

# EVERYONE COUNTS SEN

## TEACHERS' OVERVIEW

This resource has been created for learners with special educational needs (SEN) in England, Wales and for learners with additional support needs (ASN) in Scotland.

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### Introduction

*Everyone Counts* is a mainstream resource for Maths teachers developed by Oxfam in collaboration with Young Lives and The Mathematical Association. *Everyone Counts SEN* contains six springboard sessions which you can use as a set or individually to launch your students into real-world-themed mathematical learning. The resource caters for a wide range of abilities and is suitable for learners achieving between P1 and P8. Teachers are free to select activities most suited to the needs of their learners.

*Everyone Counts SEN* draws on the statistics provided by the Young Lives study, an international research project based at Oxford University's Department of International Development. This study is collecting data about children's lives in four countries: Ethiopia, India, Peru and Vietnam. Using these data with your learners will bring a real-world context to their mathematical learning.

To use the sessions as a set, simply move through them in sequence. To use them as a springboard, take each session individually and build upon its mathematical theme in subsequent lessons. For example, Session 1 is about sorting and matching; you could use it as a starting point for a set of sessions on this topic. You may find resources in the main [\*Everyone Counts\*](#) resource useful to dip into if you wish to extend a theme. There is enormous scope for making this work cross-curricular. Learners can look at where the children in the Young Lives study live as part of their geography work, they can find out the history of these countries in their history lessons, they can write factual and imagined accounts in literacy lessons, create art using techniques from the different regions in their art

lessons, cook traditional foods in their cookery lessons and so on. The possibilities are endless.

At the end of your *Everyone Counts SEN* work, whether you choose to use all the sessions or just a few, we encourage you to spend time reflecting with your learners on their learning and to consider organising an activity that can contribute to positive change in the lives of young people around the world. This could be a fundraising event, an awareness-raising event, or participation in a campaign (such as 'Send My Friend to School'). You can find further ideas for [campaigning](#) and [fundraising](#) activities on our website.

### **What is Young Lives?**

This maths resource has been developed by Oxfam in conjunction with Young Lives. Young Lives is an international research project studying the causes and consequences of children's poverty. For over 15 years, researchers have been following the lives of 12,000 children in four countries. The project is led by a team in the Department of International Development at the University of Oxford in the UK, in association with research and policy partners in four study countries: Ethiopia, India, Peru and Viet Nam.

The research follows all 12,000 children and involves repeat interviews with them every three years (rather like the Seven-Up initiative in the UK). Survey data have been collected about their lives, their families, their communities and their schools through interviews with all the children, their parents and some community representatives. Further in-depth work was carried out with a smaller number of children in each country: researchers spent roughly a week in the community, working with the children individually and in groups with their peers. They also interviewed other members of their families and communities. This provided insight and information which is hard to capture in a large survey questionnaire.

This resource introduces learners to selected children from each of the four Young Lives countries. These featured children are some of the children involved in the in-depth interviews. However, their names have been changed and none of the photos accompanying the resource are of the Young Lives children. This is to protect the children from outside interest and prevent individuals from being identified and possibly singled out in any way.

The aim of Young Lives is to provide evidence for governments and international organisations to help them to improve policies and programmes for children. The researchers have found out a lot about the individual children and their families, such as where and how they live, some of the problems they face and whether they think they have a good life or a bad life. They know about the children's hopes and fears as well as their dreams for the future. You can find out more at <http://younglives.org.uk/>

### **Inequality theme**

The underlying theme of *Everyone Counts* is inequality, which refers to wide differences in a population in terms of their wealth, their income and their access to essential services such as health and education. These differences can occur between communities in the same

country, or between countries. Inequality can also apply to unequal opportunities (life chances) and outcomes.

