately adopted the use of TV and radio for the delivery of content and have utilised WhatsApp for messaging between teachers and parents. Some subject forums have also utilised other social media such as Facebook. There has been a noticeable shift in the role of parents having to take supervisory and teaching responsibilities at home, so the Government has been considering strategies to better support families at home. They have been trying to create online platforms for learning and produce modalities for providing devices in the home.

In Uganda they established an Education National Task Force for COVID-19 response and a coordination mechanism of education response at district and sub-district levels. The Ministry provided a coordination and communication mechanism among education stakeholders and the priority is to mobilize resources and fund-raising mechanisms to enhance the capacity of Ministry of Education and to promote protection of learners and teachers to ensure continuity of learning and transition to normal school programme. Monitoring and support implementation for school closures has meant developing and disseminating awareness and health safeguarding messages to learners, teachers, parents, and community members through various media (SMS, text, TV, and radio). The ministry is now devising its digital agenda for education.

Nigeria at the Federal and State level has also been organising the delivery of content over TV and radio to reduce the amount of loss of learning during closures. Again, the biggest challenges are in remote areas with no internet connectivity and interrupted power supply. The immediate priority has been the safety and well-being of students and teachers and planning for school sanitising. Some parts of the country have produced disseminated information on learning platforms, freely available to schools. This has involved far greater engagement with families and the responsibility of parents to support logging on to systems and utilising the content.

In Botswana they have been preparing for the return to school based on two shifts per day and have hired additional staff to cover teacher shortages. The inequity of access is a concern; with very remote areas but access to technology and internet is mainly based in the urban areas. When they closed their schools three months ago this was a primary concern when trying to have continuity of learning. With the view of not leaving anyone behind they employed three methods – internet, some education websites were zero rated; TV broadcasting content mainly for secondary level schools with 87% penetration across the country; and the third mechanism was radio which has nearly 100% penetration.

If there is to be a successful implementation of public private partnership and given the need for online learning then clearly deeper, more sophisticated relationships are needed with the operators and internet service providers. With the true state of online connectivity exposed for what it is in many parts of the world, governments must surely now be looking at far more robust partnerships with the telecommunications companies. After all, a truly equitable and well-connected education system with greater use of devices can only be of benefit to the operators and hence their collaboration and contribution is essential.

Partnerships with the ICT and edtech industries is often spoken about positively because of the potential. In the immediate aftermath of lock-down a variety of short-term partnerships were formed with operators offering zero-rated access for educational content, some contributing to the purchase of devices and access to e-learning technologies. Yet mostly this has been very ad hoc depending the companies and countries concerned and policy makers are especially wary of bait and switch offerings. To facilitate online learning or even provide funding resources, we have not really heard much.

The Maldives has acted promptly in securing agreement with the two local mobile operators who are now providing students with 5 GB of free data for students and 10 GB for teachers who have been using *Google Classroom* during the school closures and are encouraged to have full *Google* certification. This has been done in conjunction with lessons being produced by teachers for TV, in what is now known as TeleClass. Approximately 500 teachers are involved in this program via the coordination of 50 schools. These then coordinate with teachers in other schools along with facilitators to produce educational content videos. Such programming requires partnership with both the national TV channel and a local private channel that has proved successful with all stakeholders producing content in the spirit of good collaboration.

The main partnerships in Mexico are with *Google* and *Microsoft*, including free accounts for teachers and students. Teachers have now been trained in the use of these technologies. So, in short time COVID-19 has acted as a catalyst to accelerate digital transformation in the Mexican education system. Additional partnerships are with a new national technology-centred polytechnic and new educational television channel which will remain for the long-term.

In dealing with infrastructure issues, the State of Alaska has built alliances with the local internet service providers. Other innovative approaches include engaging with philanthropic foundations who have offered to purchase devices for those districts in the most need. Such partnerships must be cultivated and developed to account for potential shortfalls where education is currently 100% funded through general funds.

An option in getting the best deals from the edtech sector is for greater collaboration

amongst education authorities to generate economies of scale. Cross-border collaboration in education between countries is highly unusual given the element of national pride built into the education system. That said, internet connectivity and new technologies do not stop at borders and there is certainly a considerable opportunity for groups of countries in well-defined regions polling their resources to give them greater purchasing power. On a non-national scale we see districts within states determining their own edtech procurement and this is clearly open to inefficiencies. For example, in New Hampshire they have a state-wide affiliate group that has software purchasing agreements and now they State is thinking about providing a learning management system with Zoom licences that would be state-wide. This is new for them and they see there are more possibilities for districts to join together and collaborate.

Some participants spoke of how they felt that COVID-19 had given teachers a greater appreciation of the relationship between industry and education. They have found resources they never knew existed and, in many cases, have been able to access free trails. Of course, the question remains, what happens when the free trial period expires? A lot of teachers have quickly gone from being uninformed, even naïve, about digital opportunities and now, with a little bit of investigation, are excited about the resources available and it is hoped they will continue to embrace such digital technologies for education.

3.2 Equity & Access

Of prime concern amongst all participants is how the COVID-19 pandemic has amplified inequality. Equity is a fundamental pillar of education and so systems have needed to respond quickly to ensure the most vulnerable are not left behind. To ensure equity this has required urgent interventions in the delivery of content and lessons utilising all available media – TV, radio, and the distribution of printed materials. The President of Mexico recently announced free internet for every school and every hospital in the country within the next two years, giving a platform for a far more equitable system. Officials within the federal and state ministries of education are very mindful of the need to train teachers in digital competencies in this two-year timeframe.

The Government of Delhi, India, is also witnessing how COVID-19 has amplified inequity. A large portion of their 1.6 million students come from very poor families who do not have connectivity or devices in their homes to access online learning facilities. Short-term interventions have included TV, radio, and the use of social media for direct messaging, yet the scale of learning loss is of major concern. Another big challenge in an urban centre like Delhi is large parts of the population who have migrated from rural areas but are now returning to their home states as result of the pandemic. How many children who will not return to school is still unknown and is major concern affecting future access and equity.

The dilemma over access is exacerbated in Jordan where there are over a million refugees. Students from Syria have been integrated into the Jordan education system but in remote areas the government has faced many challenges. These have been met with the use of TV, radio, the delivery of printed materials to villages and even the use of “education caravans”. Feedback from parents and communities has given the ministry of education concern over learning loss, inspiring them to

increase efforts in providing textbooks and analysing the outcomes from online learning. This implies ongoing revision of online learning curriculum and making sure that any learning loss is compensated for in future semesters.

The issue of equity must include the right procedures, guidelines and tools being in place for the vetting of content. Is the content learners are accessing culturally and socially responsible? What consideration has been made that considers the broad spectrum, such as emerging bilinguals or children from poorer backgrounds. We have seen already that in some countries and region 20 – 30% of children have not participated in the online learning during school closures. On returning to schools it will be critical for leaders to work with communities to find those children, to account for learning loss and work with families who have not been able to be at home (working two or three jobs) all the time to supervise their child's learning.

On equity there is concern across the board of children who may have fallen through the cracks and these must be attended to. The inequity of access is a concern for remote and rural areas. We are now digging deeper into the gaps in the system. Not just academic gaps, but the gaps in digital learning and the self-esteem of more vulnerable and minority groups.

The Mexican education system was caught unprepared when COVID-19 arrived in the sense that it showed immediately the deep inequalities that exist in access for technology. According to the Statistical Office in Mexico, 40% of households do not have access to internet and this figure has been going up due to the economic crisis. Some families only have access to internet through cell phones and through prepaid cards and with recent job losses many families face considerable challenges. So, the government put together two strategies. On the one hand they upscaled the online platform for basic primary and secondary education, but high school has been a problem because they do not have the electronic resources. The other strategy has been the use of TV and radio lessons. The problem here is that a lot of material has not been covered. They have had to re-think the curriculum to try to manage distance learning. However, the problem is that we know there is an important 10 to 20% of students who have not had any kind of continuation or distance learning. Mexico was already coming from a learning crisis and the PISA results show that Mexico still has deep inequalities.

These sentiments were also expressed from Argentina where not enough students have access. Mostly, they are now doing so through their mobile phones – learners going to school via their phone is a problem that needs to be addressed. The PISA results for Argentina also show high levels of inequality.

In Lebanon, the problem of inequality is exacerbated by the burden of a huge refugee population – as high as 25% of the total national population. They have struggled with access, although the ministry of education and higher education has tried to mitigate this as much as possible and are still find out where the gaps are. They have drafted a response plan with three main pillars: access; quality of learning; and the type of assessment.

In Portugal they found that around 25% of students do not have a personal computer. Many families cannot afford to pay for connectivity and some students may have to share their computer with other family members. Also, some teachers cannot afford high quality internet connection and the required devices, so it is very much the role of government to ensure there is equity in the system by providing the tools and the infrastructure. Finland has overcome this issue of equity by ensuring that every student has a device independent of other family members. This still does not negate the need to be attentive to student well-being which goes hand in hand with learning.

A real problem spoken about is the danger of students dropping out and not returning to education. Evidence shows that the poorest, the most left behind are the least likely to re-enrol in schools. Recent published research shows that potentially over 10 million girls may never return to the classroom because once lost it is very difficult to get them back into the education system. Girls are less likely to have access and have less sophisticated technologies. Girls are

more likely to face gender specific barriers. This includes unpaid care responsibilities in the household and the dangers of sexual violence. It is critical for governments to be alert to these dangers and intervene accordingly.

In terms of governance, what particularly resonated in the meeting was solidarity. Especially solidarity within government – between the ministries of education, health, and telecommunications. Such solidarity could have positive outcome when upscaling digital technologies and connectivity and ensuring cohesive alignment with the private sector and ICT operators.

3.3 Governance, Policy & Funding

Robert Hawkins in his opening statement referred to how governments and ministries of education themselves have to be learning organisations themselves. This resonated with many participants, for example in US states they need to consider moving from being generally rigid organisations to being flexible, nimble learning organisations that look at the data and respond with policy and practice changes in the classroom accordingly. So, what steps does it take for a government department to become a learning organisation? COVID-19 has clearly been a catalyst for shifting the thinking of policy makers.

Governments are hierarchical institutions so becoming a learning organisation involves strong leadership from ministers and directors of education all the way down. Being able to access data is extremely important along with reducing silos across departments and harmonizing collaboration is critical. This must sit alongside the idea of the entire ecosystem and that the ministry of education cannot do it all alone. There needs to be strategies to engage with those outside the ministry.

As people look ahead to this coming school year, they will do so with the realisation that remote learning is still going to be needed within the school system – especially considering the requirements of social distancing. So, policy makers will need to start aksing how are we going to do remote and online learning properly, what kind of platforms and how to best use them along with a more project-based learning approach. Central government decision making, and education legislation will be critical for spreading best practices in the system.

That said, federal agencies and ministries of education are also looking to see how districts and regions at the local level more choice in the decisions they make, thus giving greater freedom to innovate. The concern here is that they still need guidance if making key education decisions for the first time. Their systems need to be ready and staff need to learn how to innovate. Guidance from central government should look across experiences in other countries such that decisions are not made in a vacuum.

Although several participants spoke of how COVID-19 can be a real catalyst for policy change from teaching to pedagogy to assessment to digital skills, there remained some scepticism and awareness of real politics. That is, countries and states will have policies largely driven by the priorities of the incumbent government along with its manifesto pledges which may well have priorities in areas other than education. Ministers and officials are very much still in a state of flux and awaiting the turn of September which is too short a time period to enact any change amongst the education stakeholders – teachers, unions, principals, superintendents, district leaders and so on. Still, people are now having conversations about the lessons learnt over the last 4 months and policy changes may well be looming on the horizon. Generally, governments just simply have not had the time to catch up.

Such time lags in governance relate to the regulatory perspective, yet there is still the education perspective which includes a definite shift towards greater blended learning. People are embracing the blended option of learning with it moving into the mainstream of operations. For example, in Botswana, the regulatory officials have contacted all the principals and leaders of secondary and higher institutions to gauge what is the methodology

they will be most comfortable with under the current COVID-19 scenario. Institutions have submitted their proposals, and this is very much a first step in developing policy.

Government officials spoke of deploying taskforces. Some immediately working on how best to re-open schools, others tasked with guidelines for student and teacher data privacy and provision of other essential support services. In doing so they have had to act quickly and innovate, so there is a real opportunity for those short-term innovations to be integrated into future long-terms plans.

The economic backdrop is paramount concern, with education ministries fully aware of the dangers of austerity and accordingly the need to reset priorities. This is one of the painful points for the Government of Delhi which cannot borrow money on its own and hence needs federal support. Fortunately, Delhi has been a surplus economy over the last 5 years, and they have allocated 25% of their budget into education, with high expectations of the long-term return of doing so. One of their biggest focusses will be to ramp up the digital infrastructure in schools along with the provision of devices and for this to succeed will likely need creative public private partnerships.

In the immediate term, we are seeing many countries where funds are being diverted from many government departments to the ministry of health in response to COVID-19 with some countries reporting up to 20% cut from the secondary and tertiary education sectors. This invariably means there will be a drop in enrolment especially with the new cycle starting soon in August/September. Conversely, many in education will say that their budget pressures are almost constant – pandemic or no pandemic; not forgetting in many parts of the world, education budgets have their own micro-environments with quality often impacted by whether a student comes from a wealthy community or not. COVID-19 may well have resulted in the relaxing of procurement guidelines, yet many teachers responsible for special needs education are reporting real difficulties in meeting the requirements of SEN students.

Local economic factors are also of vital consideration. For example, oil revenues in countries like Nigeria or states like Alaska are being severely impacted by the falling oil price over the last few months. Alaska is an oil rich state where education is funded both by federal and state funding, but a good portion of the state finances comes from oil revenues. Short-term economic stimuli packages and sustainability funds from the federal government have provide short-term relief to the COVID-19 crisis but expire in 18 months. The challenge for the state government is how to maximise those dollars couple them with other sources of funding from the state. Hence, what kinds of shifts can be made to continue providing excellent education for every student with less money and in a virtual environment?

