Key Messages

Recent societal, technological and economic changes have placed pressure on school systems to adapt their curriculum by including various competencies (e.g. **digital and data literacies, global competencies, financial literacy, media literacy, coding and programming, entrepreneurship, environmental literacy, health literacy, and social and emotional skills**).

However, teaching time over the last decade has not changed much. This creates tensions and competing demands for students to stretch themselves too thinly and not having time for deeper learning; for teachers to embed these competencies within limited instruction time; and for policy makers to resist accommodating all these demands by adding more hours to curriculum. Most importantly, school systems need to be aware that "**more learning time does not necessarily lead to productive student outcomes**", therefore more countries and schools have increasingly become aware of the importance of focusing on **quality of learning time (rather than quantity per se)** as well as **student well-being**. Addressing curriculum overload is also actioned to ensure **teacher well-being** and support **effective teaching**.

To make this curriculum paradigm shift a reality, countries and schools are called to rethink what to change on the scope and structure, what to prioritise/remove among topics without compromising rigour, how to manage change process, etc. For example, they are making changes such as regulating the quantity and **ensuring the quality of learning time**; translating emerging societal needs into **connecting topics/themes or developing competencies across learning areas**; focusing on **conceptual understanding or "big ideas"** to avoid an excessive number of subjects and/or topics per subject – often described as "mile-wide, inch-deep"; carefully defining the pitch of what is included in curriculum; building in **coherent learning progressions** across grades; and **managing perceptions** by adjusting the size and/or format of curriculum documents.

"Connecting topics/themes or developing competencies across learning areas" is one of the main curriculum trends across schools and countries. On **cross-curricular themes**, the most frequently articulated across countries include "environmental education, sustainability" (57% of countries), "local and global citizenship, peace" (51% of countries), and "health education, well-being and lifestyle (51% of countries)". Among the least targeted cross-curricular themes are "regional and global engagement" (16%) and "media education" (11%). However, it would be misleading to only look at the thematic level. On c**ross-curricular competencies**, countries make different choices when embedding in existing subject areas:

- **ICT/digital literacy** has a stronger presence (on average, 40% of content items), in line with the growing movement towards digital transformation in education. It is emphasised in areas such as t**echnologies/home economics, national language, mathematics and science**. Estonia stands out because of the stronger emphasis (almost 70%), followed by Korea and Kazakhstan (just below 60%).
- Despite the growing needs for an interconnected world, **global competency** is explicitly articulated on average in 28% of content items, in areas such as **humanities, arts and national language**. This said, interdisciplinarity is acknowledged in several countries/jurisdictions by embedding it in areas such as **science** and **technologies/home economics**, and, although more rarely, in **mathematics** (in British Columbia [Canada], Korea, Northern Ireland [United Kingdom] and Sweden).
- With the increasing appearance of fake news, **media literacy** is highlighted as necessary competency for future. It is covered in around 24% of content items and is mostly emphasised in the areas of **national language** and **humanities**. Notable exceptions are two countries, Korea and Estonia for the degree of coverage (more than 50%), and two Canadian jurisdictions (British Columbia and Saskatchewan) for subject areas by emphasising it in **mathematics**.

- **Entrepreneurship** is only modestly embedded in curricula (on average 14% of curriculum). Estonia and Japan report a higher emphasis on entrepreneurship, with 40% and 56%, respectively, of the mapped curriculum targeting this competency. Both countries adopt a holistic approach by embedding entrepreneurship across most learning areas.
- With accelerated technological advancements such as *AI, Robotics, and Internet of Things*, c**omputational thinking/ programming/coding** is also embedded explicitly in curriculum but with a low percentage of content items (on average 11%) mainly in areas such as **technologies/home economics and mathematics**. The proportion is much higher in Estonia (37%) and the Russian Federation (32%).
- **Financial literacy** is one of the least targeted competencies (9%), mostly embedded in areas such as **technologies/home economics, humanities** and **mathematics**. Estonia and Kazakhstan give a greater emphasis to financial literacy (21% and 24%, respectively) and in a wider variety of learning areas.

Five key lessons learned from unintended consequences that countries experienced when tackling overload suggest to:

1. **keep the right balance between breadth of learning areas and depth of content knowledge**. Changing content often presents trade-offs; selecting only certain academic subjects to avoid overload can overlook the importance of "whole student development", "whole-school learning", and "whole community learning"; at the same time, keeping everything in limited space can lead to a "mile-wide, inch-deep" curriculum, creating a sense of disengagement in both students and teachers;

2. **use focus, rigour and coherence jointly as key design principles when addressing curriculum overload**, as using them as a package can help manage a false perception that focusing on a small number of topics leads to lowering standards, and ensure each student progresses their learning at developmentally appropriate levels;

3. **be conscious and avoid homework overload for students.** When contents are not covered during class, teachers are likely to assign homework, which disproportionately affects disadvantaged students, especially as types of homework are becoming more diverse. It also adversely influences teachers by increasing teachers' workload for homework preparation and marking.

4. **be mindful of local decisions leading to curriculum overload for schools.** Finding the right balance between detailed guidance and autonomy/flexibility is crucial to avoid content overload. Detailed descriptions narrowly framed around grades and stages can easily lead to content overload, while at the same time, lack of specificity without appropriate teacher support can have similar effects if teachers use autonomy to decide to keep everything at the school level. Supporting teachers and preparing enabling conditions for teachers to act on their agency and be the designers, co-creators and facilitators of the curriculum is of critical importance.

5. **stress curriculum overload as a pressing issue by redefining student success and well-being,** moving away from focusing solely on academic performance to a more holistic vision of students. Putting student well-being at the centre of curriculum reform and education overall is needed to ensure an inclusive, sustainable and creative society.