

# International Early Learning and Child Well-being Study

A SUMMARY OF FINDINGS



# THE INTERNATIONAL EARLY LEARNING AND CHILD WELL-BEING STUDY

**T**he first five years of every child's life are a period of great opportunity, but also one of risk. The cognitive and social-emotional skills that children develop in these early years have long-lasting impacts on their later outcomes throughout schooling and adulthood. While the quality of later schooling also matters, strong early learning accelerates later development whereas a poor start inhibits it.

Countries will make faster progress on improving children's early learning experiences when they are able to learn from other countries and systems, rather than each working in isolation. There is a lack of reliable, valid and comparable international evidence that enables countries to do so. The International Early Learning and Child Well-being Study addresses this gap.

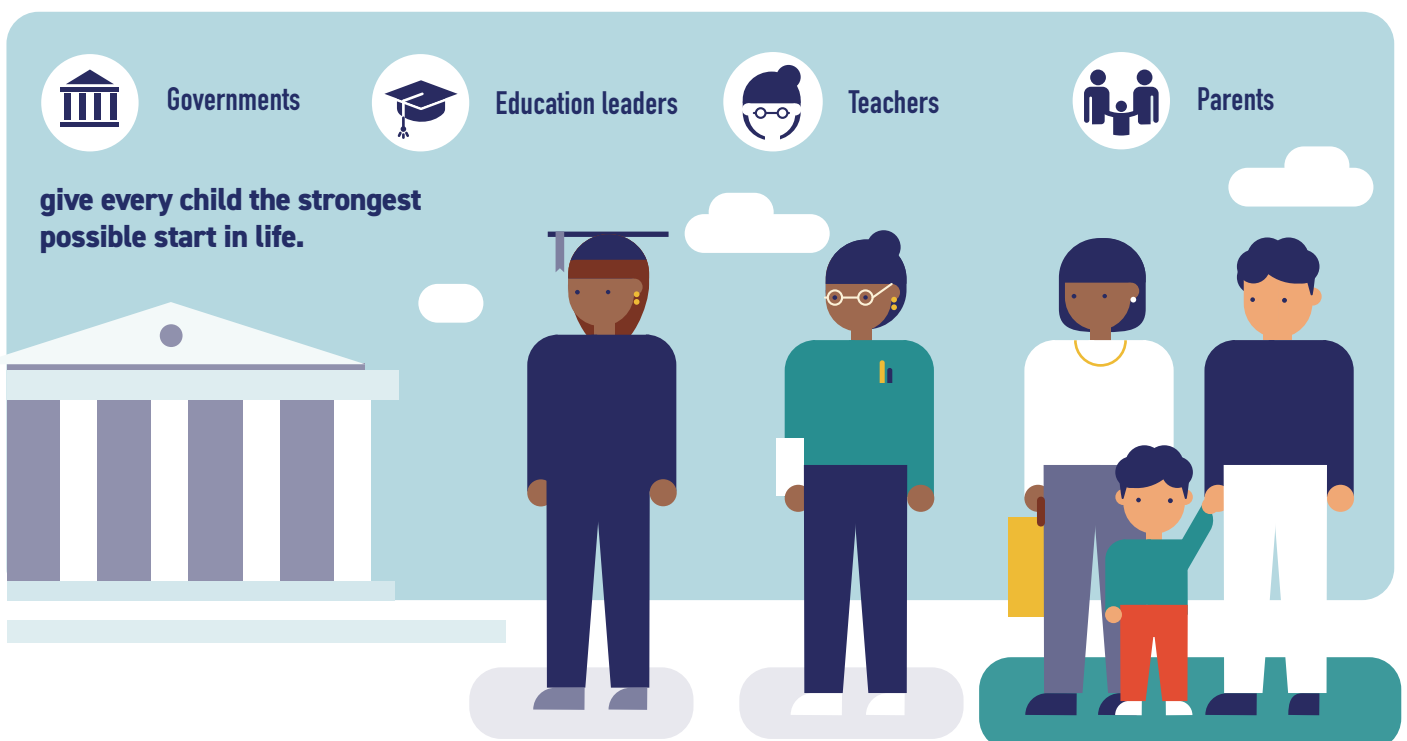
The fundamental objective of the study is to provide participating countries with information they can use to

benchmark and monitor the performance of their systems in giving all children a strong early start.