The Alaskan sentiment was reflected in Alberta where they too have a huge hydrocarbon economy, yet the distribution route is through the US, making harder to get oil to market and we are now seeing a collapse in global oil prices. Those in senior governmental positions have spoken of a “financial reckoning” in the wake of COVID-19, anticipating big cuts in education, with the unions expecting to lose of the order of 1,500 teachers.

Equally, the major source of tax and foreign exchange revenues come from the petroleum sector. The collapse in oil prices has put huge pressure on government budgets with investment in education suffering. Such a challenge requires creative solutions. For

example, in 2019, the Government of Saudi Arabia raised $30 billion in the IPO of Saudi Aramco. The possibility of putting equity in national hydrocarbon resources on the global stage and then ring-fencing some of the raised funds for education was one innovation suggested.

States in the US can put forward proposals to access federal funds that are distributed to support professional learning, access to devices and upgrading of connectivity. For example, the Governor of Oregon responded to the school closures by putting an additional $20 million into broadband infrastructure, especially for the rural areas, to respond to the need for more online learning. Furthermore, they are particularly looking at the best use of money and how it can be fairly distributed based on considerations such as poverty, number of rural students and really looking at how they address equity within their deliverables.

The US federal government has released grants through state governments and the US Department of Education which then goes to the state departments of education. It is the job of the states to ensure the money flows to the local school districts who have fairly broad guidelines on how to spend the money relating to any impact from COVID-19; so this could be anything from personal protective equipment to upgrading computer systems. Of course, a lot in the US will depend on the November general election and the political decisions made thereafter.

The Maldives has a collaboration with UNICEF and the Global Partnership for Education (GPE) that includes partial development funding along with further investment by the government for teaching and learning that includes the use of digital content and the training of teachers in the unique pedagogical requirements for online learning and assessment. The Ministry of Education is now developing their policy guidelines for online teaching and learning.

Concerns over potential budget cuts in the future brought mention of teacher professional development. CPD tends to be one of the first things cut when budgets are reduced. This sits alongside the impact of COVID-19 whereby there is now greater call for more investment in professional development because we are asking a lot of teachers right now. Supporting them more may mean incorporating new skills sets or coaches with the ability to build skills as part of their work, as opposed to doing it on their own time. This may also require professional learning for administrators who will need to have a greater understanding of online learning and what hybrid learning looks like.

Some participants referred to up to a 30% reduction in education budgets because of falling receipts. They are facing a very critical situation and the State is spending a lot of money to support the healthcare system. With expectations of not receiving any new money, then it requires the shifting of priorities which should include the professional development teachers as well as caring for their health and safety. Innovative policies such as partnering with social or private organisations are options, but the danger could be to focus on compliance and the things you must do as opposed the things you need to do.

Not forgetting the voices of parents. Children have been at home for the last 3 months. In the case of fee-paying schools and universities, parents are asking what services is the school providing? The online delivery of content and lessons through TV and radio represent sterling efforts on the part of education ministries, and generally the community is sympathetic to the situation, but this will eventually fall short of parental expectations when they do their own cost/benefit analysis. Enrolment in higher education is likely to be hugely impacted, worldwide.

In response to the pandemic, the Portuguese Government already allocated an additional €400 million for the ICT for education program, though it is not yet clear how much of those funds come from the normal treasury budget or from the recovery package of the European Union. As of the writing of this report the EU agreed an overall recovery package of €750 billion for the 27 member countries. The deal centres on a €390bn programme of grants to member states hardest hit by the pandemic. Italy and Spain are expected to be the main recipients.

Several countries also spoke of specific response funds such as the Global Partnership for Education (GPE) who have mobilised more than $500 million to support partner countries with implementing their response to COVID-19. As of writing this report, 49 grants of $408 million have been approved with another 4 proposals totalling $23 million under review and 14 countries expressing an interest to apply for grants in September, totalling $42 million.

Such activity, from the likes of GPE is complemented by other agencies such as the World Bank, Inter-American Bank, Islamic Development Bank, UNESCO, UNICEF, and others mobilising funds in response to the pandemic and shortening the approval times. One recommendation was that these multilateral agencies could possibly work together more collaboratively to bring economies of scale, reduce local costs, and avoid overlaps in spending. The rationalisation of funding needs further investigation and research.

Of course, during times of crisis and demand for resources, there can result in a natural competition between agencies for funding. Other than the obvious healthcare requirements, every department is still demanding resources from travel & transportation to tourism to the important welfare requirements of citizens. So, education needs to be put up a strong case of why more money needs to be spent. The strength argument could well lie in equity. Most schools, especially in industrialised countries, are unequally funded. Research in the US has shown that low-income students who spent all 12 years of school in districts that increased their spending by 20% saw their graduation rates rise by 23& and adult poverty rates fell by 20%.

The discussion on funding also touched on the investment that goes into physical space, and maybe this pandemic could be a catalyst for how we rethink the use of space. As we move from emergency response to planning and sustainability which includes greater use of online and blended learning then the budgeting needs to be considerate of a different looking system. This requires vision and leadership with policy makers who can determine the balancing act between technology and pedagogy. This links to the OECD's Learning Environments Evaluation Programme (LEEP) to develop instruments and analyses to inform school leaders, researchers, designers, and policy makers about how investments in learning environments translate into improved education, health, social and well-being outcomes.

There was call for G20 leaders to recognise the potential crisis in the financing of education – if they want an educated workforce for the 21st century then ore commitment to the sustainable development goals calling for every child to receive full primary and secondary education by 2030 is required. According to UNESCO, the share of aid funding spent on education has fallen for the past six years, from 10% in 2009 to 6.9% in 2015. Aid has increased considerably worldwide since 2010, but in education it is still below the 2010 levels. Aid also needs to be better targeted. There are calls to establish a financing scheme bringing together public and private donors, alongside international financial institutions to raise additional funding. Such a body could increase education financing by more than $10bn annually.

Some recommendations from Latin America included having legislation that protects investment in education – with a minimum level of expenditure being 6% of GDP as is the case in Argentina. This is way above the OECD average. In Argentina in 2015 they did hit that 6% target for education. Their experience is that it is a good law when the GDP is growing, but with the global economic downturn caused by COVID-19 the cake gets smaller and so the actual slices of the cake get smaller. The impact on the education system is particularly severe because a huge part of any education budget is wages and any impact on teacher salaries comes with a plethora of political implications.

Of course, the economic impact of COVID-19 is a conspicuous concern for all education decision makers. Governments and multilateral agencies have providing emergency funding for health and education but multiple demands, such as investment in the ICT infrastructure, lie on the horizon. Without innovative policies for financing along with stronger industry

partnerships then the danger of widening the digital divide is a troubling scenario for all participants. Several countries in Latin America are working together to understand the financial consequences of the pandemic on educational services, leading to a growing exchange in policy ideas. This will involve strengthening partnerships with multilateral agencies, including UNESCO and the Inter-American Development Bank.

3.4 Teaching, Learning Outcomes, Social & Emotional Well-Being

COVID-19 has certainly increased the spotlight on social and emotional learning along with the pastoral care of students. SEL will be critical to re-engaging students, supporting adults, rebuilding relationships, and creating a foundation for academic learning. Yet the responsibility of offering this kind of support cannot fall solely on the shoulders of overstretched teachers and school leaders. Hence, there is a clear opportunity for organisations that work in partnership with schools to support the social and emotional development of learners.

For school re-openings in Mexico they plan to split school openings by family name and will be ensuring that they provide more classes for disadvantaged children. Hence, the social and emotional response will be linked to the impact of COVID-19, including the students being taught a better understanding of its societal effects with a project-based approach. This is new for Mexican teachers who may currently be unprepared but is an opportunity to leverage the unprecedented momentum for change that pandemic has catalysed and the feedback from teachers is that they want to do things differently. They plan to incorporate social and emotional learning by starting a completely new subject dedicated to well-being and healthy living, giving due consideration to hygiene, exercise, physical development, and nutrition.

There is a strong call to invest more resources into the emotional well-being of children. We do not know entirely what they are going through right now and when the return to school it is important to make sure they feel safe, reassured, and ready to learn. Generally, making up cognitive learning gaps is achievable but the emotional damage is something that participants are concerned about limiting especially as the research evidence is clear that when a student does not feel safe in the environment then learning cannot happen.

Not to be forgotten, in terms of well-being, is the vast number of student populations who receive their main meal of the day at school. Now that has been taken away. Officials state that they are still reacting and working with their best endeavours to ensure student health and well-being takes priority. Furthermore, students with disabilities have been struggling with technology during the crisis – this certainly needs more research and pedagogical investigation. The health and well-being of students in the digital environment cannot be ignored as we try to maximise opportunities and pay attention to education as a social activity.

In consideration of well-being then privacy and online safeguarding will also be necessary policy guideline considerations. One anecdote in the meeting was of a school district with 80,000 students and teachers registered on *MS Teams*. There happened to be an argument between the assistant superintendent and school principle recently, but they had not sorted out their privacy settings and this live video went out to every parent, teacher and student who was online at the time. Clearly, this is all part of the growing pains of online education and many in authorities are primarily focussed on just getting things going for online teaching that next level challenges such as security and privacy have yet to be dealt with. Conversely, a number of authorities already have strict student and teacher data privacy laws in place and have

formed alliances to ensure compliance. For the sake of well-being this is a matter that needs far better collaboration with industry where there remains a lack of uniform standards and interoperability between applications.

The COVID-19 pandemic has certainly inspired people to see this as an opportunity to improve learning outcomes through education reforms that include more project-based learning, the universal design of learning, digital education and more relevant skills and competencies. Such ideas about changing the mindset of the way we teach also invokes the question of what are we trying to foster from the use of digital technologies?

It must not be forgotten that it is not too long ago that blended education options were maybe of lesser quality in terms of learning outcomes, but with COVID-19 blended learning is now mainstream. Of course, those at an advantage are those that have already deployed digital platforms, learning and information management systems and even provider students with devices. Their transition was a lot easier when closures started taking effect, so if outcomes are going to be more aligned with hybrid and blended learning then there needs to be an acceleration of implementing equitable access to avoid an enhanced digital divide.

For example, in New Hampshire, they have been promoting competency-based learning for the last 15 years with a more skills and demonstration-based approach. Such student-centred learning has been embraced by many teachers who being familiar with the technology and hybrid pedagogies found it easier to transition. Those who have not embraced it have found things much more difficult.

Certainly, the blended model of learning poses some serious challenges under the shadow of responding to COVID-19. Splitting classrooms into smaller groups, rotating students by day of the week, teachers seeing one group of students for part of the day, then switching to another group and then being expected to teach and support via remote learning. This is a demanding recipe for the teaching profession. And every time the teacher will tell you, as Andria Zafirakou (2018 World Teacher of the Year) told us during the last GOLA meeting, teaching is primarily a relationship business. Teachers are driven by the success of those relationships, by the pedagogical connection and face to face interaction. The flip side of that is that in fact, in response to COVID-19, teachers are now forming even more relationships – with the families; such greater community and family interaction will change the teaching profession profoundly.

Regarding learning outcomes, in the Maldives they traditionally have a deep-rooted exam-based system and the policy is now evolving to make the learning process more skills-based. These skills include a better understanding of societal values for young people which will be included in the school program for about one and half hours a week. This policy of providing a wider scope of life skills will also reduce some content in other subject areas. This is in harmony with making the classroom more learner centred and yet incorporating a hybrid approach. This policy also accounts for the geography of the Maldives with schools on 198 islands, each with their own unique cultural identity and traditional skills.

Undoubtedly, COVID-19 has shifted the emphasis of assessment policy and pedagogical strategies in the future. In the US, a lot of the funding for the states comes from the federal government through the *Every Student Succeeds Act*, within which there must be set an assessment component. This must be satisfied. This leads to questions for the states in how they may create interim assessments or broaden evaluation environments. How do they assess from remote locations, what technology will be required, and will this pass the test of the federal government?

Teacher certification, qualification, digital competencies, and robust standards of professional development are now policy priorities because of the pandemic with policy makers needing to establish new frameworks for online learning. Prior to COVID-19 the World Bank was looking at opportunities around the virtual coaching of teachers along with paring with expert teachers and creating learning circles to share information. With COVID-19 we are now seeing huge gap, not just in digital skills

and how to use the technology but pedagogy and how to effectively teach online, including the ability to engage more personally with students. For example, in Israel, they brought in engineering experts and have an application where teachers can meet with engineers and bring them into the classroom. In the future teachers will be asking questions of where are the gaps in understanding and how to effectively use data to move towards more project-based learning?

From a policy standpoint the common statement if participants is to answer how should online learning work. Of course, there is the necessary investment in the ICT infrastructure and equitable access to devices but what do we see as being quality online learning? For example, in Ontario, the ministry cares about having synchronous elements to online education such that all teachers and students are gathered together, interacting, and working with each other.

In terms of professional development, the challenge many face is having the capacity to build expertise around high quality online teaching, because currently there is a great variance in quality and furthermore it depends on the type of edtech that has been employed. All participants spoke of their expectations of how online and blended learning is going to be a permanent feature of education and thus teacher training and continuous professional development is critical. We need to adapt training and pre-service qualification such that online learning and virtual lessons are included in the curriculum of teacher training colleges.

Pedagogically, there were comments on embracing a culture of failure. Not because failure is a good thing in its own right but failure means learning from mistakes and freeing up innovation, pushing students to new limits. The same goes for teachers. They do not have to be nor should expected to be the font of all knowledge in the classroom. It is okay not to know things; it is okay to collaborate and question. Such an approach has great potential in reducing the stress on teachers.

Across the US, many states were able to pivot to digital and online learning formats – some teachers embraced it more than others and although there was a variance in the level of technology skills, they were open minded to the necessity to adapt. This the leads onto the discussion about personalised learning, as in new Hampshire where they have found some students thriving in the digital environment, whereas some who may have been strong in the face to face setting where less so on the digital platform. Teachers have been worried about those students and hence in the framework of personalised learning there needs to be a robust alignment with the child's learning style. Ultimately it is the responsibility of the education system to provide choice for students and some teachers will be specialists in digital platform and virtual learning, while others will be best at front of classroom teaching.