A rapidly growing gap between rich and poor is now being seen in many countries around the world. Seven out of ten people in the world live in countries where economic inequality has increased in the last 30 years. If the entire wealth of the planet were divided into two, almost half would go to the richest 1% and the other half to the remaining 99 per cent of the population. Inequality is an increasing problem in the UK. The richest five families in the UK are now wealthier than the bottom 20% of the population (12.6 million people).

For further background information about inequality, see the separate document *Background notes for teachers*.

### Young Lives and inequality

The majority of the families in the Young Lives study are poor, or relatively poor. Over the 14 years since the children and their families were first interviewed in 2002, the economic situation in all of the countries in which they live has improved. Between 1995 and 2010, Gross National Income (GNI) per capita grew by 91% in Ethiopia, 122% in India, 61% in Peru and 145% in Viet Nam. Overall, researchers have found that the Young Lives families also became less poor during this period. Many families have noticed an improvement in living conditions and infrastructure such as electricity, safe water, toilets and roads.

However, Young Lives researchers have also found that inequality has grown over this time. There is an increasing gap between rich and poor, rural and urban families, boys and girls, and the ethnic majority and minorities. In all four countries, researchers found that the same children often face multiple disadvantages based on where they live, what ethnic or caste group they come from, and whether they are girls or boys. As children get older, the differences between them increase, including those between boys and girls. Overall, the Young Lives study has seen how inequality undermines the development of human potential, with children from disadvantaged families quickly falling behind in terms of early learning and other outcomes.

For further background information about inequality and the four Young Lives countries, see separate document *Background notes for teachers*. You might also want to read the Young Lives report: [\*What Inequality Means for Children\*](#).

#### Note on photographs

Note that all photographs included in *Everyone Counts SEN* are photographs of children living in communities similar to those studied in the research. The children come from similar backgrounds and are of similar ages, but they are not the actual children studied for safeguarding purposes: Young Lives has promised to keep the children's real identity secret because it has published so much information about them.

### **Aims of *Everyone Counts SEN***

- To use real-life case studies and data to engage learners and enable them to see the practical relevance of maths in the world around them.
- To develop learners' mathematical skills in a range of areas including division; measuring time; comparing quantities and handling data.
- To encourage participatory, investigative and collaborative teaching and learning styles.
- To encourage critical thinking about issues and values.
- To help enable teachers to fulfil the demands of the SEN curricula in England and Wales and the ASN curriculum in Scotland.

### **Structure of *Everyone Counts SEN***

*Everyone Counts SEN* comprises 6 session plans and 6 slideshows

- Session 1: Sorting and matching
- Session 2: Equal and unequal sharing
- Session 3: Time
- Session 4: Displaying data
- Session 5: More or less
- Session 6: Collecting data and interpreting it

Each session starts with an overview and includes learning objectives, learning outcomes, key questions and resources. Suggested activities are provided along with approximate timings. Starters and plenaries are included. Any resource and activity sheets are included in the session plan. The sessions also refer to slideshows, which are provided separately. Sometimes, teachers will need to print out copies of the slides.

#### *Session 1: Sorting and matching*

In the first session learners are introduced to the Young Lives study and eight children from four countries: Ethiopia, India, Peru and Viet Nam. They will start to identify and discuss the similarities and differences between the lives of these children and their own lives. The table below provides a quick reference to the eight featured children.

Name of child	Gender	Country	Town/village	Urban/rural
Afework (A-fee-work)	Boy	Ethiopia	Addis Ababa, capital city	Urban
Seble (Seb-lay)	Girl	Ethiopia	Village in Oromiya state	Rural
Ravi (Rav-y)	Boy	India	Village in Andhra Pradesh	Rural
Harika (Har-i-ka)	Girl	India	Village in Telangana	Rural
Manuel (Man-well)	Boy	Peru	Village in Andean highlands	Rural
Luz (Loose)	Girl	Peru	Town in Puno region	Urban
Hung (Hungh)	Boy	Viet Nam	Village in Red River Delta region	Rural
Lien (Lee-en)	Girl	Viet Nam	Hanoi, capital city	Urban

### Important teaching note

*Everyone Counts SEN* includes suggested activities and resources to **support** your maths teaching rather than guide it. Additional teaching input may be required to develop learners' knowledge, skills and understanding of some of these concepts. Oxfam Education  
www.oxfam.org.uk/education

### Differentiation

Where possible the activities and resources are differentiated to meet the needs of different learners in the class. The resource caters for a wide range of abilities and is suitable for learners achieving between P1 and P8. Teachers are free to select activities most suited to the needs of their learners. Provision is made for differentiation within some of the activities and extension tasks are sometimes provided.