The study focuses on those aspects of children's early learning that have been found to best predict positive later outcomes. The areas of early learning that best support positive later outcomes are inter-related and mutually reinforcing. This core set of early learning domains encompasses emergent literacy, emergent numeracy, self-regulation, and social-emotional skills.

Three sources of information provide a triangulated perspective on children's learning and development: a direct assessment of children's skills, and feedback from parents and teachers on children's learning, development and behaviour. Children completed the direct assessment on tablets, with one-to-one support from a trained study administrator. The children listened to stories and engaged with cartoon-like characters in these stories by touching

## The International Early Learning and Child Well-being study is designed to help:



or moving items on the screen. The process was simple and intuitive, and was trialled with different groups of children before the study was implemented in the participating countries. Children did not need any prior experience with tablets or other digital devices to successfully complete the activities.

The study found clear differences in children's early learning across the three countries, including between different groups of children such as boys and girls and children from different socio-economic backgrounds. In addition, the study found similarities across countries in the factors that are positively or negatively associated with children's early learning and well-being.

Information was collected from **children's parents and teachers**, as well as direct assessments of just under:

# 7 000 CHILDREN

in England, Estonia and the United States.



The study collected information on a broad range of children's skills, including:



Emergent literacy



Emergent numeracy

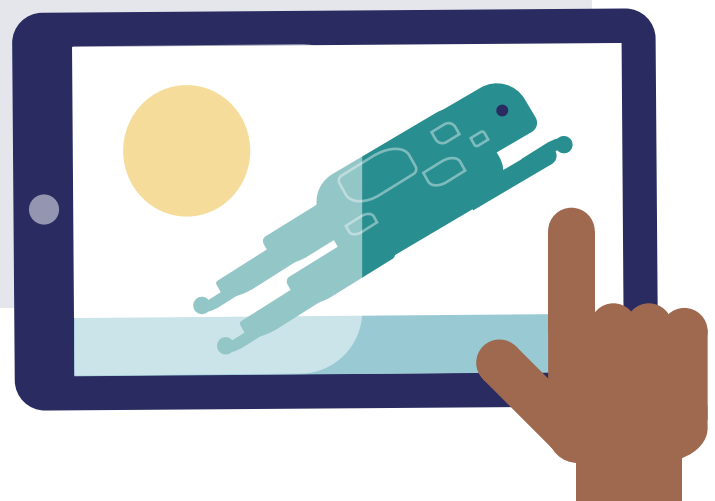


Self-regulation



Social-emotional skills

For the direct assessment, children engaged with **developmentally appropriate stories and activities on a tablet**. There was no reading or writing involved.

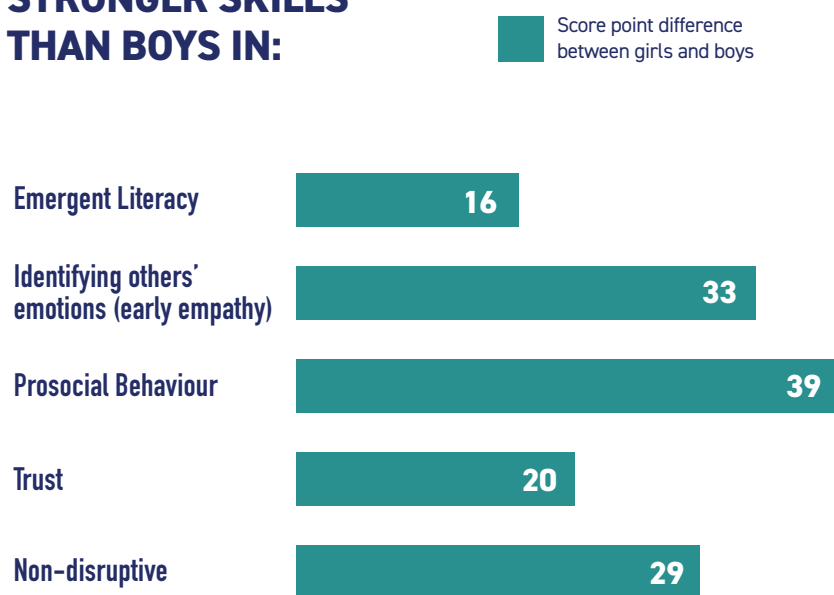


# DIFFERENCES BETWEEN BOYS AND GIRLS ARE EVIDENT AT FIVE YEARS-OF-AGE

**G**ender differences were found in all three countries. **Girls had stronger emergent literacy and social-emotional skills than boys.** Girls scored more highly in empathy and reports from parents and teachers identified girls as having higher trust and prosocial skills and to be less disruptive than boys.