In terms of capacity and the pedagogical interaction between teachers and students it is simply not practical in the long-term to have a one-to-one connection, yet equally it is very hard to maintain the attention of a whole class online. So, there must be more research in how to make online teaching work in small groups, maybe splitting by capabilities and needs – which of course must be clearly understood prior to assessment. Digital education is not the same and further investigation needs to be carried out in terms of quality and learning outcomes.

One aspect of education is how we design and think about virtual online schools. For example, in Oregon, there has not been a lot of attention paid there are 14,000 students in Oregon that experience school through online virtual charters, and their learning outcomes are well below expectations. So, there is concern about how to design that for learning without a lot of clear parameters, without monitoring or checking and around pedagogy and best practice. So, there is an opportunity to tighten and clarify what is high quality teaching and learning a comprehensive distance learning model. Furthermore, there must be a strong social emotional component available to children so that their, well-being is nurtured and supported.

SYNTHESIS

SECTION 4.

Synthesis

4.1 Joint Synthesis of Andy Hargreaves & Jim Knight

We have held a meeting that is looking across very different economies, some emerging economies, some developed economies, some still developing economists, some with high refugee populations, some with very government driven strong public systems, some with more market based or charter school based as well. So coming from many diverse perspectives, firstly do we or do we not need austerity? Is austerity not only inevitable for education, in terms of ring fencing but austerity inevitable generally? Economists are divided on this.

Now that the second thing is people talked about how their governments have responded, and not everybody is positive about. Everybody has felt a little out of their depth from the impact of COVID-19. Nobody has felt totally comfortable. So, we have all been out of our depth here, making it up as we go along and being extremely creative as we do that. Some people have said they feel their governments and other stakeholders together have responded very well; and others have worried that their government has reacted a bit late on what seems to be haphazard, and not always consistent manner. We can conclude here, for governments, for systems, which includes things like school districts is that if the leadership is effective when it is evidence informed and not data driven, because even public health officials don't entirely agree on what the evidence says or even around things like social distancing.

That is when it is evidence informed, it is collaborative. It really does involve all stakeholders, or parents or communities, governments and teacher unions working together and deciding on what the strategy. Yet there are those who have had to be creative and innovative at a rapid rate in terms of responding to the greatest crisis for a century.

On the big issue of assessment is do we want to bring back expensive and disliked high stakes, standardized testing? Do we want a 21st century system of learning and teaching while still operating a 20th century system, of high stakes standardized testing?

A lot of participants spoke about well-being and what are the effects of social isolation? How will we deal with that when kids go back to school? There is a lot of evidence that the most vulnerable demographic during COVID-19 is not old people nor is it young children, but it is actually teenagers who have are experiencing the biggest surge in mental health issues.

Of course, schools are physical places for children to go, so their parents can go to work. School is a place where you meet your friends, for relationships, learn to get along with people who are different from you, as well as build community and develop social skills. You need a physical place in order to do that. Think about counsellors, volunteers, special educational support, and it is clear we will need more expenditure on well-being; not just restoring the expenditure that we already have.

A lot of people spoke about digital and online learning. From the OECD we see figures with high usage by teachers who already have technology and during COVID-19, we have seen a further leap in terms of competence and

capability. What the data does not really show us yet is how well teachers are already using technology, and students are already using technology. Some systems like South Korea have 99.8% of their schoolchildren already on digital devices and accessing WiFi. The issue with technology is how are kids learning at home? How are they easily distracted when in crowded environments? How are kids who have special educational needs? How are kids like these coping with learning anywhere, anytime?

We even need to go even further than just at home. We need technology everywhere, all the time for everybody, as a public universal human, right. This is something we really need to think about now in terms of government working in partnership with other organizations. There are developing countries where the public sector is not very strong yet, hence they are the places where anytime, anywhere may provide a kind of transitional solution.

The discussion seems to be revolving around what we might call the human capital model of teaching. How do you train individuals? How do you develop individuals? How do you find new individuals to come and help as babysitters? We know that the biggest value added for teacher competency and quality is not human capital, but it is social capital. So, how do you get those teachers to work together? We know within COVID-19 that when, for instance, teaching unions and governments have worked closely together, there has been a more coherent and consistent direction. We know in schools that when teachers work together, you get better results in terms of student outcomes, and we have seen that one of the greatest benefits of digital learning and technology is particularly for teachers in isolated areas and separated rural schools.

So, do not just think about human capital, but think about social capital.

In in some parts a lot of much needed expenditure is required to keep the economy going through debt, but it might not be that straightforward in other places. For example, Nigeria, Alaska, or Alberta they have been badly hit by the collapse in the oil price and that is not going to make some of judgments straightforward. The overall cost context of thinking about this question on the impact on financial planning is whether education can hold onto its funding envelope from the finance ministries, who will inevitably have lots of pressure for reactive spending on health.

Alongside big collapses in tax revenues coming is going to drive finance ministers to say, yes we understand that education is really important for the long term health of our nation, but right now, all we can worry about is the economic impact in the short-term. So, funding will definitely be under some pressure. That then means looking inside that education envelope and determining the most appropriate priorities for spending.

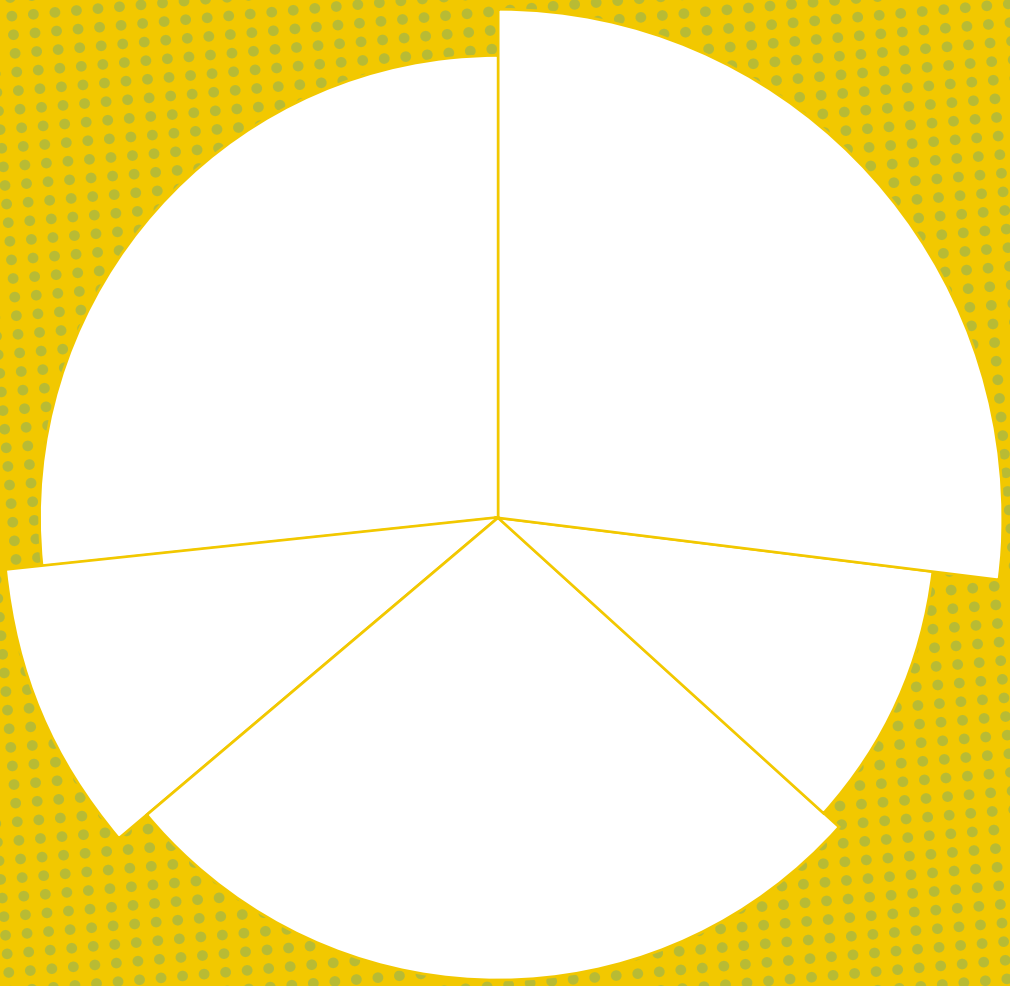
Assessment in the future will be critical. The old norms are of parents saying: “I want test results; I want proof that my child has done as well as I think my child has done.” That has maybe changed a bit as result of the pandemic. It is up for grabs. So, if you wanted to make that shift from summative testing to more formative testing, then now is an interesting time to explore that and to push harder for reform.

If you can make common cause by investing in education in communities with the education department, we can also be educating parents and can be part of creating regeneration through education, which in the end is the only solution. We have to invest in education if we are going to change those communities and make that common cause.

But there is going to be ongoing disruption caused by this pandemic. We will see localised lockdowns, far more than nationalized lockdowns, and that could well spell even further trouble for the digital divide. Partnerships with the private and sector and technology companies are critical in how we resolve the digital divide question. When we look at the amount of money made in Silicon Valley, by Google and Amazon and Facebook and Apple, to name but a few, we should really lean on them. For example, one cent on every message that was shared on all the social media platforms, how much money could that generate for education? How can we make those companies work a bit harder for their huge profits that are bigger than the GDP of most countries in the world?

- End -

For further details or copies of this report, please contact john.glassey@brains.global



APPENDICES

Schooling disrupted – schooling rethought

How the Covid-19 pandemic is changing education

Andreas Schleicher

- **1.5bn** students (and their parents) learned over the last two months that learning with technology must work in the future
- **Remote learning** has become the lifeline for learning but doesn't address the social functions of schools
- Access, use and quality of **online resources** amplify inequality
- **Accreditation** at stake
- Huge needs for **just-in-time professional development**
- Re-prioritisation of curricula and strategies for **re-opening** of schools needed
- But lots of highly **innovative learning environments** emerging !

