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Cambridge Lower Secondary  
**Global Perspectives™**

TEACHER'S BOOK 8

Keely Laycock



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# > Introduction

Cambridge Lower Secondary Global Perspectives™ is a transformational programme designed to help students develop a range of key skills that will aid them not only in their school and academic life but also in their future career. At the heart of the course is a varied and active learning approach, which inspires students to explore a wide range of issues and different points of view.

This approach is what I have kept in mind whilst writing a learner's skills book and teacher's book for each stage of lower secondary. Stages 7 and 8 are structured around six skills: research, analysis, evaluation, reflection, collaboration and communication. Stage 9 is structured around five skills (collaboration is not assessed at this stage), and a section dedicated to planning, writing and reviewing the Checkpoint assessment.

Each skills section follows the same approach, guiding learners through a 'Starting with', 'Developing' and 'Getting better at' scaffold, building their awareness of their own progress and encouraging them to take charge of their own learning journey. A range of activities and tasks are included, with plenty of opportunities for peer-to-peer and group work, and to encourage students to reflect upon progress, track action and achievements and record their next steps. The self-assessment activities build on each other to give learners a clear visual of how they are progressing, and these will help you to support them in their learning journey whilst maintaining an overview of any gaps in knowledge and understanding. The learner's skills books are write-in resources, so each learner can create and keep a portfolio of their work and track their progression through each skill and each stage.

The first part of this Teacher's Book includes useful guidance around teaching techniques and pedagogical approaches, with information and tips about things like Assessment for Learning, Differentiation and Language for Learning.

The substance of this book is dedicated to support you when teaching Global Perspectives and in using Learner's Skills book 7 within your classroom. Lesson ideas are designed to help you plan for each stage of your lesson, motivate learners and monitor their progress against learning goals. Worked examples are included for each lesson to illustrate how to build and teach a skill through a relevant Global Perspectives topic, using sample material, exemplars and useful weblinks. This selection of real-life and fictional examples is there to help you plan, but is in no way intended to be a 'correct' way of working through the skills – the ideas are intended to be flexible, and I hope they will assist you in generating ideas to apply to the topic you are studying.

By using this scaffolded approach through each skill and each stage, I hope that you will find a solid framework upon which to build, and that it will support you as an effective facilitator of Global Perspectives, helping your learners to enjoy exploring ideas in the classroom that they can then apply to their lives outside of school and into the future.

Keely Laycock

# > How to use this Teacher's Book

This Teacher's Book contains both general guidance and teaching notes that help you to deliver the content in Cambridge Lower Secondary Global Perspectives Stage 7.

There are **teaching notes** for each lesson of the Learner's Skills Book. Each set of teaching notes contains the following features to help you deliver the unit.

At the start of each section there is a **Skills overview**, which summarises the learning objectives within each skill and how these are developed across the lessons within that skill. It also contains ideas for which Challenge topics can be used, and how you may be able to make links with other skills across the curriculum. Key points cover common misconceptions and tips on how to fill learning gaps. The overview also provides language support, highlighting key terminology needed for that section.

<b>Learning objectives</b>	<p>1.1 Construct relevant research questions</p> <p>1.2 Identify and begin to reference a range of print and multimedia sources and use them to locate relevant information and answer research questions</p> <p>1.3 Select an appropriate method and conduct research to test predictions and begin to answer a research question</p> <p>1.4 Select, organise and record relevant information from a range of sources and findings from research, using appropriate methods</p>
<b>Challenge topic ideas</b>	Education for all; Humans and other species; Disease and health; Conflict and peace; Sport and recreation

The **Learning objectives and Learning goals** feature take the objectives from the curriculum framework and the goals from the Learner's Skills Book, to help you communicate to learners what is expected of them.

**CAMBRIDGE STAGE 7 RESEARCH LEARNING OBJECTIVES**

- 1.3 Select an appropriate method and conduct research to test predictions and begin to answer a research question
- 1.4 Select, organise and record relevant information from a range of sources and findings from research, using appropriate methods

**LEARNING GOALS**

To get better at:

- understanding when to use primary research methods
- selecting which information to use from primary research
- recording information gained from primary research

Each **How will I know if I reach my goals?** heading contains advice on how students can interact with the success criteria laid out in the Learner's Skills Book.