The direct assessment found no discernible differences between girls and boys in emergent numeracy. However, girls were reported by teachers as having higher levels of emergent numeracy than boys.

## GIRLS HAVE SIGNIFICANTLY STRONGER SKILLS THAN BOYS IN:

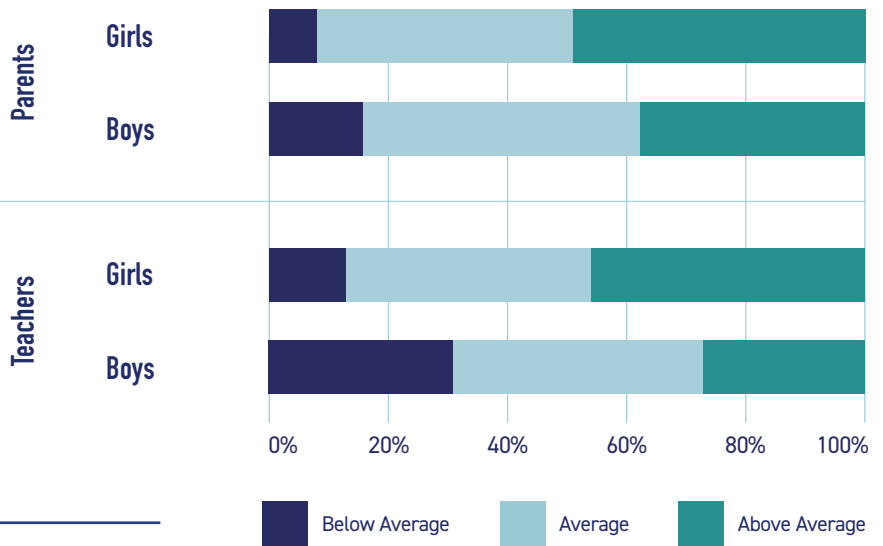


The International Early Learning and Child Well-being study puts a spotlight on how children are faring at five years of age.

## SELF-REGULATION



Parents and teachers also reported girls as having better self-regulation than boys.



Boys are **2X** as likely as girls to be reported by their parents as having learning difficulties, such as speech or language delays, or to have social, emotional or behavioural difficulties.

Parents and teachers report that girls have stronger skills than boys in all areas covered by the study

Children with these difficulties had lower levels of skills across every measure in the study.

Families provide boys and girls with the same early learning opportunities, such as:

- Having back-and-forth conversations with children
- Reading to children
- Providing children's books in the home
- Taking children to special activities, such as sporting and cultural activities.



In addition, boys and girls are equally likely to participate in early childhood education and care programmes



# DIFFERENCES BASED ON SOCIO-ECONOMIC BACKGROUND ARE SIGNIFICANT

**C**hildren from high socio-economic backgrounds had higher levels of skills than children from low socio-economic backgrounds in all measures in the study, but were strongest in emergent literacy and emergent numeracy.

Estonia had the smallest differences amongst children based on their socio-economic backgrounds whereas the greatest differences were found in the United States. While differences in children's skills are linked to socio-economic background in other international studies, this study shows these differences already exist at age five in the participating countries.

## CHILDREN FROM HIGH SOCIO-ECONOMIC GROUPS HAVE SIGNIFICANTLY STRONGER SKILLS IN ALMOST ALL MEASURES IN THE STUDY, INCLUDING:

Score point difference between children from high socio-economic groups and children from low socio-economic groups.