Special survey conducted by Harvard University and OECD

- 25 April – 7 May

1370 respondents from 59 countries

- Government officials
- School administrators
- Teachers

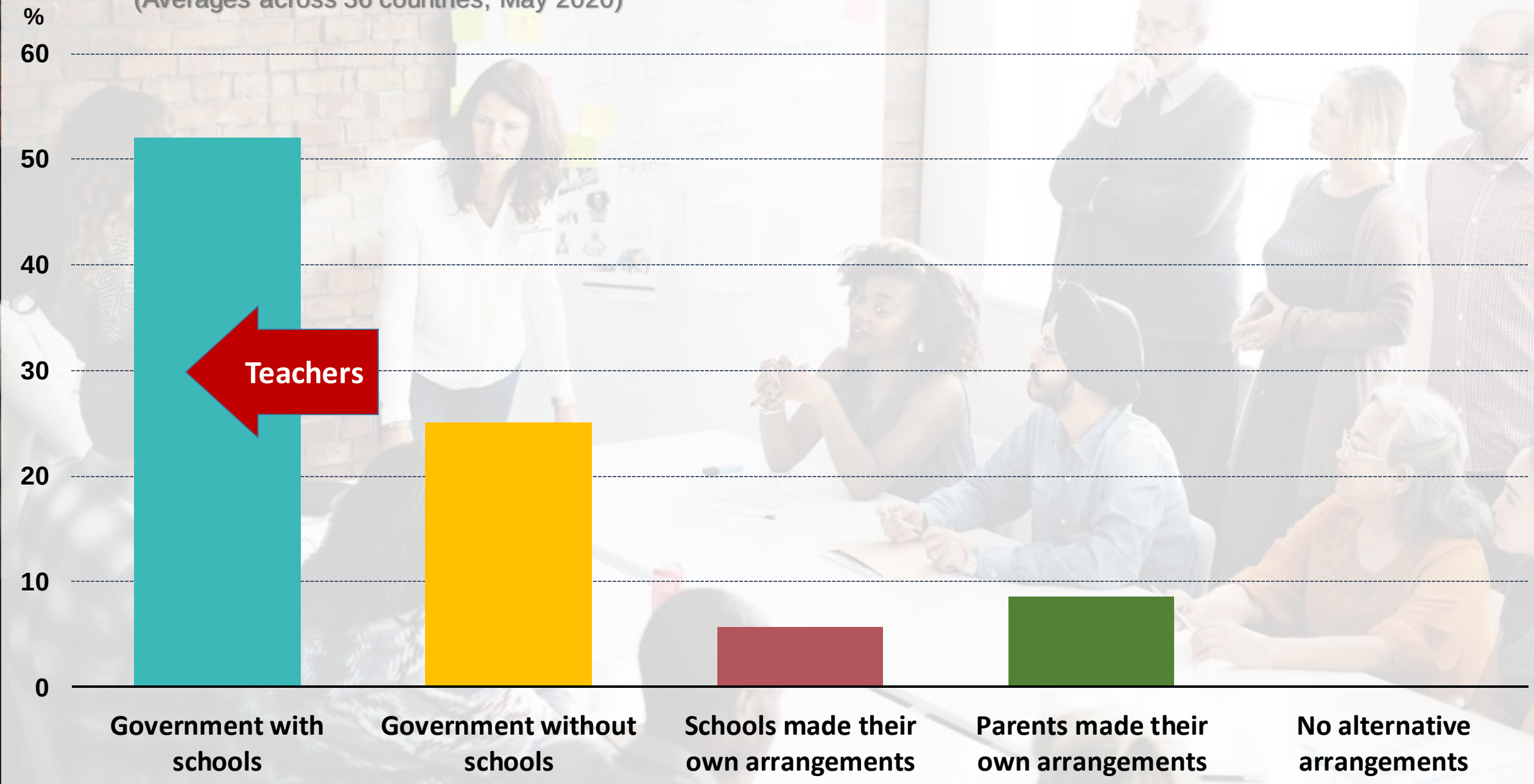
OECD
BETTER POLICIES FOR BETTER LIVES

Global Education Innovation Initiative

Working together

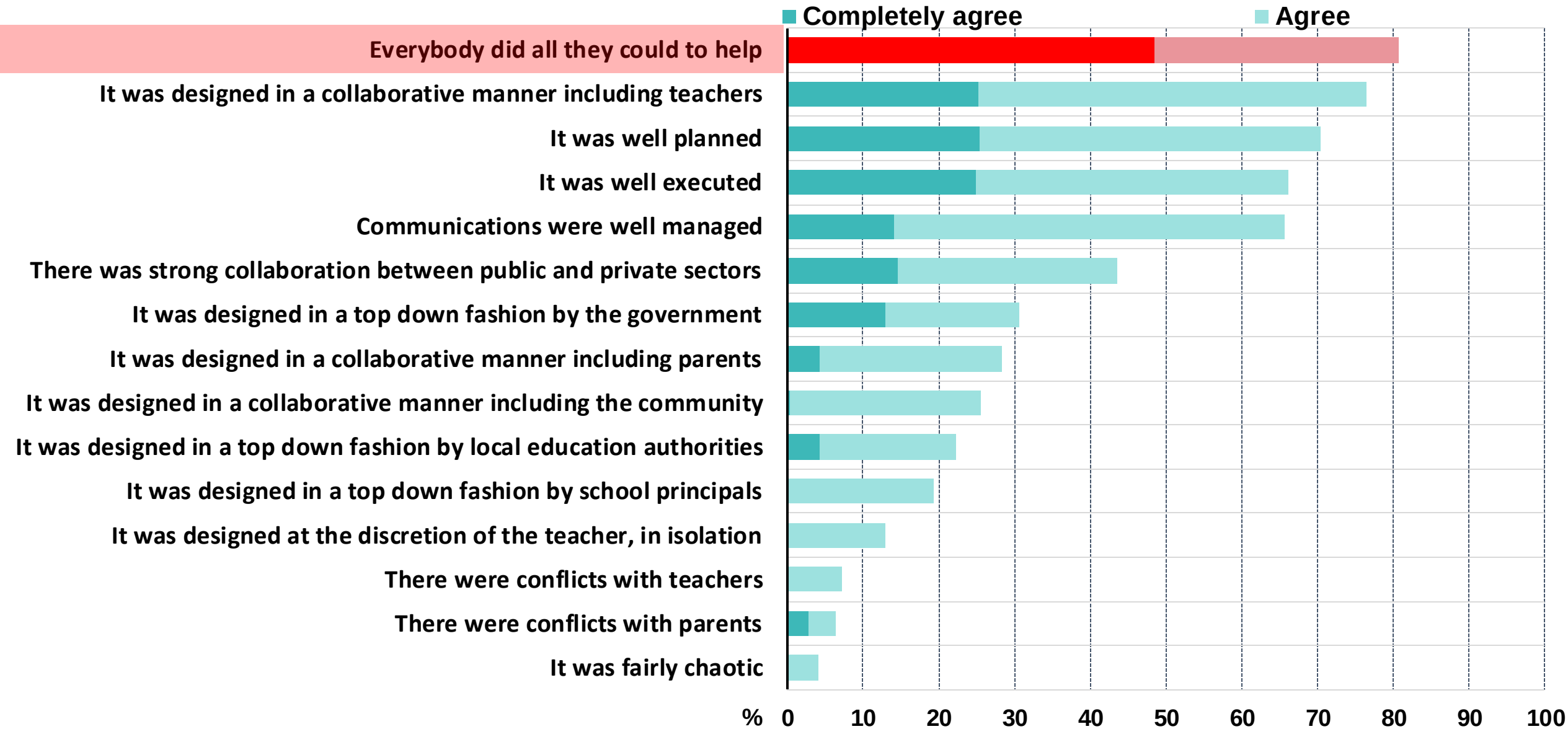
Stakeholders involved in making alternative arrangements for education

(Averages across 36 countries, May 2020)



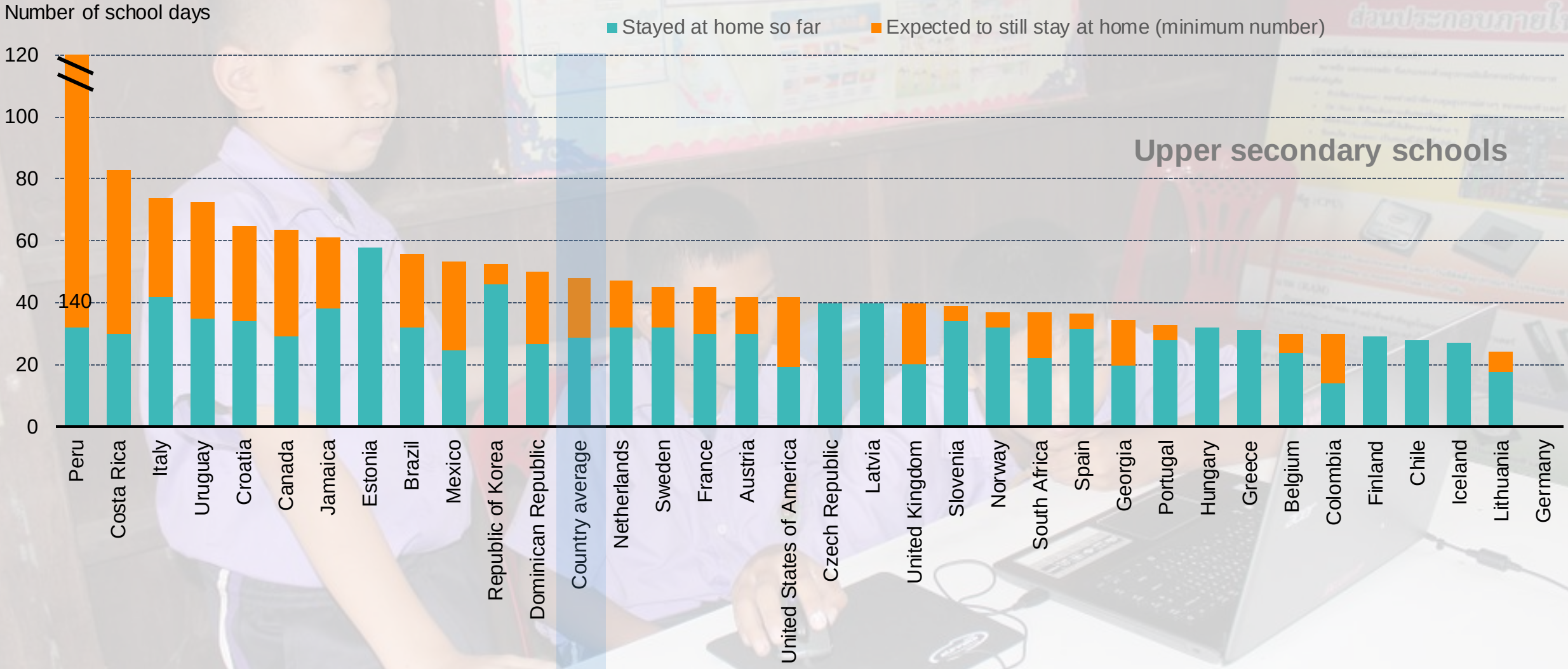
Evaluation of the strategy for education continuity

(Averages across 36 countries, May 2020)



The crisis exposed the many inequities in our school systems

Number of school days of scheduled instruction students have stayed at home so far/are expected to still stay at home* (May 2020)

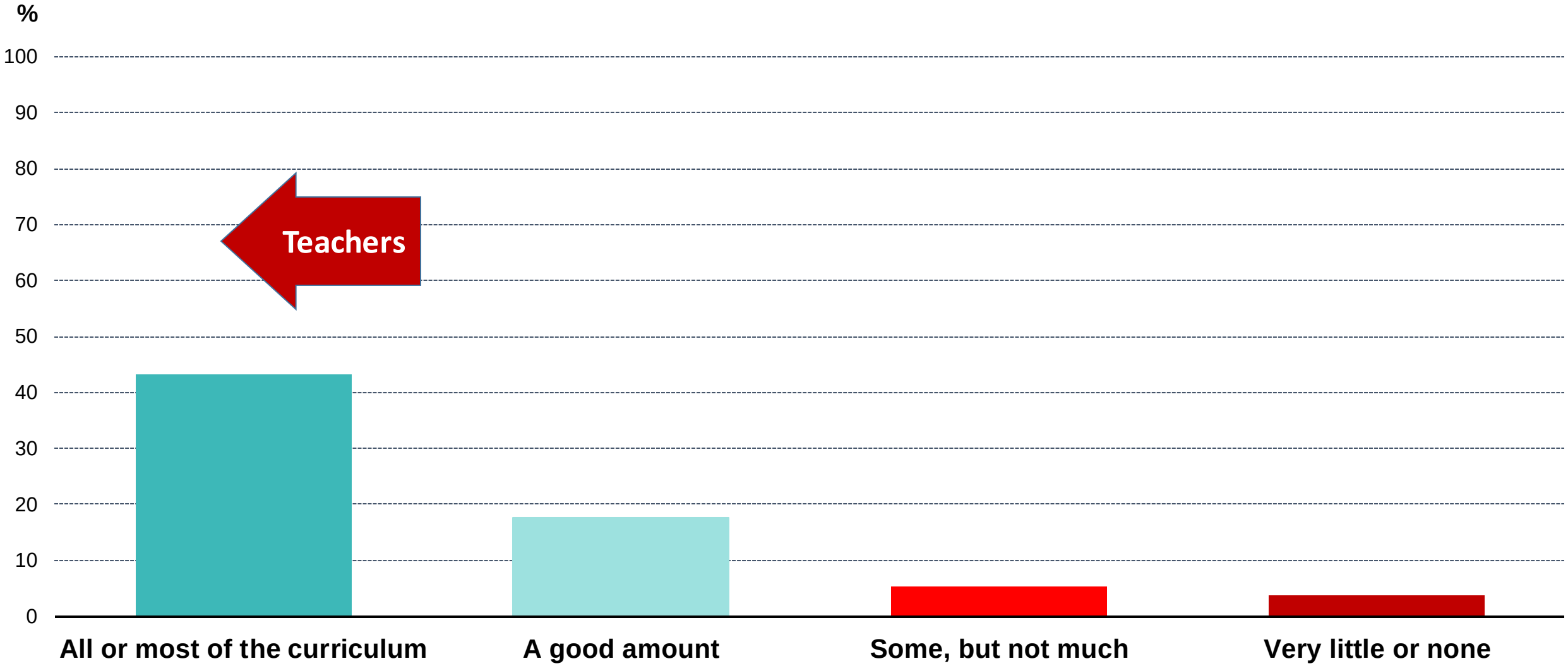


*Excluding public and school holidays and excluding weekends

Percentage of students who could access all or most of the curriculum

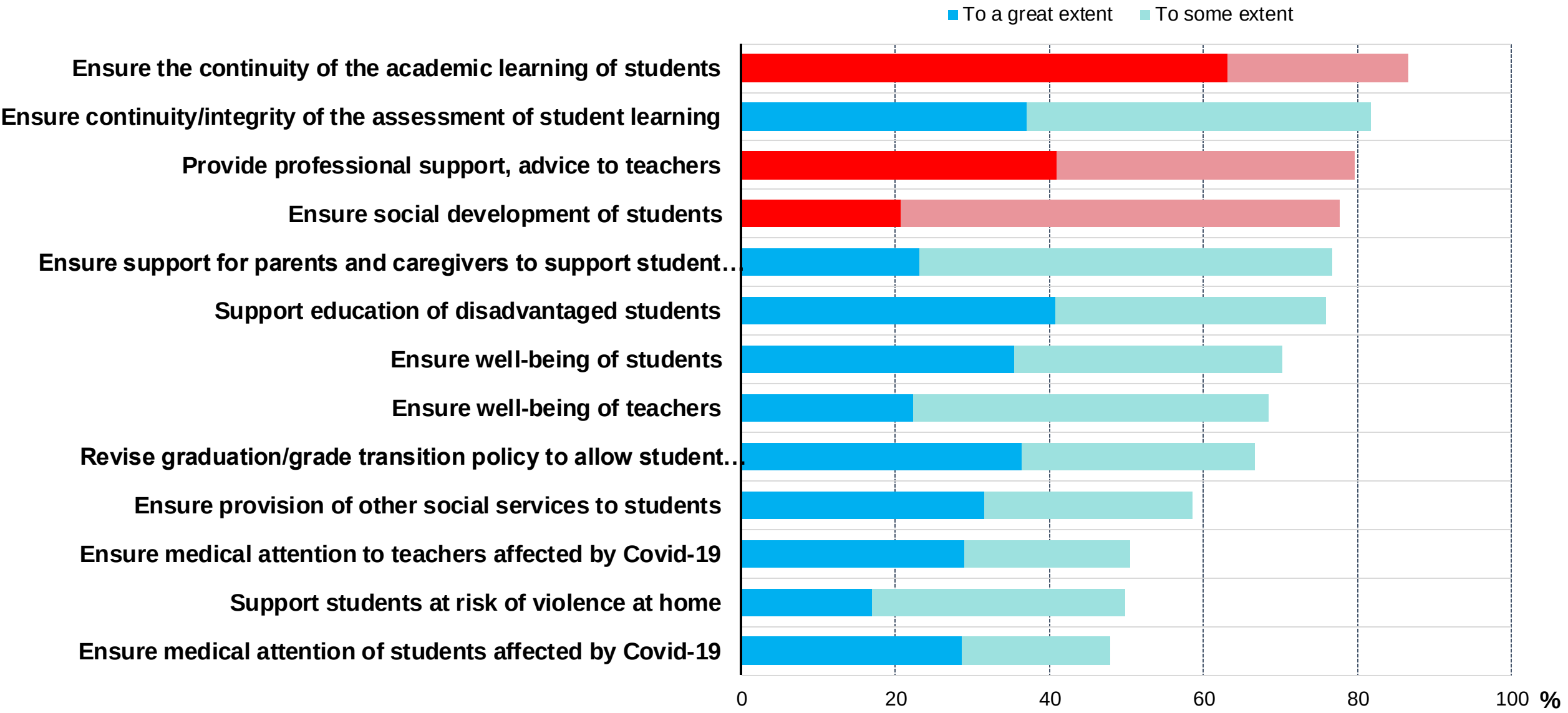
(Averages across 36 countries, May 2020)