Reflecting the activities in Learner's Skills Book, each lesson consists of advice on how to work through the **Prior learning activity**, **Starter activity**, **Main activity**, **Class discussion** and **Peer assessment**. To help you plan, a suggested time is given against each element of the lesson, and a list of **resources you will need** has been included with each lesson.

The **prior learning** notes provide advice on where your learners should be in their learning before beginning the activity.

The ideas for the **Starter activity** are designed to grab your learners' attention and create interest and engagement. They include advice on what to listen out for, how to diagnose and issues and how to make decisions about what to do next.

The **Main activity** ideas give instructions for successful execution of the activity, with differentiation advice, suggestions for feedback and answers where relevant.

In each lesson there is also a **Worked example** for the Starter activity or Main activity, to demonstrate how the activity could work with a relevant Challenge topic. This serves as an example of what success looks like, but you do not have to use the topic given in the example.

At the end of each lesson there are ideas on how to use the **Independent reflection activity**, **Self-assessment**, **Setting learning targets** and **Challenge topic review**, depending on which lesson you are in and if your learners are completing these in the lesson or as homework. These are scaffolded throughout each section.

### How will I know if I reach my goals?

**Good for:** Learners to give examples of their learning from the lesson. They can complete the table at any point in the lesson, but they might do it at the end.

### Resources needed

Learner's Skills Book 7; your own Language Support handout (if appropriate); text and Challenge topic (e.g. Education for all; see Worked Example for the Main activity).

### Prior learning (approx. 5 mins)

**Good for:** Building on previous knowledge, learning and understanding. This might be from Primary Global Perspectives or from other subject areas as this might be your learners' first Lower Secondary Global Perspectives lesson.

### Starter activity (approx. 10 mins)

**Good for:** Identifying good questions and some of the features of a good question.

### Main activity (approx. 20–25 mins)

**Good for:** Producing questions about a topic.

**Activity:** Learners produce a mind map of questions about a topic (can be any topic) in order to produce research questions.

### Worked Example for the Main activity

#### Challenge topic: Education for all

**Research Question:** Should parents be allowed to decide whether to home school their children instead of sending them to school?

### Independent reflection activity; Self-assessment; Challenge topic review (approx. 15–20 mins)

**Good for:** Encouraging learners to consider their learning in lessons. Encourage learners to reflect on other skills as well as evaluation skills (research, analysis, reflection, communication, collaboration) they have used this lesson, for example, research skills as they selected which websites to use.

# > Approaches to teaching and learning

## Active learning

### What is active learning?

Active learning is a pedagogical practice that places student learning at its centre. It focuses on how students learn, not just on what they learn. We, as teachers, need to encourage learners to ‘think hard’, rather than passively receive information. Active learning encourages learners to take responsibility for their learning and supports them in becoming independent and confident learners in school and beyond.

Research shows us that it is not possible to transmit understanding to learners by simply telling them what they need to know. Instead, we need to make sure that we challenge learners’ thinking and support them in building their own understanding. Active learning encourages more complex thought processes, such as evaluating, analysing and synthesising, which foster a greater number of neural connections in the brain. Although some learners may be able to create their own meaning from information received passively, others will not. Active learning enables all learners to build knowledge and understanding in response to the opportunities we provide.

### Why adopt an active learning approach?

We can enrich all areas of the curriculum, at all stages, by embedding an active learning approach.

In active learning, we need to think not only about the content but also about the process. It gives learners greater involvement and control over their learning. This encourages all learners to stay focused on their learning, which will often give them greater enthusiasm for their studies. Active learning is intellectually stimulating and taking this approach encourages a level of academic discussion with our learners that we, as teachers, can also enjoy. Healthy discussion means that learners are engaging with us as a partner in their learning.

Learners will be better able to revise for examinations in the sense that revision really is ‘re-vision’ of the ideas that they already understand.

Active learning develops learners’ analytical skills, supporting them to be better problem solvers and more effective in their application of knowledge. They will be prepared to deal with challenging and unexpected situations. As a result, learners are more confident in continuing to learn once they have left school and are better equipped for the transition to higher education and the workplace.

### What are the challenges of incorporating active learning?

When people start thinking about putting active learning into practice, they often make the mistake of thinking more about the activity they want to design than about the learning. The most important thing is to put the learner and the learning at the centre of our planning. A task can be quite simple but still get the student to think critically and independently. Sometimes a complicated task does not actually help to develop the students’ thinking or understanding at all. We need to consider carefully what we want our learners to learn or understand and then shape the task to activate this learning.