Some learners may benefit from participating in some of the activities in the main resources *Everyone Counts* for 8–12 year olds too:  
<http://www.oxfam.org.uk/education/resources/everyone-counts>

## Everyone Counts SEN – detailed session outline

Session overview	Learning Objectives	Learning Outcomes	Key Questions	Activities	Resources
<p><b>Session 1: Sorting and matching</b> Learners will explore images from the Young Lives study of children in four different countries and sort and match them according to different criteria.</p>	<ul style="list-style-type: none"> <li>Learners achieving at P levels 1 to 3 will have the opportunity to encounter, react to, respond to, show interest in, engage in activities about, and communicate about sorting and matching activities based on the Young Lives study.</li> <li>Learners achieving at P levels 4 to 6 will have the opportunity to match pictures and group pictures according to given criteria.</li> <li>Learners achieving at P levels 7 and 8 will have the opportunity to classify pictures using different criteria, identify when a picture does not belong to a particular set, and recognise identifying features in a picture which identify it as belonging to a particular set.</li> <li>All learners will have the opportunity to engage with pictures of people from different cultures and places.</li> </ul>	<ul style="list-style-type: none"> <li>I have taken part in sorting and matching activities.</li> <li>I have matched pictures.</li> <li>I have sorted pictures according to a given criterion.</li> <li>I can spot when a picture does not belong in a group.</li> <li>I have looked at pictures of people from different cultures and places.</li> </ul>	<ul style="list-style-type: none"> <li>What is the same?</li> <li>What is different?</li> <li>What can you see?</li> </ul>	<ul style="list-style-type: none"> <li><b>Starter:</b> <i>Life in four different countries</i></li> <li><b>Activity 1.1:</b> <i>Similarities and differences</i></li> <li><b>Activity 1.2:</b> <i>Taking a closer look</i></li> <li><b>Activity 2.2:</b> <i>Meet the Young Lives children</i></li> <li><b>Plenary:</b> <i>We're not all the same</i></li> </ul>	<ul style="list-style-type: none"> <li>Slideshow 1: Sorting and matching</li> <li>Printout of the slides</li> <li>Photos of your learners doing different activities, for example, at school, playing or helping</li> </ul>
<p><b>Session 2: Equal and unequal sharing</b> In this session learners will think about how resources can be shared equally, and also unequally, between people. The lives of the children in the Young Lives study will be used to demonstrate how resources are shared out globally.</p>	<ul style="list-style-type: none"> <li>Learners working at P 1–3 will have the opportunity to engage in coactive exploration of familiar objects, observing the results of their actions and exploring objects. For example, they might share knives and forks out amongst a set of plates, and perhaps place food upon those plates.</li> <li>Learners working at P4–6 will have the opportunity to complete tasks that require them to share a small number of items out equally.</li> <li>Learners working at P7–8 will have the opportunity to share items out equally and unequally and comment on the difference.</li> <li>All learners will have the opportunity to engage with pictures of people from different cultures and places.</li> </ul>	<ul style="list-style-type: none"> <li>I have experienced sharing activities.</li> <li>I have shared a small number of items out equally.</li> <li>I have shared items out equally and unequally.</li> <li>I have engaged with pictures of people from different cultures and places.</li> </ul>	<ul style="list-style-type: none"> <li>Is that fair?</li> <li>Who has more?</li> <li>What is the difference?</li> <li>What can you see?</li> </ul>	<ul style="list-style-type: none"> <li><b>Starter:</b> <i>Inequality between countries</i></li> <li><b>Activity 2.1:</b> <i>Practical division</i></li> <li><b>Activity 2.2:</b> <i>Inequality within countries</i></li> <li><b>Activity 2.3:</b> <i>Equal opportunities?</i></li> <li><b>Plenary:</b> <i>Thinking more deeply about inequality</i></li> </ul>	<ul style="list-style-type: none"> <li>Slideshow 2: Equal and unequal sharing</li> <li>Objects for sharing, for example, plates and cutlery, bricks, food, counters, and so on</li> </ul>