Table 6



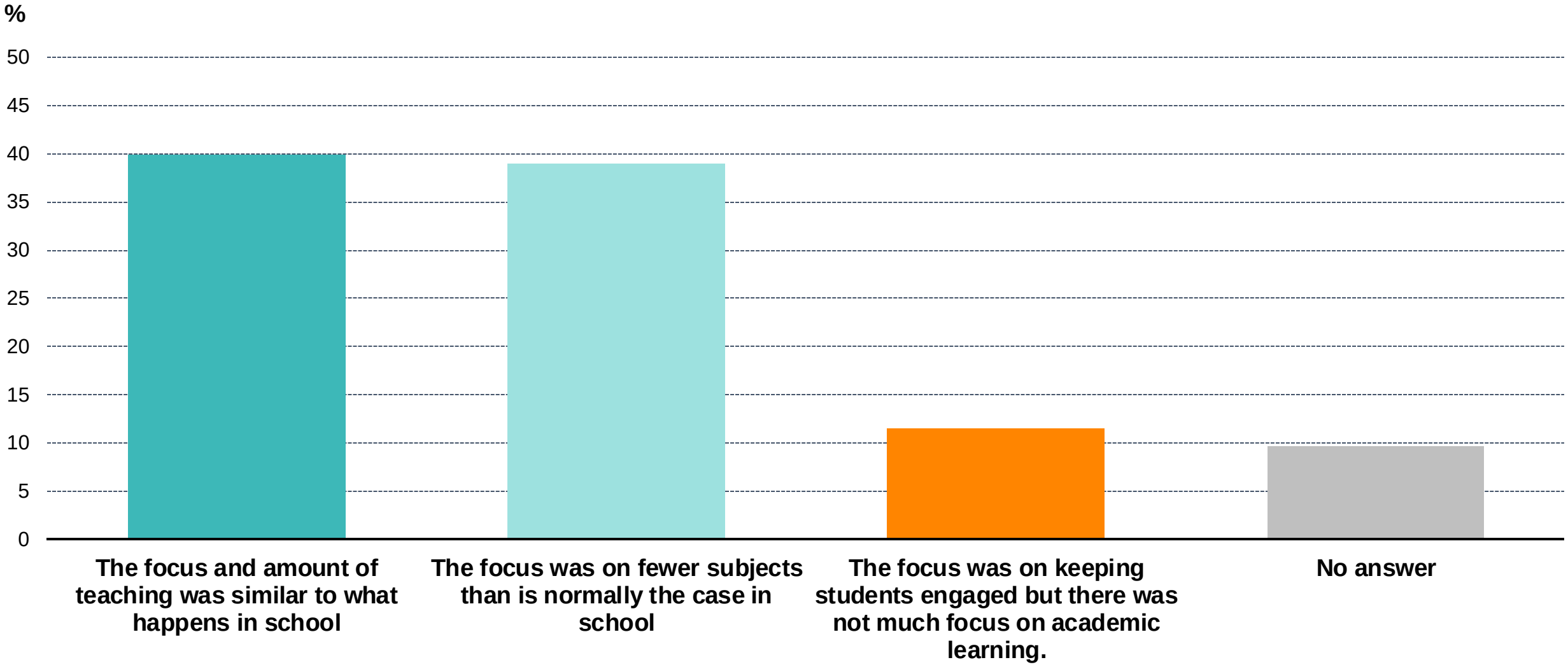
Focus of the strategy (Averages across 36 countries, May 2020)

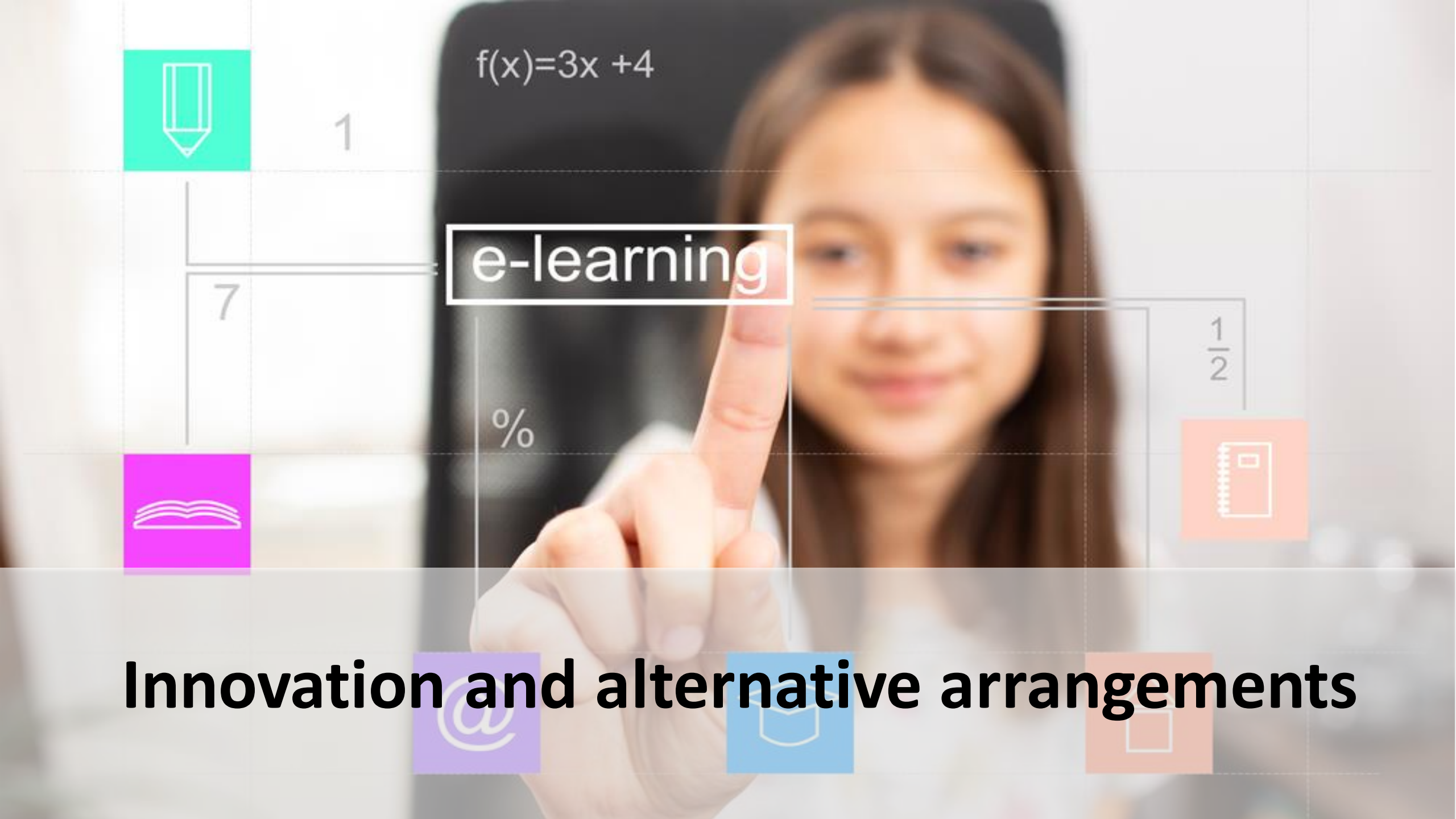
Table 10



Compared to what is normally the focus on schools, what was the focus of the curriculum? (Averages across 36 countries, May 2020)

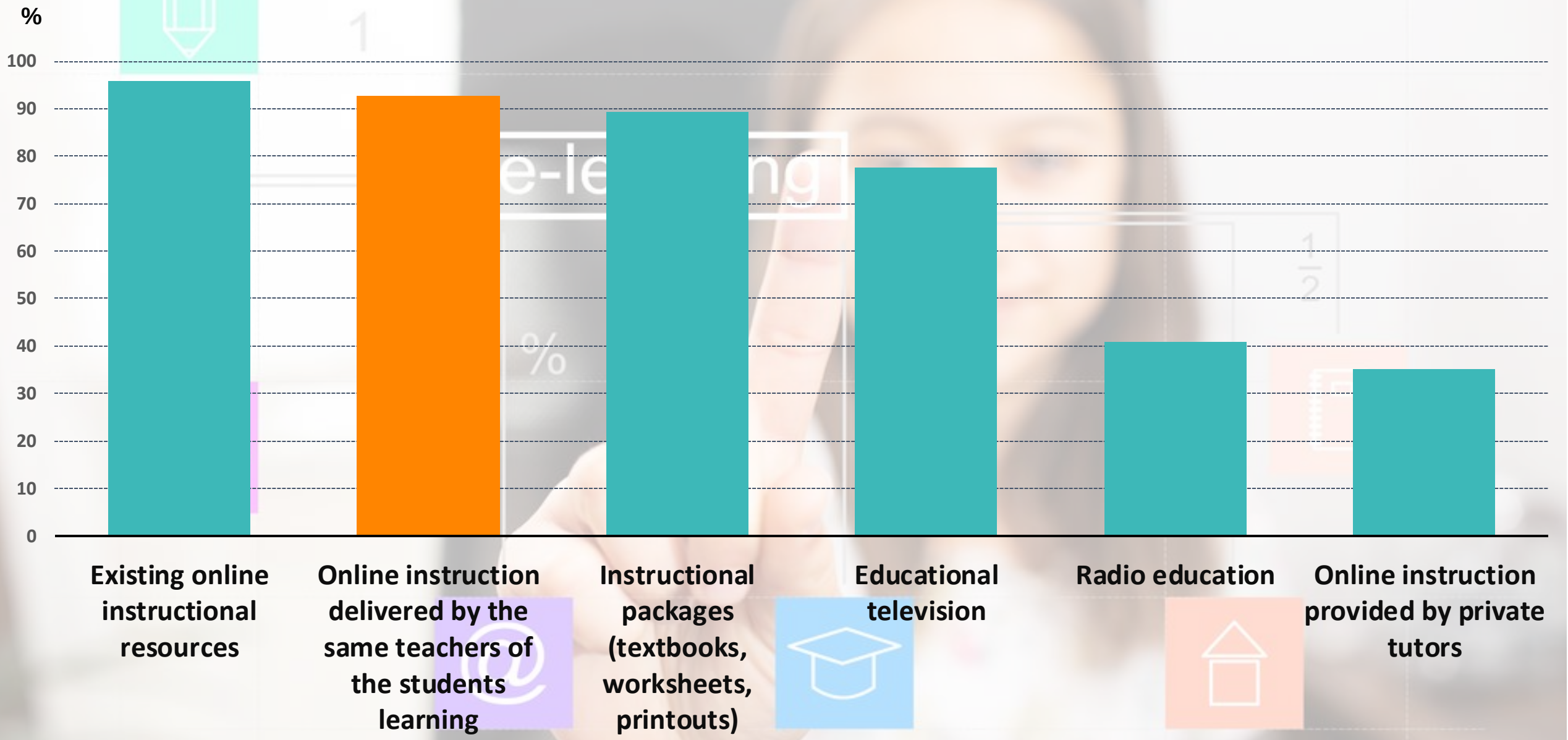
Table 9





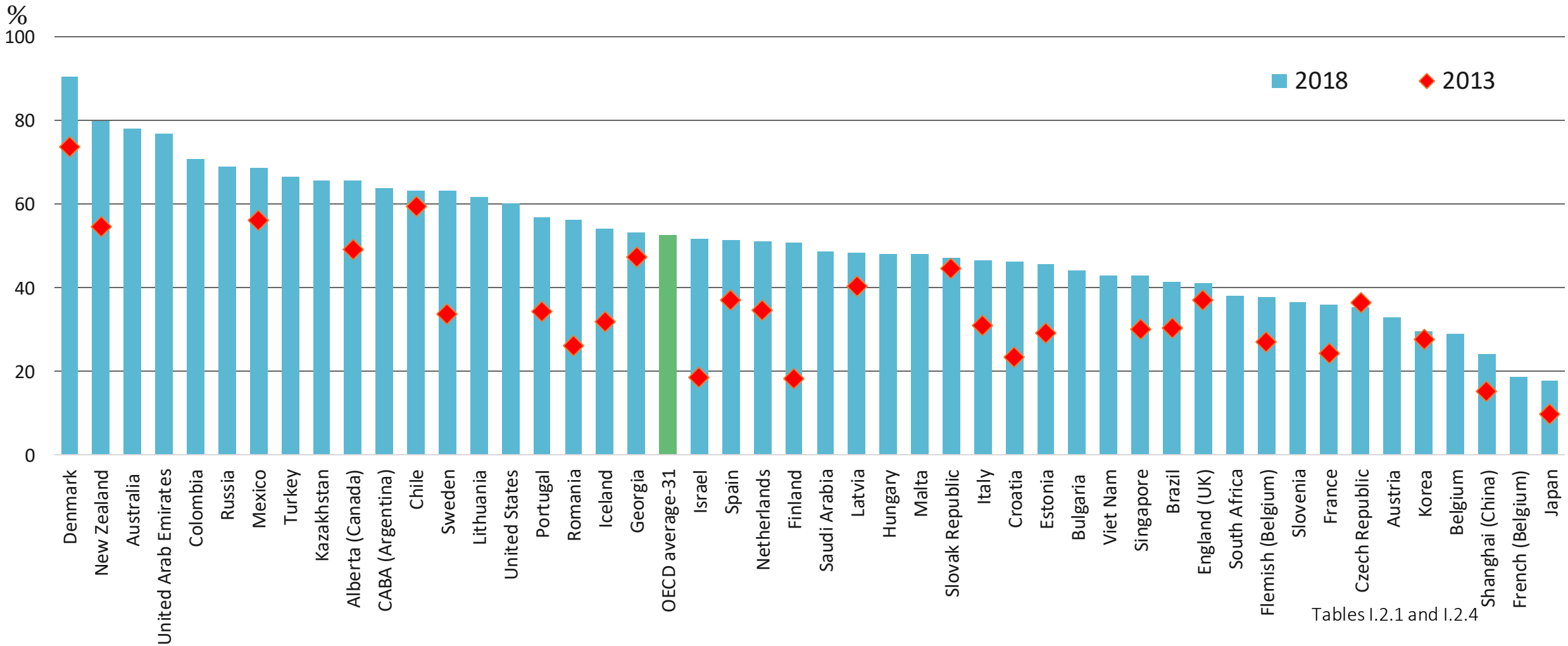
Innovation and alternative arrangements

Instructional resources used (Averages across 36 countries, May 2020)