Cambridge Lower Secondary Global Perspectives Stage 7 includes many opportunities for active learning such as pair and group work, discussions, working with a variety of texts; written and spoken, and producing a variety of shared outcomes to raise awareness about global issues, like posters, video clips and podcasts.

## Assessment for Learning

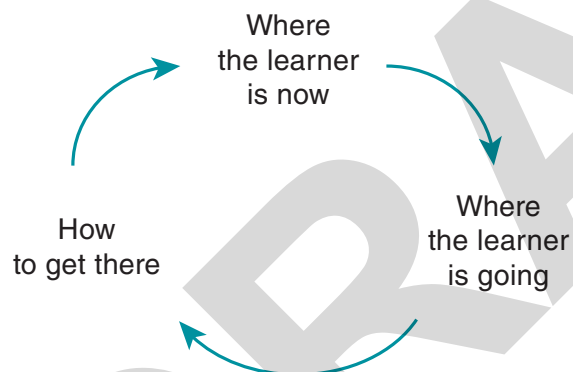
### What is Assessment for Learning?

Assessment for Learning (AfL) is a teaching approach that generates feedback which can be used to improve learners' performance. Learners become more involved in the learning process and, from this, gain confidence in what they are expected to learn and to what standard. We, as teachers, gain insights into a learner's level of understanding of a particular concept or topic, which helps to inform how we support their progression.

We need to understand the meaning and method of giving purposeful feedback to optimise learning. Feedback can be informal, such as oral comments to help learners think through problems, or formal, such as the use of rubrics to help clarify and scaffold learning and assessment objectives.

### Why use Assessment for Learning?

By following well-designed approaches to AfL, we can understand better how our learners are learning and use this to plan what we will do next with a class or individual learners (see following diagram). We can help our learners to see what they are aiming for and to understand what they need to do to get there. AfL makes learning visible; it helps learners understand more accurately the nature of the material they are learning and understand themselves as learners. The quality of interactions and feedback between learners and teachers becomes critical to the learning process.



We can use AfL to help our learners focus on specific elements of their learning and to take greater responsibility for how they might move forward. AfL creates a valuable connection between assessment and learning activities, as the clarification of objectives will have a direct impact on how we devise teaching and learning strategies. AfL techniques can support learners in becoming more confident in what they are learning, reflective in how they are learning, more likely to try out new approaches, and more engaged in what they are being asked to learn.

### What are the challenges of incorporating Assessment for Learning?

The use of AfL does not mean that we need to test learners more frequently. It would be easy to just increase the amount of summative assessment and use this formatively as a regular method of helping us decide what to do next in our teaching. We can judge how much learning has taken place through ways other than testing, including, above all, communicating with our learners in a variety of ways and getting to know them better as individuals.

Cambridge Lower Secondary Global Perspectives Stage 7 provides teachers and learners with opportunities to check learners' progress against learning goals, give peer feedback and improve work after feedback. For example, improving an argument after peer feedback.

## Improving learning through questioning

Thinking is driven not by answers but by questions. Learners do best when they are given adequate opportunities to engage with, and respond to questions. As a teacher, you can use questions effectively in the classroom to:

- review student learning
- challenge learner thinking
- stimulate interest and motivate learners to become actively involved in the lesson
- cultivate critical thinking skills
- encourage learners to ask their own questions.

There are a number of ways in which you can do this.

Depending on the content and aims of the lesson, it is likely that you will use different types of question. Three types of question are explained and exemplified below.

### TIP

You should consider the wording of questions in advance to ensure that they are accessible to all learners. This will be particularly important in contexts where the language of instruction is not the dominant language of learners in your class. For help with language awareness, see the document called 'Developing student learners' skills' in this introduction.

### Discussion questions

These facilitate debate and allow teachers to dig deeper into learner reasoning (in some situations, their imagination) by asking probing questions.

*Example:* Why do you think that?

**Activity:** could be used in pair, small group or whole-class discussion. Discussion questions do not need to have a 'correct answer' as their value is in helping learners to think through, share and discuss their own response.

### Diagnostic questions

These give you a quick insight into whether what you have taught has been learned. Responses may identify parts of the curriculum that warrant re-teaching to clarify misconceptions and fill gaps. They can identify specific gaps in learner understanding while learning is still taking place.

*Example:* True or false?