Children from **low socio-economic backgrounds** were more likely to be reported as **having learning or behavioural difficulties, especially boys.**

**The activities parents undertake with their children are significantly related to their children's learning**


### Children from low socio-economic backgrounds whose parents:

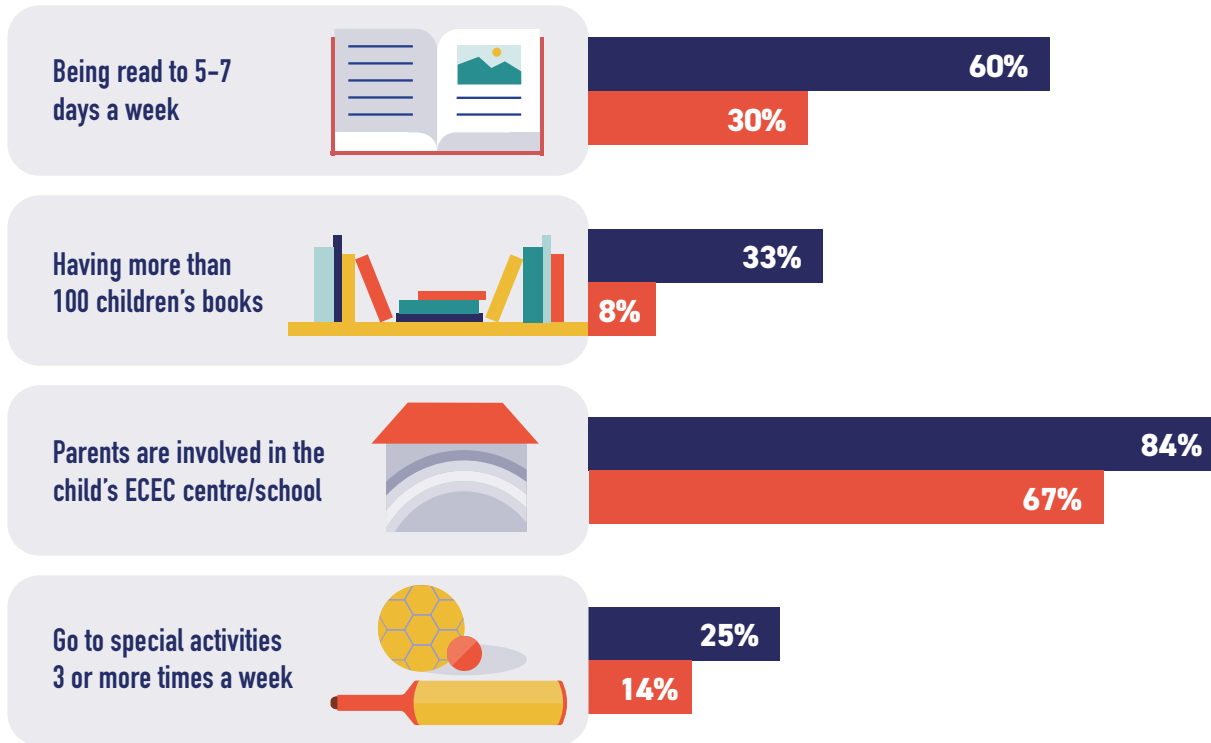
- read to them almost every day,
- were involved in their ECEC centre or school and
- had children's books at home

**achieved significantly higher outcomes** than children whose parents did not undertake these activities.

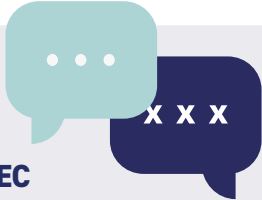


## CHILDREN FROM ADVANTAGED FAMILIES, ON AVERAGE, HAVE MORE LEARNING OPPORTUNITIES.

 % of children from advantaged families  
 % of children from disadvantaged families



**Immigrant children are less disruptive and have lower trust and pro-social skills than other children.** There are no differences between the emergent literacy, emergent numeracy and self-regulation skills of immigrant children, compared to other children, once socio-economic status and home language have been accounted for.


**Having a home language that is different from the ECEC centre or school the child attends is associated with lower learning and development.** Teachers report these children are, however, less disruptive than other children.