Technology is only as good as its use (TALIS 2018)

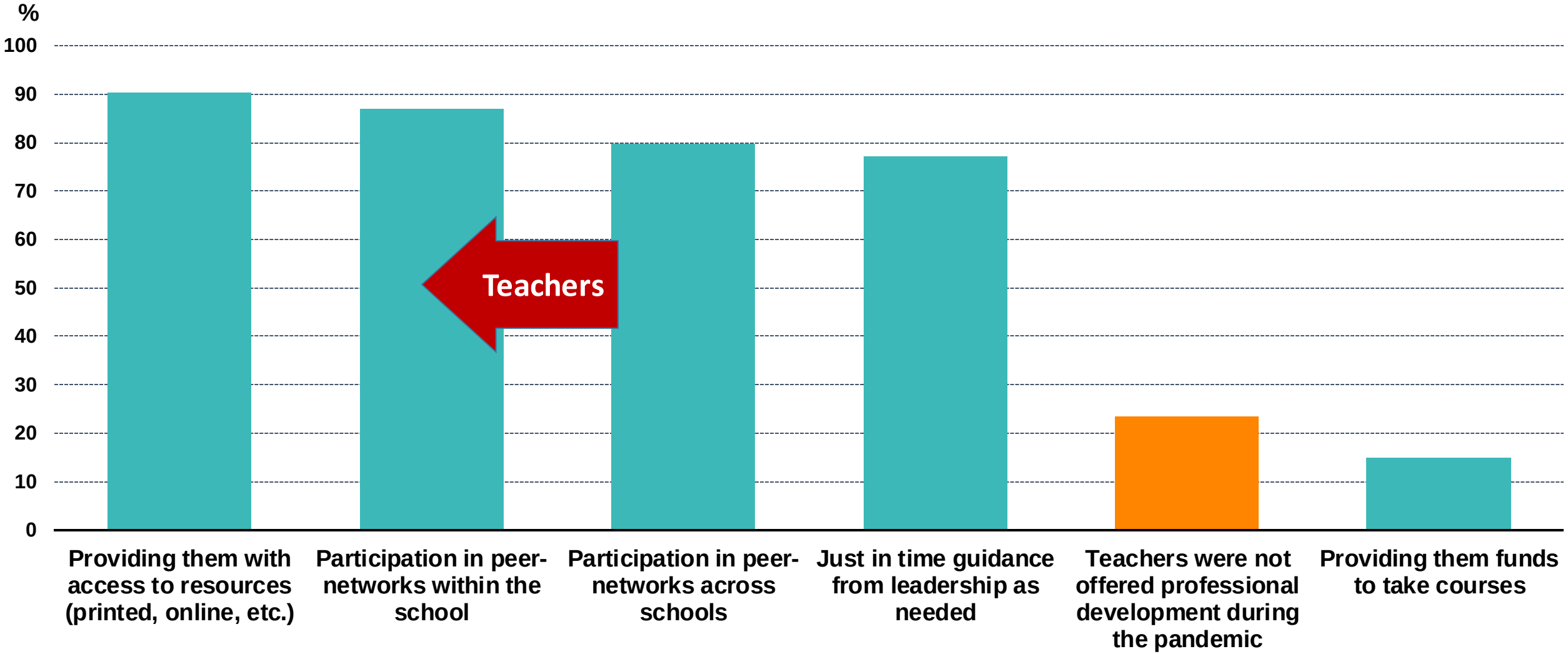
Percentage of teachers who “frequently” or “always” let students use ICT for projects or class work



Tables I.2.1 and I.2.4

Professional development to support teachers during the strategy of education continuity (Averages across 36 countries, May 2020)

Table 11



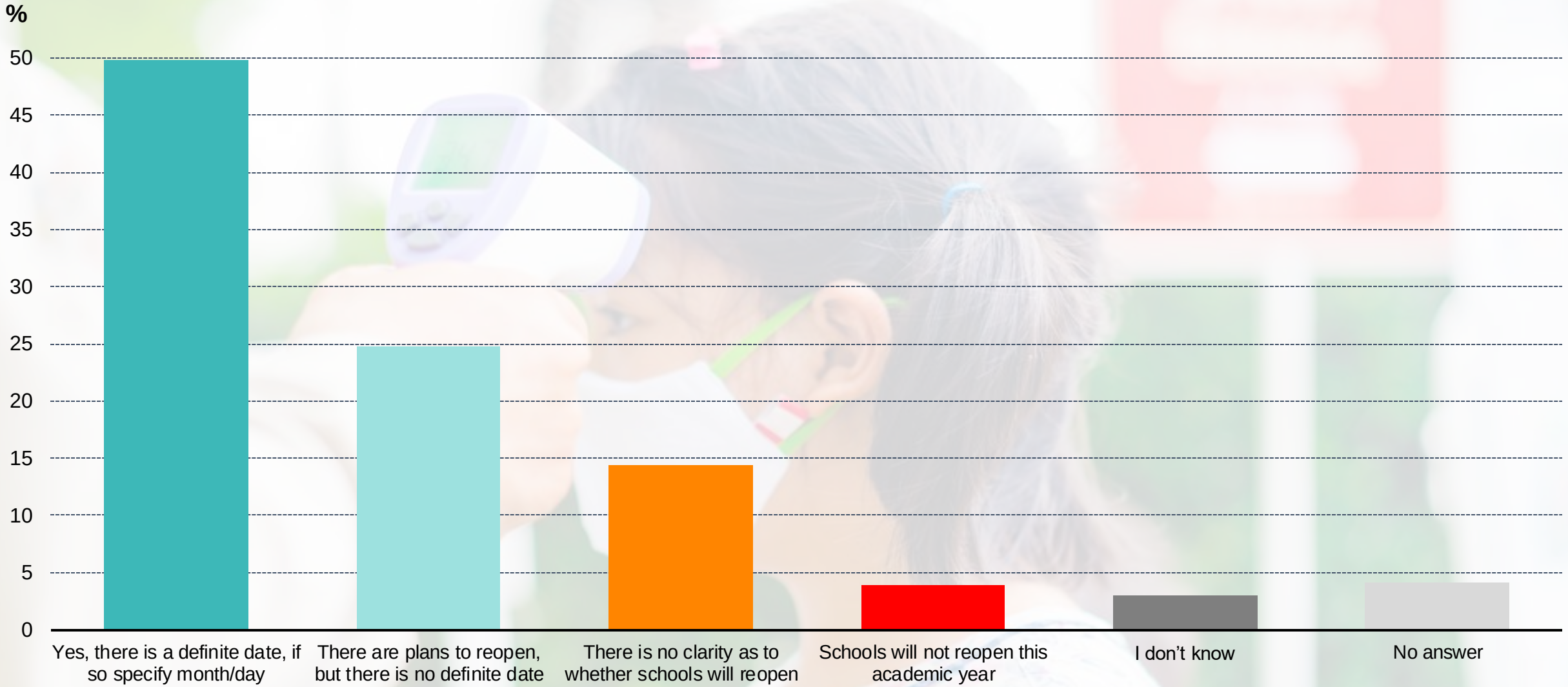
Re-opening schools

Strategies for the new normal

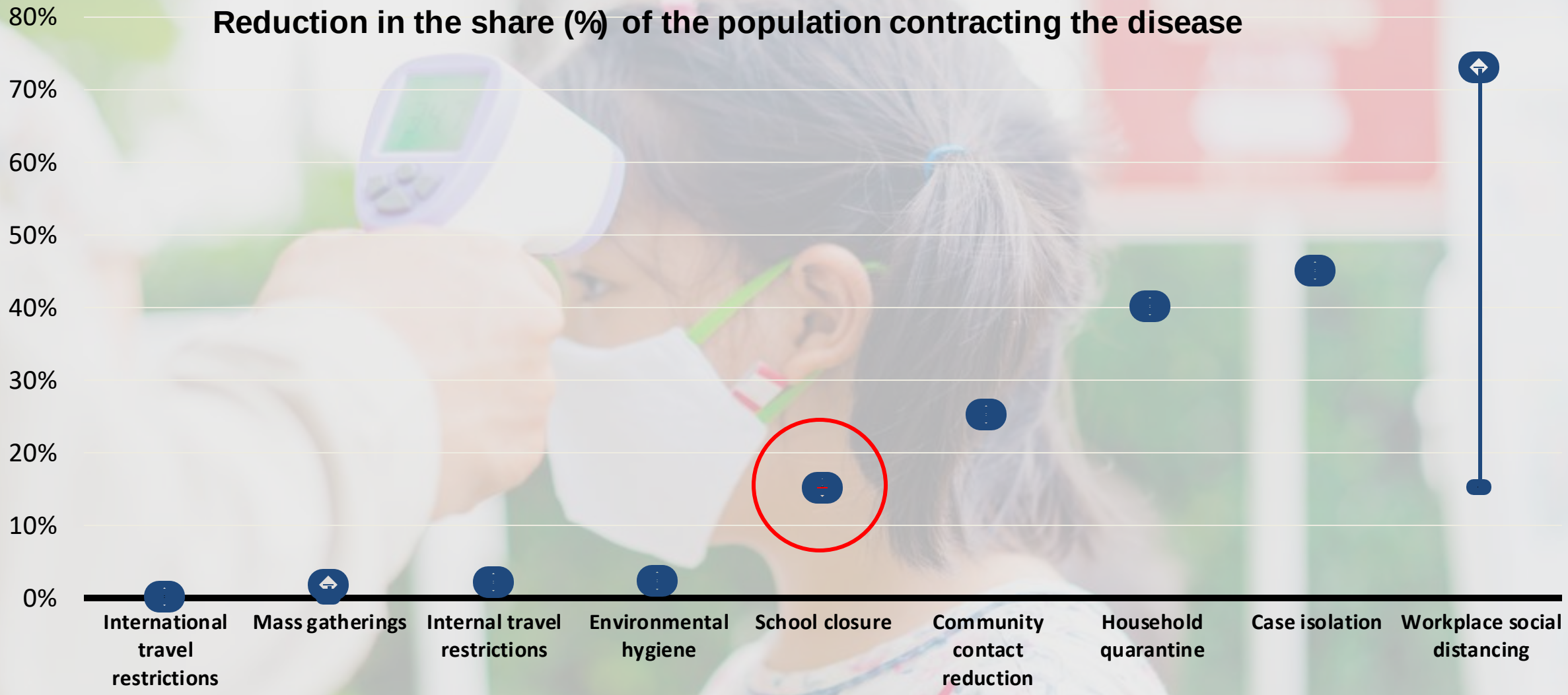
Are there plans to reopen schools this academic year?

(Averages across 36 countries, May 2020)

Table 13



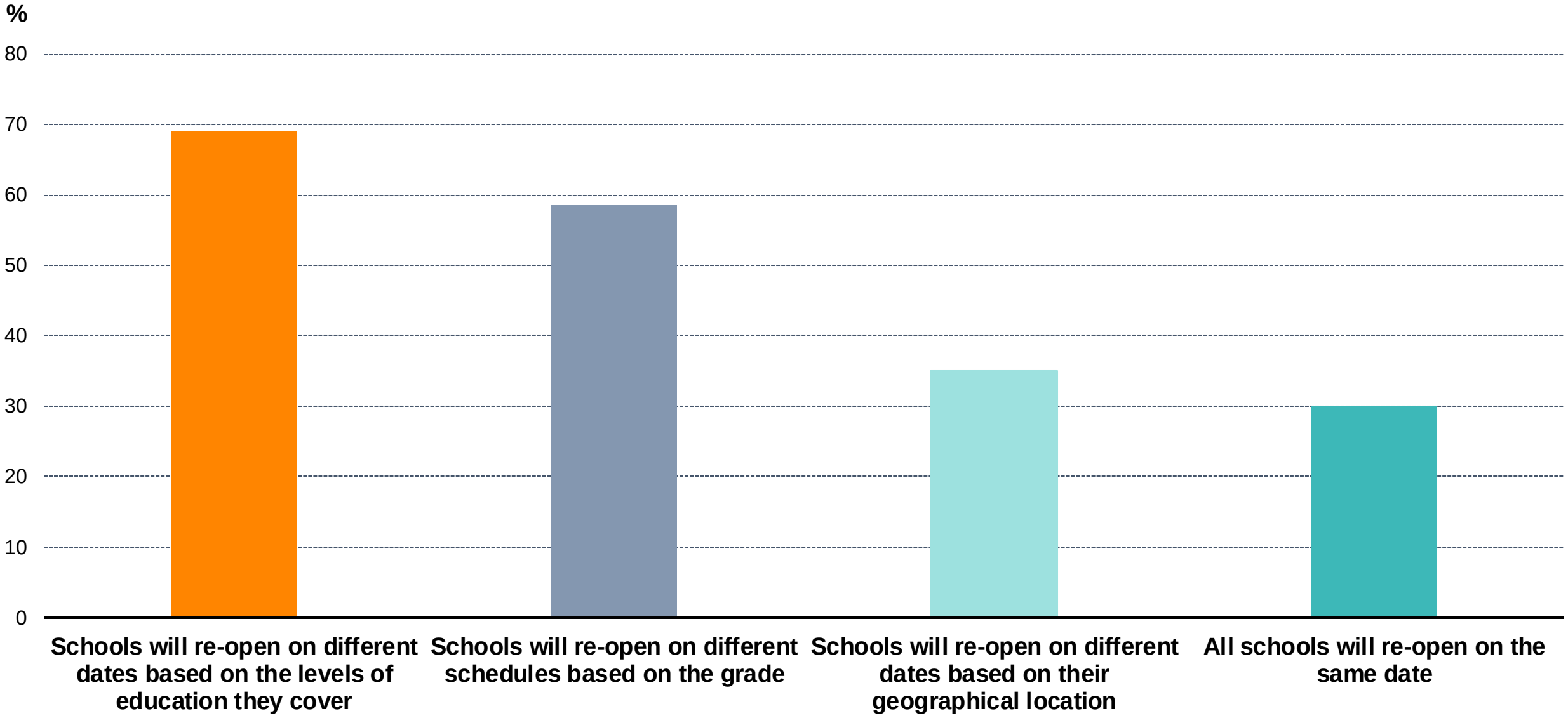
Evidence from previous epidemics suggests school-closure can prevent < 15% of infections