<p><b>Session 3: Time</b> In this session learners will look at how different children around the world spend their time each day. They will have the opportunity to look at different clock displays and guess at what time of day some of the Young Lives children carry out particular activities. Learners will also consider similarities and differences between these children's lives and their own.</p>	<ul style="list-style-type: none"> <li>Learners working at P levels 1–3 will have the opportunity to encounter and experience activities for short and long periods of time. They will also have the opportunity to be involved in activities relating to specific times of day.</li> <li>Learners working at P levels 4–6 will have the opportunity to recognise numbers on a clock and talk about time. They will also have the opportunity to recognise activities that relate to specific times of day and talk about how long an activity takes.</li> <li>Learners working at P levels 7 and 8 will have the opportunity to organise activities according to the time of day they happen and to practise reading the time from both analogue and digital clock displays. They will also have the opportunity to time activities and talk about how long an activity takes.</li> <li>All learners will have the opportunity to engage with pictures of people from different cultures and places.</li> </ul>	<ul style="list-style-type: none"> <li>I have encountered or experienced activities for short and long periods of time.</li> <li>I have taken part in activities that relate to specific times of day.</li> <li>I have recognised the numerals on a clock display.</li> <li>I can talk about how long it takes me to do a particular task.</li> <li>I can talk about activities that happen at different times of the day.</li> <li>I have organised events in the order that they happen in my day.</li> <li>I have practised reading the time.</li> <li>I have looked at pictures of people from different cultures and places.</li> </ul>	<ul style="list-style-type: none"> <li>What time is it?</li> <li>What kind of clock is this?</li> <li>What happens next?</li> <li>What do you do at bedtime/in the morning/when you get in from school?</li> <li>How would it feel to be Afework/Harika?</li> </ul>	<ul style="list-style-type: none"> <li><b>Starter:</b> <i>Afework's day</i></li> <li><b>Activity 3.1:</b> <i>What's your day like?</i></li> <li><b>Activity 3.2:</b> <i>Harika's day</i></li> <li><b>Plenary</b></li> </ul>	<ul style="list-style-type: none"> <li>Slideshow 3: Time</li> <li>Clocks, (and possibly number fans and individual whiteboards)</li> <li>Photos or symbols representing events in the school day and in the daily lives of your learners (optional)</li> <li>Role play accessories to help learners create role plays about different times in their day, for example, cutlery and a plate from the school canteen, a blanket to represent being in bed</li> <li>Stop watches (alternatively learners can count steadily to time events)</li> </ul>
<p><b>Session 4: Displaying data</b> In this session learners will continue considering how different people around the world spend their time and will be introduced to visual representations of data as a way of easily spotting similarities and differences.</p>	<ul style="list-style-type: none"> <li>Learners working at P levels 1–3 will have the opportunity to encounter and explore activities relating to their daily lives for long and short periods of time.</li> <li>Learners working at P levels 4–6 will have the opportunity to talk about how much time is spent doing different tasks.</li> <li>Learners working at P levels 7 and 8 will have the opportunity to talk about differences in how much time is spent on different task by different people.</li> <li>All learners will have the opportunity to create visual representations of their time use.</li> <li>Some learners will be able to use the pie/bar charts to gain information.</li> <li>All learners will have the opportunity to engage with pictures of people from different cultures and places.</li> </ul>	<ul style="list-style-type: none"> <li>I have taken part in activities linked to what I typically do in a day.</li> <li>I have taken part in short and long activities.</li> <li>I can talk about how long a task takes.</li> <li>I can talk about the differences in time spent by different people on different tasks.</li> <li>I have taken part in creating a visual representation of data to do with time use.</li> <li>I was able to gain information from looking at the pie chart/bar chart.</li> <li>I was able to answer questions about the pie chart/bar chart.</li> <li>I have looked at pictures of people from different cultures and places.</li> </ul>	<ul style="list-style-type: none"> <li>How long does it take you to...?</li> <li>Who spends the most time...?</li> <li>Who spends more time than you...?</li> </ul>	<ul style="list-style-type: none"> <li><b>Starter:</b> <i>Daily life around the world</i></li> <li><b>Activity 4.1:</b> <i>How long does it take?</i></li> <li><b>Activity 4.2:</b> <i>Graphs showing time use</i></li> <li><b>Plenary</b></li> </ul>	<ul style="list-style-type: none"> <li>Slideshow 4: Displaying data</li> <li>Role play items linked to times of day</li> <li>Blank pie charts and bar charts (printouts of slides 14 and 15)</li> <li>Camera and printer (optional)</li> </ul>