On average, **13%** of children across the three countries **had a different home language:**

**20%** of children in the United States,

**16%** in England and

**6%** in Estonia.

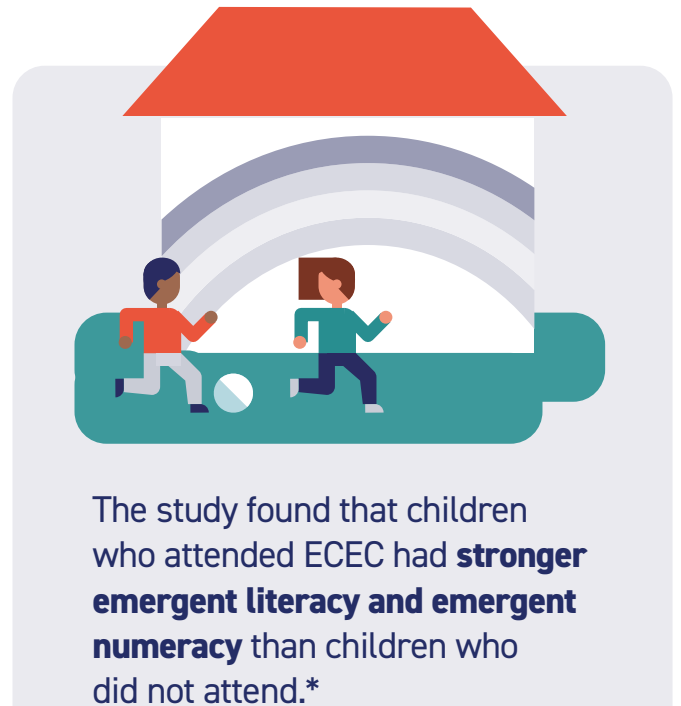
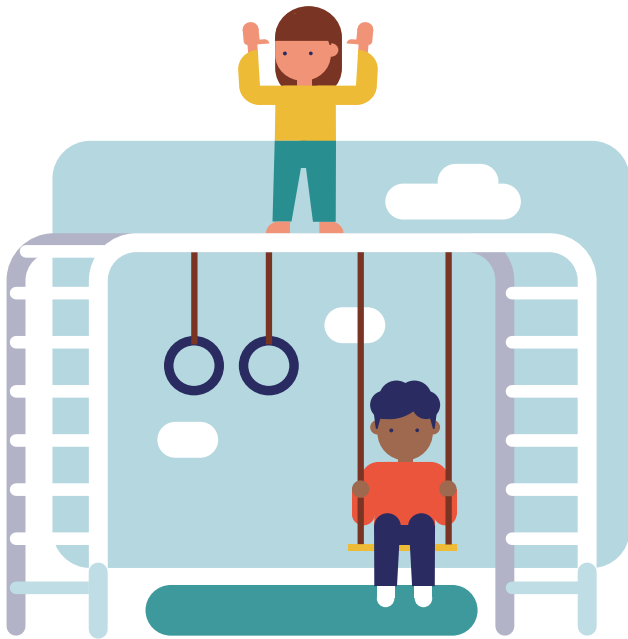
# EARLY CHILDHOOD EDUCATION AND CARE MATTERS FOR CHILDREN'S DEVELOPMENT

**A**lmost all children in England and Estonia attend some form of early childhood education and care (ECEC) setting by the age of three. In the United States, however, this is not the case. In the United States, 51% of children in this study had attended ECEC by the age of three years, although children from high socio-economic families had higher participation rates. Children from advantaged families were more likely to have attended ECEC than children from disadvantaged families.

In the United States, children who had participated in ECEC had significantly higher emergent literacy and emergent numeracy scores than children who had not attended, after

accounting for socio-economic status. These differences were particularly strong for emergent numeracy. Attending ECEC was not, however, significantly associated with children's self-regulation or social-emotional skills in either a positive or negative direction.

The study found no differences in children's emergent literacy or numeracy based on the age they started ECEC. After accounting for children's socio-economic backgrounds, there were no differences in emergent literacy and numeracy for children who started ECEC before they turned three compared with children who started ECEC as three-year-olds or older.



Emergent literacy



13

Emergent numeracy



26



Score point difference between children who attended ECEC and those who did not, after accounting for socio-economic status.

**Starting behind means staying behind - for individual children and for education systems.**

\* Note that these findings based on children in the United States as nearly all children in England and Estonia attend ECEC before the age of five.