Source: OECD, Flattening the covid-19 peak: Containment and mitigation policies

When do schools plan to reopen? (Averages across 36 countries, May 2020)

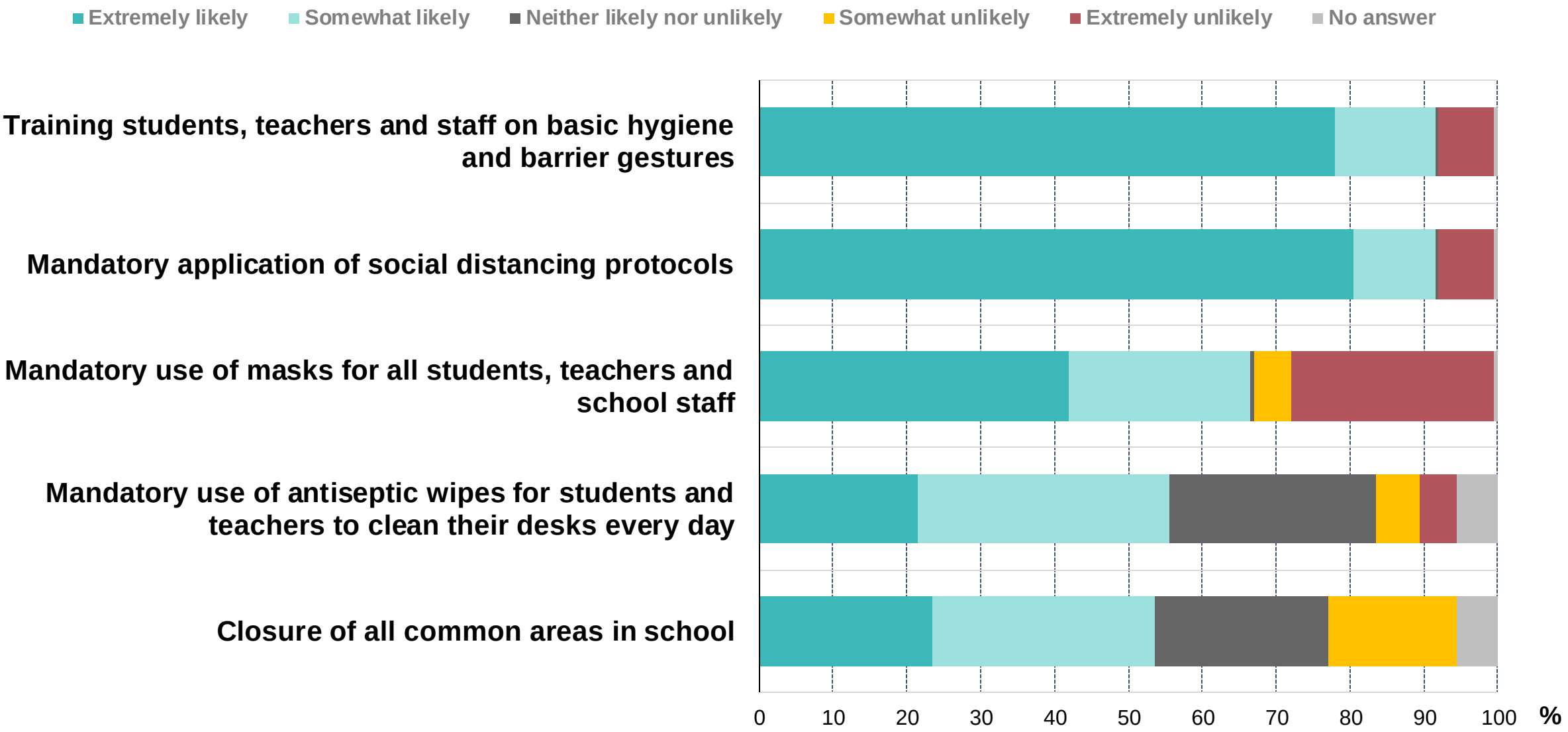
Table 16



Health measures included in the reopening plans

(Averages across 36 countries, May 2020)

Table 22



Can we reconcile…

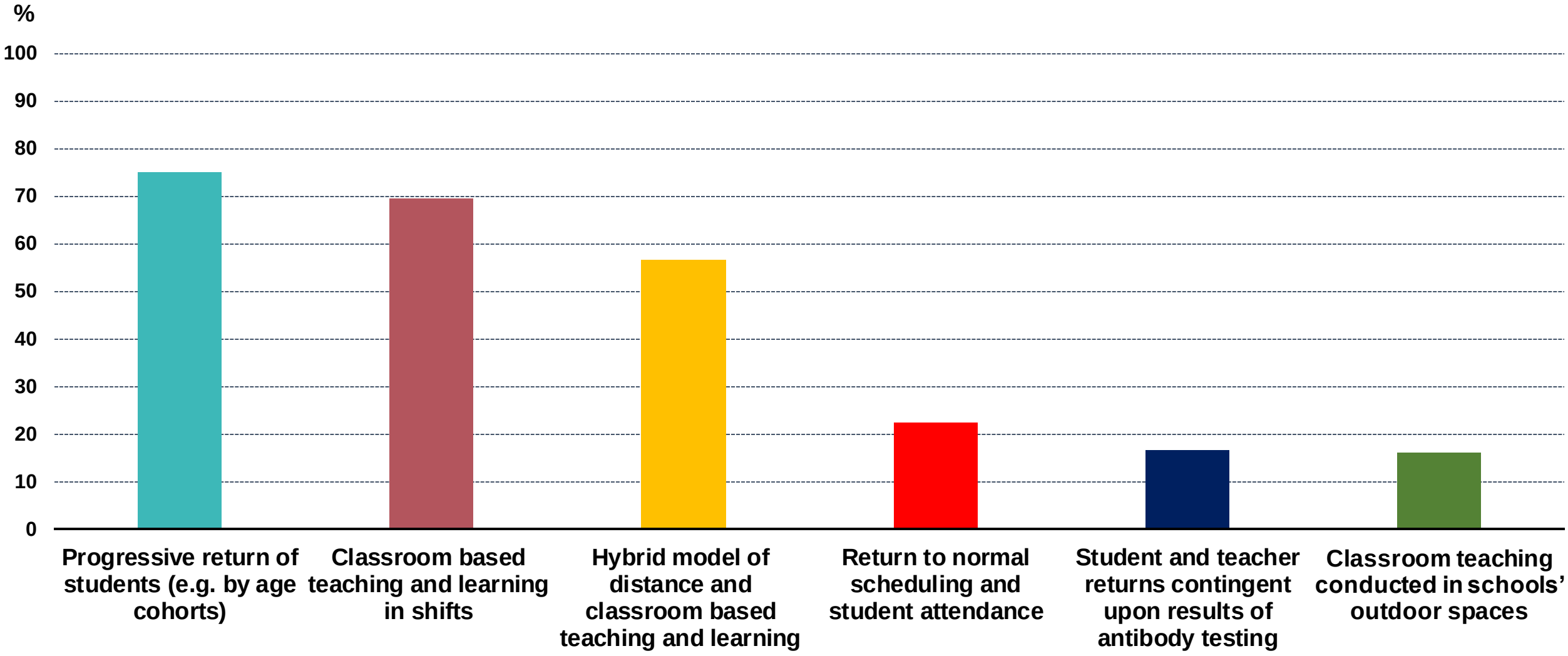
…social distancing with…

…innovative pedagogy?

What strategies will be used for school reopening?

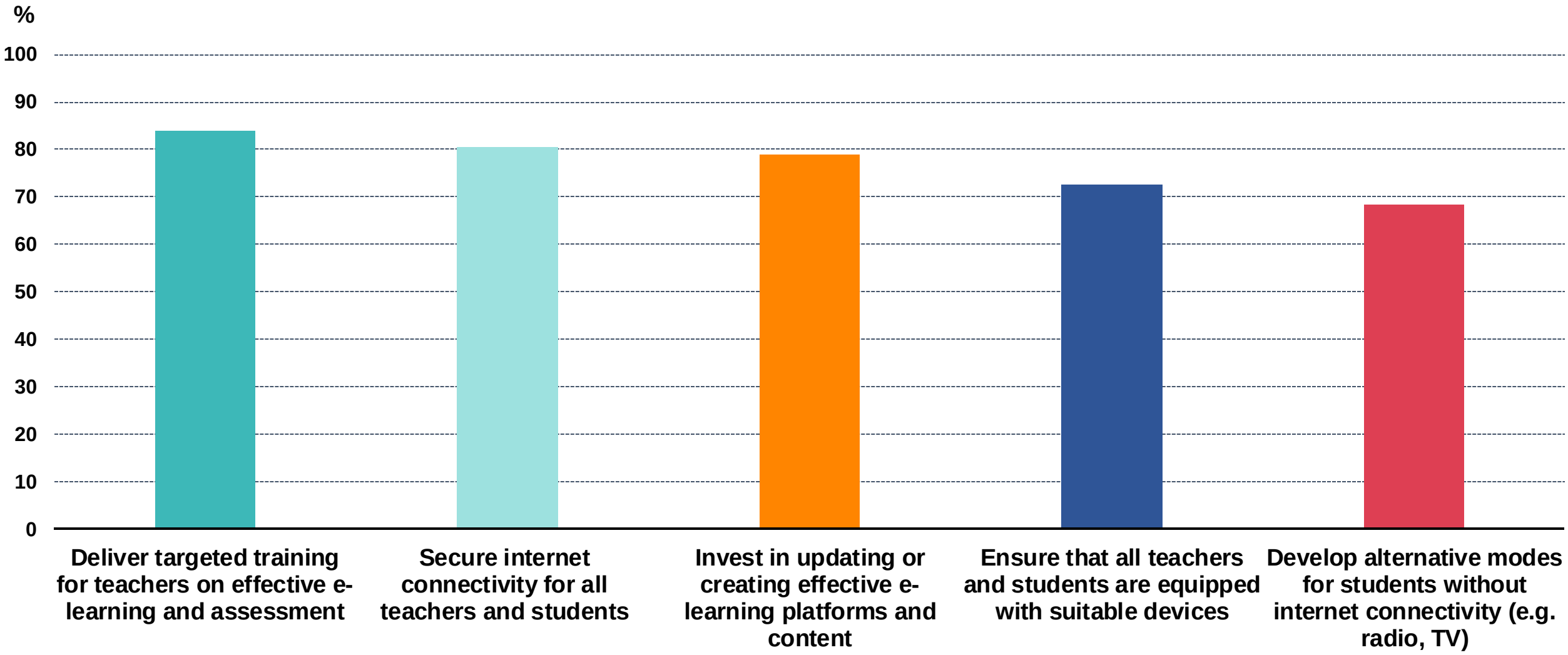
(Averages across 36 countries, May 2020)

Table 17



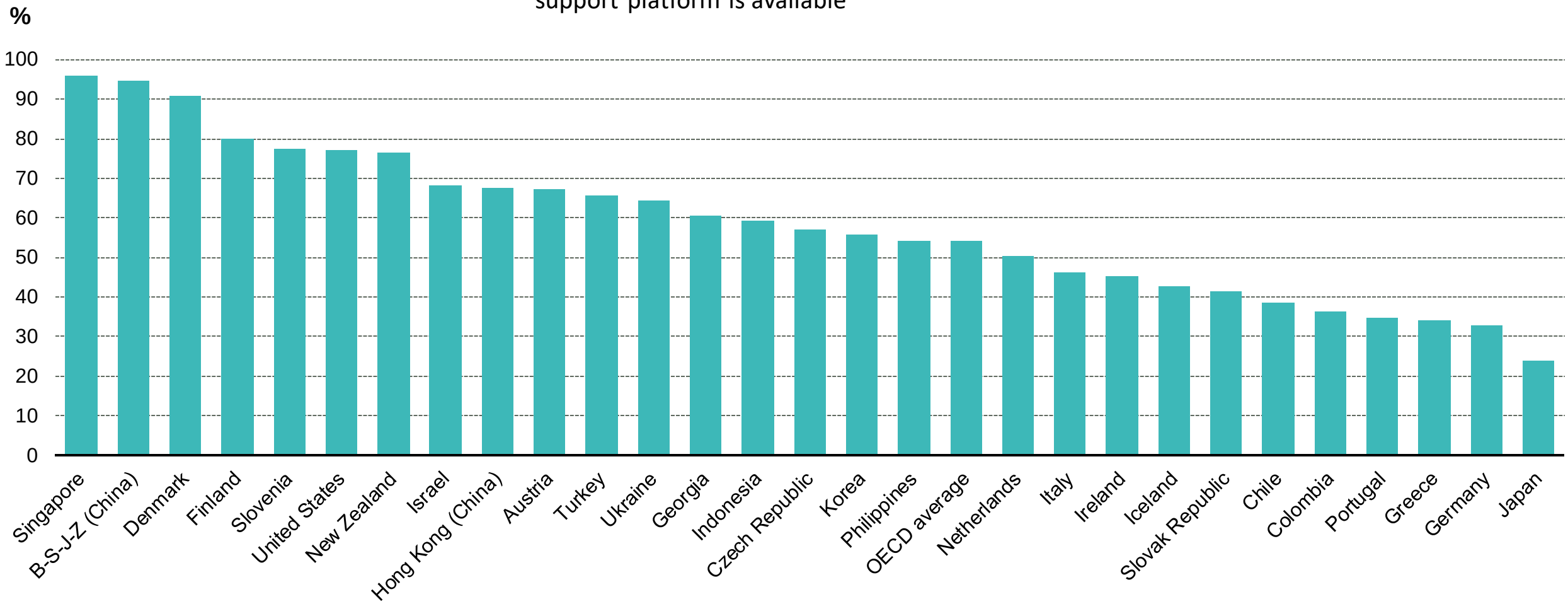
E-learning readiness in reopening plans

(Averages across 36 countries, May 2020)



An effective online learning support platform is available (PISA 2018)