<p><b>Session 5: More or less</b> In this session learners will explore the concepts of more and less using concrete examples and through considering the way they and the children in the Young Lives study spend their time.</p>	<ul style="list-style-type: none"> <li>Learners working at P levels 1–3 will have the opportunity to encounter and explore differing quantities of items.</li> <li>Learners working at P levels 4–6 will have the opportunity to respond to the words more and less, for example, by responding to a request for more of something.</li> <li>Learners working at P levels 7 and 8 will have the opportunity to compare quantities and comment on whether a group has more or less than another group.</li> <li>All learners will have the opportunity to engage with pictures of people from different cultures and places.</li> </ul>	<ul style="list-style-type: none"> <li>I have encountered different quantities of items, for example, I have experienced one of something and many of something.</li> <li>I can respond to requests for more.</li> <li>I understand “more” and “less” in familiar contexts.</li> <li>I can talk about differences in quantities, using the terms “more” and “less”.</li> <li>I am able to judge with reasonable accuracy whether one group has more or less items in than another group.</li> <li>I have looked at pictures of people from different cultures and places.</li> </ul>	<ul style="list-style-type: none"> <li>How many?</li> <li>Which has more?</li> <li>Which has less?</li> </ul>	<ul style="list-style-type: none"> <li><b>Starter:</b> <i>More or less</i></li> <li><b>Activity 5.1:</b> <i>Which pile is bigger?</i></li> <li><b>Activity 5.2:</b> <i>More time or less?</i></li> <li><b>Plenary</b></li> </ul>	<ul style="list-style-type: none"> <li>Slideshow 5: More or less</li> <li>Large signs (one for each learner) with &lt; on them</li> <li>Objects to be grouped by amount, for example, bricks, coins, sand, paper and so on. By including items that are have interesting sensory properties you will make this activity more engaging and stimulating, so consider using things such as sand or clay for interesting tactile experiences, brightly coloured, high-contrast items for visual experience, and things that sound different when sorted for differing auditory experiences (for example, the clink of money, the rattle of beads). You may even be able to find some items that could stimulate taste and smell, for example, fruit.</li> </ul>
<p><b>Session 6: Collecting and displaying data</b> In this session learners will have the opportunity to collect data of their own, giving them an insight into the Young Lives data-gathering. Learners will then display their data and be invited to look at similarities and differences between their lives and the lives of their peers, both in their class and in other countries.</p>	<ul style="list-style-type: none"> <li>Learners working at P levels 1–3 will have the opportunity to encounter and experience stimuli relating to different forms of transport and to take part in data collection.</li> <li>Learners working at P levels 4–6 will have the opportunity to use their counting skills in the collection of data.</li> <li>Learners working at P levels 7 and 8 will use a tally chart to collect data.</li> <li>All learners will have the opportunity to participate in creating a visual representation of the data.</li> <li>Some learners will have been able to answer simple questions by looking at the bar chart.</li> <li>All learners will have the opportunity to engage with pictures of people from different cultures and places.</li> </ul>	<ul style="list-style-type: none"> <li>I have encountered stimuli relating to different modes of transport.</li> <li>I have been involved in collecting data.</li> <li>I have counted how many people travel using a particular mode of transport.</li> <li>I have used a tally chart to record data as it was collected.</li> <li>I have taken part in creating a visual representation of data.</li> <li>I was able to answer questions about how people got to school by looking at our bar chart.</li> <li>I have looked at pictures of people from different cultures and places.</li> </ul>	<ul style="list-style-type: none"> <li>How many?</li> <li>Do more people travel to school by ... than by ... ?</li> <li>How do other people travel to school?</li> </ul>	<ul style="list-style-type: none"> <li><b>Starter:</b> <i>Getting to school in different countries</i></li> <li><b>Activity 6.1:</b> <i>A survey on getting to our school</i></li> <li><b>Activity 6.2:</b> <i>Collating the data</i></li> <li><b>Plenary:</b> <i>Asking questions about graphs</i></li> </ul>	<ul style="list-style-type: none"> <li>Slideshow 6: Collecting and displaying data</li> <li>Tally charts (one per group) and associated useful equipment, for example, clipboards and pencils</li> <li>Photos/symbols or objects to represent different modes of transport (optional)</li> <li>Coloured dot stickers, or glue and thumbnail printouts of different modes of transport</li> <li>A large sheet of paper with graph axes marked on it</li> <li>A second large sheet of paper with a graph on it – you can create this as a representation of an imagined school; better yet would be to partner up with a class in a mainstream school and compare their results with yours</li> </ul>