# PARENTS' ACTIVITIES WITH THEIR CHILDREN ARE STRONGLY LINKED TO CHILDREN'S LEARNING AND WELL-BEING

**T**he day-to-day activities that parents undertake with their children are highly correlated with children's learning and development. Regardless of socio-economic background, the study found children had higher levels of skills when their parents:

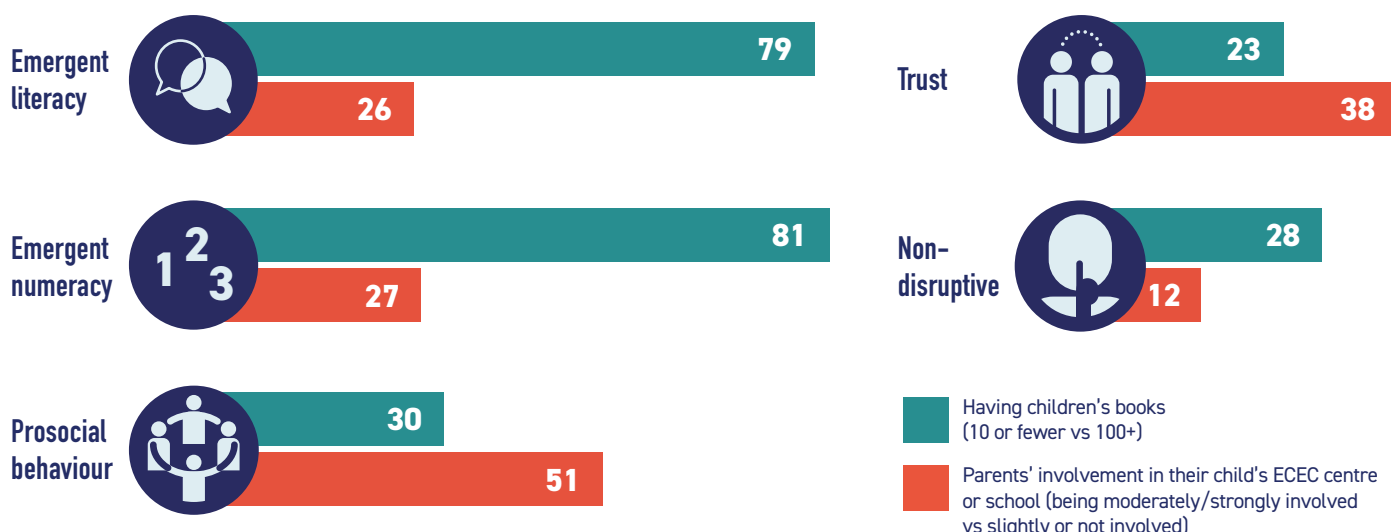
- Read to them almost every day
- Ensured there were many children's books in the home
- Had back-and-forth conversations with them
- Took them to special activities such as swimming, dance or scouts
- Were involved in the ECEC centre or school they attend.

At the same time, the study found that moderate engagement in most activities was more strongly associated with children's learning than daily frequency. For example, children who attended special activities three or four times a week had stronger skills than children who attended such activities every day. An exception was reading, where the findings show that reading five to seven days a week with children was



more strongly correlated with children's emergent literacy and their social-emotional skills than reading to them less frequently. Nonetheless, reading to children three to four times a week was still significantly associated with stronger skill development than reading to children once a week or not at all.

## Children who have books at home and whose parents are involved in their ECEC centre or school have higher scores in a number of skills: (score point difference, after accounting for socio-economic status.)