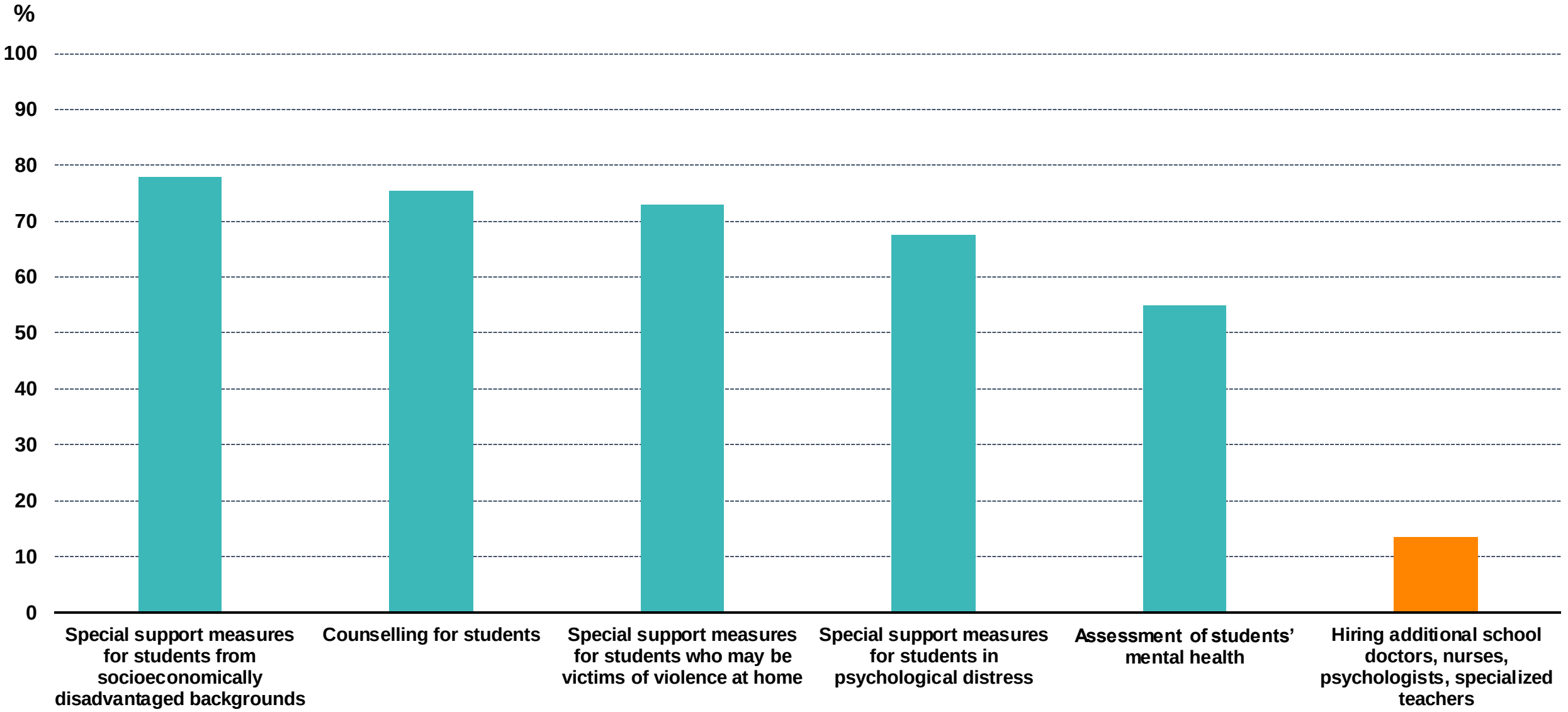
Percentage of students in schools whose principal agreed or strongly agreed that an effective online learning support platform is available



Plans to reopen to address well-being of students

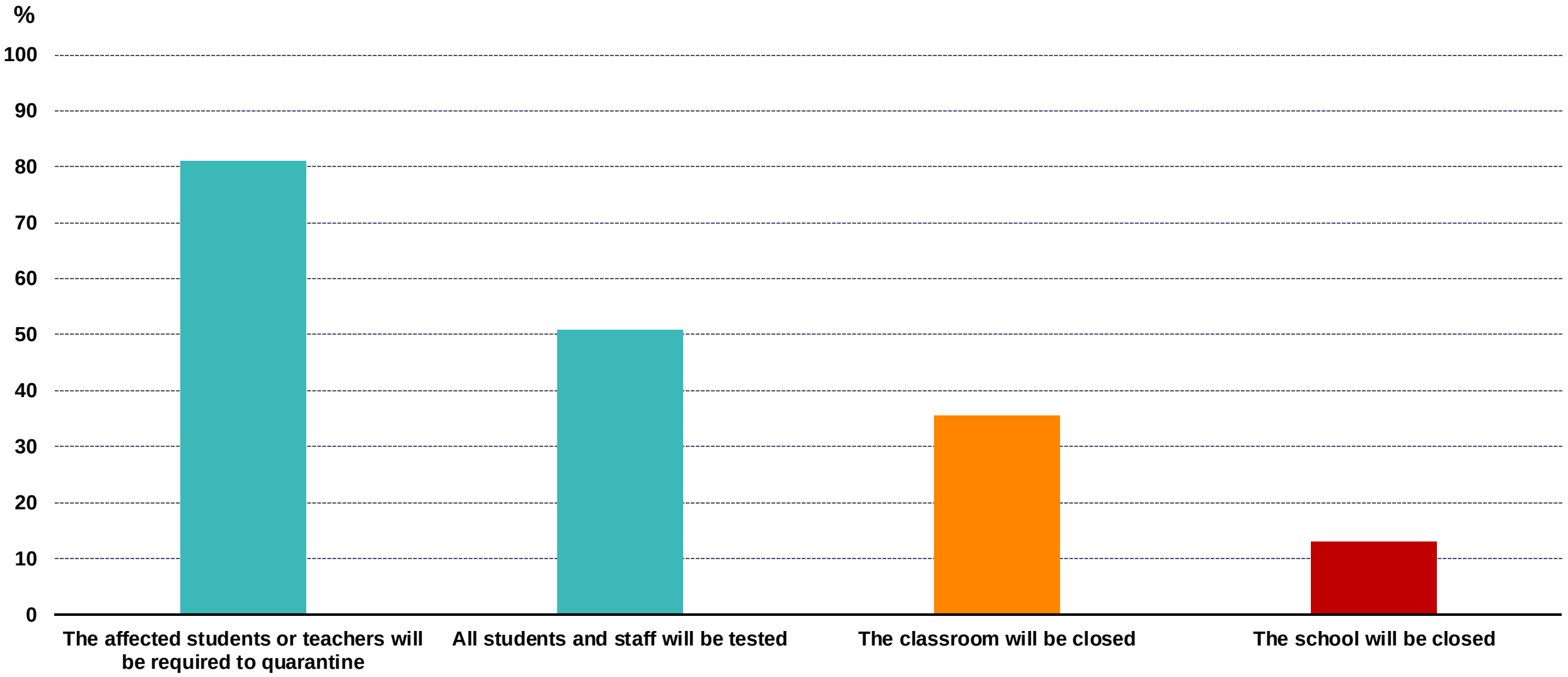
(Averages across 36 countries, May 2020)

Table 19



Health measures in the reopening plans to respond to Covid-19 cases

(Averages across 36 countries, May 2020)

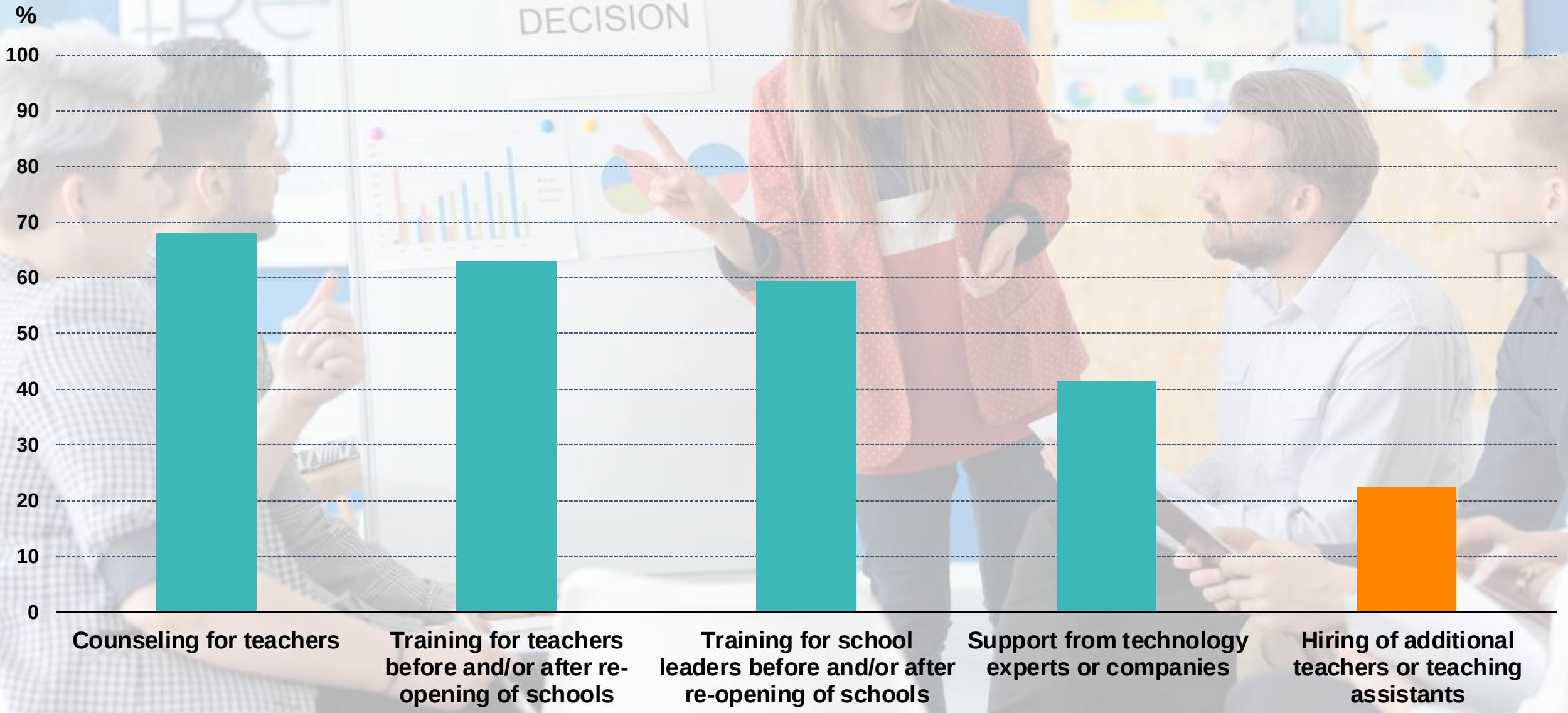


Building capacity

Which of these measures are part of the reopening plans?

(Averages across 36 countries, May 2020)

Table 20

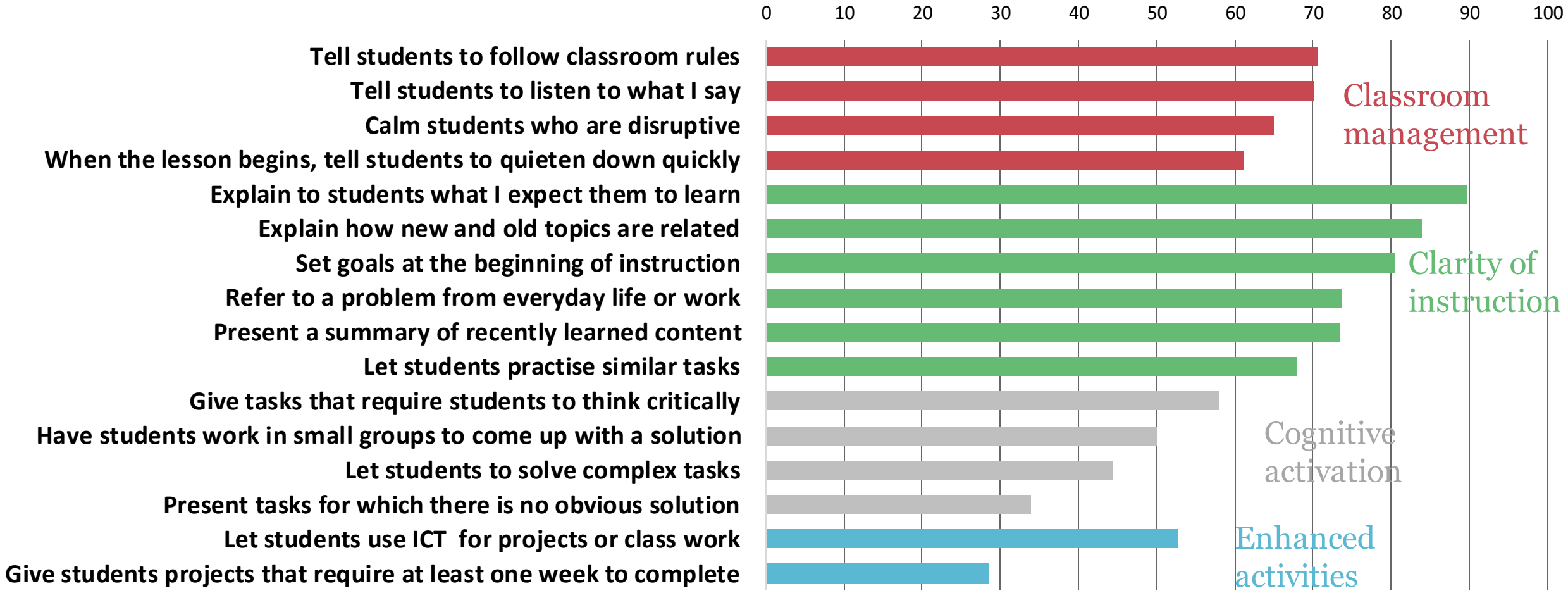


Prevalence of pedagogical strategies (TALIS 2018)

Teaching practices

Percentage of teachers who frequently or always use the following practices in their class

(OECD average-31)



Thank you

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- **Country implementation examples**
- **Innovative education resources**
- **Country notes**

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