**Activity:** could be a lesson starter (using mini-whiteboards or Post-it notes) or part of a quiz or other form of assessment.

All diagnostic questions must have a clear purpose; you must use the information gathered to help inform your next steps. See below for suggestions on how to use diagnostic results in feedback.

### Hinge-point questions

The 'hinge' is the point where you move from one key idea/activity/point on to another. Hinge-point questions are a specific type of diagnostic question that are most useful after a period of learning to help you decide whether to continue, recap or re-teach. It is usually the case that understanding the content that occurs before the hinge is a prerequisite for the next chunk of learning. This is

important because moving on is dangerous if key concepts are not fully understood, yet if you get this wrong and re-teach pointlessly then engagement will slip and time will be wasted.

*Example:* What did we learn today? Why does it matter?

**Activity:** list of ideas (timed), either individually or in a pair. These could be written on poster paper or shared orally.

For hinge-point questions to be useful, you have to be able to elicit the information from learners immediately and be able to understand and act on it quickly. Dylan Wiliam suggests that learners should respond within one minute and teachers should be able to view and interpret responses within 15 seconds. Hinge-point questions seek a response in the form of a snapshot, not an essay.

Experienced teachers will use a range of question types in their professional practice, appropriate to the level, subject and learners they are teaching.

## Using feedback to optimise teaching and learning

Questions help learners to challenge and explore their understanding of a particular topic. Questions can also help learners identify areas where their knowledge is less secure. This is a valuable part of the learning process. You can help them to move beyond 'struggle zones' in their learning by providing feedback which helps them to fill the gaps in their knowledge, thereby boosting both their competence and their confidence.

Feedback should:

- be oral or written
- be appropriate to the learner
- include information about where to go (which pages in the learner's book, for example) to revise the problematic material.

Once it is clear to learners what must be done to move beyond their current limits of learning, young people often make significant progress. You can facilitate this progress via feedback and help 'close the loop' of learning.

Feedback is powerful: to optimise teaching and learning, you should create an environment in which learners are encouraged to reflect on their learning experiences and identify next steps during the learning process. These next steps may take the form of further questions on the topic, to which the learners might like to research answers, or the next steps may be connected with their experiences of learning (for more information about metacognition, see the document in this introduction).

## Self/peer assessment

Rather than always relying on teacher judgement, by assessing their own (and each other's) work, learners independently assess progress with confidence. Learners who can look at their work, and judge the degree by which it reflects explicitly stated goals or criteria, can assess the quality of their work and revise it accordingly. They are actively involved in the learning process and their independence and motivation is improved.

## Further reading

Gaunt, A. and Stott, A. (2019) *Transform teaching and learning through talk: the oracy imperative*, Rowman and Littlefield Education, Lanham, MD.

Gershon, M. (2013) *How to use questioning in the classroom: the complete guide*, Amazon Media.

Paul, R.W. and Elder, L. (2000), *Critical thinking: basic theory and instructional structures handbook*, Foundation for Critical Thinking, Tomales, CA.

Wiliam, D. (2011), *Embedded Formative Assessment*, Solution Tree Press, Bloomington, IN.

Cambridge Lower Secondary Global Perspectives Stage 7 develops learners' ability to not only ask questions like 'what', 'when', 'where' and 'who', but also questions which require more thinking

about like 'how' and 'why'. For example, 'How does the amount of water an individual uses impact the issue of global water shortage?'

## Differentiation

### What is differentiation?

Differentiation is usually presented as a teaching practice where teachers think of learners as individuals and learning as a personalised process. Although precise definitions can vary, typically the core aim of differentiation is viewed as ensuring that all learners, no matter their ability, interest or context, make progress towards their learning outcomes.

It is about using different approaches and appreciating the differences in learners to help them make progress. Teachers therefore need to be responsive, and willing and able, to adapt their teaching to meet the needs of their learners.

There is no one style teachers should adopt. Teachers do not need to differentiate everything for everyone every day; instead, they should select appropriate moments in the instructional sequence to differentiate. In other words, effective differentiation is part of an experienced teacher's daily lesson plan. It is important that teachers are able to respond to the needs of their learners and use the techniques they deem to be most suitable.

It can be difficult to fit in all the syllabus content and support all learners, keeping them engaged in their learning. This is a challenge for teachers the world over.