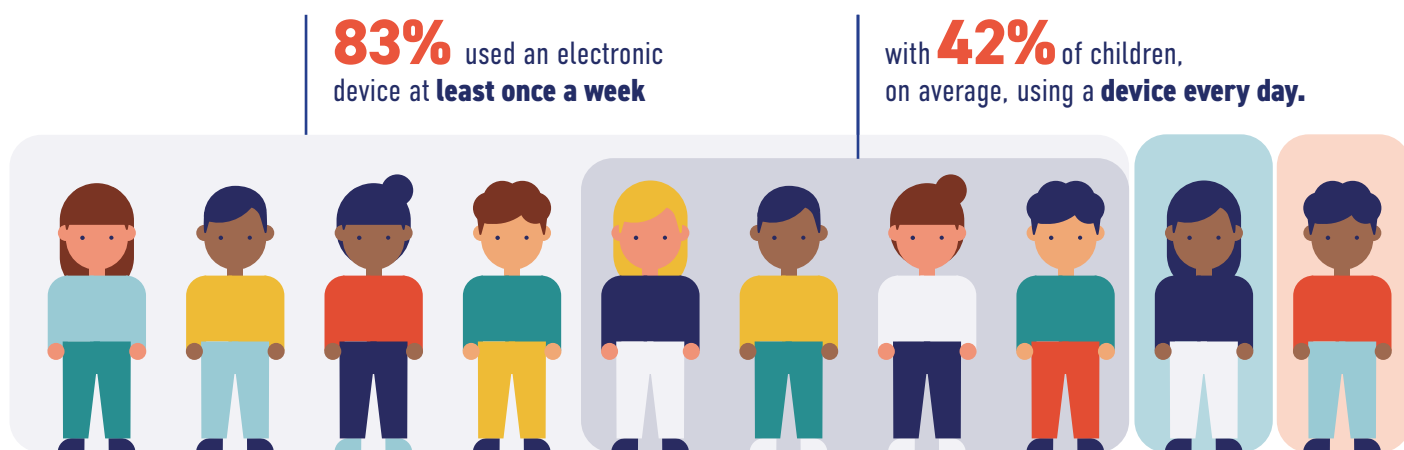


# MOST FIVE-YEAR-OLDS ARE USING DIGITAL DEVICES REGULARLY

**M**ost of the five-year-olds in the study (83%) used a digital device at least once a week and 42% did so on a daily basis. Children in the United States were more likely to regularly use a device than children in England or Estonia.

There were no clear relationships between the regular use of electronic devices and children's development and skills. There was, however, a positive relationship between the frequency of device use and the mental flexibility skills of children in Estonia and the United States but this was not the case in England.

## THE MEAN PROPORTION OF 5-YEAR-OLD ACROSS THE THREE PARTICIPATING COUNTRIES:



The use of electronic devices amongst these children is:

**more prevalent in the United States** > **least prevalent in Estonia.**



with an average of **10%** of children using a device at **least monthly, but not weekly.**

Only **7%** of children on average across countries **never or hardly ever used a device.**

**The regular use of electronic devices weekly or monthly was positively associated with higher scores in some countries in:**



Emergent literacy



Self-Regulation

# CHILDREN'S DEVELOPMENT AND LEARNING IS INTER-DEPENDENT AND MUTUALLY REINFORCING



**T**here were positive relationships between each dimension of children's early development and learning in this study. Emergent literacy and emergent numeracy were strongly correlated, and these also correlated positively with self-regulation skills. At the same time, there were positive associations between the cognitive aspects of the study (emergent literacy, emergent numeracy and self-regulation) and children's social-emotional skills, particularly with children's skills in identifying others' emotions and their levels of prosocial behaviour and trust. Thus, children's learning gains in any one area support ongoing development in other areas of their development.

## THE RELATIONSHIP BETWEEN PROSOCIAL SKILLS AND OTHER EARLY LEARNING

Score point difference

Children with strong prosocial skills scored more highly in other learning areas than children without these skills.



**“Children love to learn and supportive, caring environments help them to do so. Our job is to ensure we are providing such environments.”**

– Andreas Schleicher, Director, Directorate for Education and Skills, OECD.

## DEFINITIONS

**Emergent literacy** refers to the skills children develop that are a precursor to literacy and enable them to understand and communicate with others. In this study, there was no assessment of whether children could read or write.

**Emergent numeracy** refers to simple problem solving and the application of concepts and reasoning in relation to numbers and counting, working with numbers, shape and space, measurement and pattern.

**Self-regulation** refers to the skills children develop to inhibit their impulses and direct their thought processes, enabling them to concentrate, retain information and complete short tasks.

**Social-emotional skills** refer to children's abilities in interacting well with others and in managing their emotions.

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[www.oecd.org](http://www.oecd.org)  
[earlylearning@oecd.org](mailto:earlylearning@oecd.org)

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