## Global Citizenship

*Everyone Counts SEN* is a global citizenship resource written for English teachers. Education for global citizenship is a methodology to help young people to develop as active global citizens. Oxfam suggests a Learn-Think-Act approach to help structure global citizenship activities and give young people the opportunity to learn about issues, think critically about how to solve them, and act as responsible global citizens. Actions may simply be to find out more or think more deeply about an issue. They may also involve making others more aware of an issue or engaging in specific fundraising or campaigning activities. For more information, see: <http://www.oxfam.org.uk/education/global-citizenship>

The key elements of responsible global citizenship are:

Knowledge and understanding	Skills	Values and attitudes
<ul style="list-style-type: none"> <li>• Social justice and equity</li> <li>• Identity and diversity</li> <li>• Globalisation and interdependence</li> <li>• Sustainable development</li> <li>• Peace and conflict</li> <li>• Rights and responsibilities</li> <li>• Power and governance</li> </ul>	<ul style="list-style-type: none"> <li>• Critical and creative thinking</li> <li>• Empathy</li> <li>• Self-awareness and reflection</li> <li>• Communication</li> <li>• Cooperation and conflict resolution</li> <li>• Ability to manage complexity and uncertainty</li> <li>• Ability to take informed and appropriate action</li> </ul>	<ul style="list-style-type: none"> <li>• Sense of identity and self-esteem</li> <li>• Commitment to social justice and equity</li> <li>• Respect for people and human rights</li> <li>• Value diversity</li> <li>• Concern for the environment and commitment to sustainable development</li> <li>• Commitment to participation and inclusion</li> <li>• Belief that people can bring about change</li> </ul>

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For further information about Oxfam Education, including a wide range of other curriculum-linked resources, see: <http://www.oxfam.org.uk/education>.

For further information about the Young Lives study, see: <http://younglives.org.uk/>

For further information about The Mathematical Association, see: <http://www.m-a.org.uk>

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