Although there is no single formula that creates a differentiated classroom, when differentiation is in place opportunities for innovation and ongoing reflection are created that boost teaching and learning in a way which would not be possible in a 'one size fits all' lesson.

It is clear how much overlap there is between differentiation and Assessment for Learning methodology. Both aim to support all learners to improve their learning, using similar techniques such as questioning, providing feedback and a learner-centred approach. Ongoing assessment in class is fundamental to differentiation; teachers need to see what the learner currently knows or can do, and then work out what the learner needs to know or do next. It is an approach that incorporates a variety of strategies and depends very much on the individual teacher's school and classroom culture to guide practical implementation and outcomes.

Effective differentiation is heavily reliant on teachers being able to respond to each individual and fully understand their needs to best support their next steps. The viability of this will depend on each teacher's specific context, motivation, obstacles to overcome, and training.

### Role of the learner

Understanding individual learners is vital for successful differentiation. In order to be effective, figuring out what the individual already knows or can do is a vital step in the process.

Getting to know learners is, however, more than just finding out what they know. It is also about a broader understanding of learner difference. Learners and their learning can be different for a number of reasons: they may have different levels of interest in the topic; they may have differences in their levels of motivation, their ability to remember information, their confidence, the accuracy of their handwriting, their levels of vocabulary acquisition.

Having knowledge of the individual helps teachers to plan for learning rather than teaching, and ensures that they are always supporting progress. In a differentiated classroom, teachers and learners collaborate in learning and learners have ownership and responsibility. Offering choice can encourage ownership of individual work and learning, creating a learning environment in which learners 'have no fear' and apply effort.

## Techniques

### Learning outcomes

Since differentiation aims to support all learners in working towards particular outcomes, it is important to carefully consider what those outcomes are and maintain focus on the overarching learning intention and success criteria. Teachers can then formatively assess against these and gauge learner needs.

A shared concept of quality between the learner and teacher is vital for learner progress. This includes both clarity of learning outcome and the use of examples of good work. If learners are aware of what good work looks like, they are better able to both self- and peer-assess.

### Scaffolding

Scaffolding, a metaphor to describe the process of learning support that enables learners to go beyond what they are initially able to do, can be a key component of successful differentiation.

These suggestions include the modelling of work and tasks, use of listening and writing frames, provision of sentence starters and structure guidelines, scaffolded use of questioning and the encouragement of group and pair work.

### Feedback

Feedback is a key tool in helping all learners to make progress in their learning. Good feedback can help move learners towards their learning outcomes, provided learners understand, act upon and learn from it. Feedback should address any misconceptions that are exposed during learner activities.

### Group work

Teachers should employ variety in their classrooms, using a mixture of whole-class instruction, one-to-one work, small group work and peer tutoring. Group work is suggested by many as a good way to differentiate as learners working in groups are able to create knowledge with their peers, help each other to learn, use discussion and apportion tasks based on the relative strengths of the group.

A balance needs to be met between the use of group work and teacher instruction. As John Hattie (2008) argues, direct instruction done properly has a greater impact on learning than group work done incorrectly or inappropriately.

## Differentiation support in our materials

Our materials will contain frequent opportunities for ongoing assessment in class to help teachers see what the learner currently knows or can do and then work out what the learner needs to know or do next. This will help to identify misconceptions or misunderstandings and guide actions.

Through the course of the activities in the resources, we will support differentiation predominantly in the following ways:

- differentiation by questioning (embedding questioning strategies to inform better next steps)
- differentiation by grouping (using mixed ability groups)
- differentiation by outcomes (multiple modes of learner output or how learners demonstrate/show their learning)
- differentiation by task (additional worksheets).

There is no single, optimum way to conduct differentiated teaching. However, we can provide a selection of strategies to help teachers to become more confident in their teaching practice.

Cambridge Lower Secondary Global Perspectives Stage 7 supports differentiation in a number of ways. For example, with each skill section divided into getting started with ..., developing... and

getting better at... and by offering learners support via their peers, their Skills Book or by using an appropriate Language Support handout.

## Language awareness

### What is language awareness?

For many learners, English is an additional language. It might be their second or perhaps their third language. Depending on the school context, learners might be learning all or just some of their subjects through English.

For all learners, regardless of whether they are learning through their first language or an additional language, language is a vehicle for learning. It is through language that learners access the learning intentions of the lesson and communicate their ideas. It is our responsibility, as teachers, to ensure that language doesn't present a barrier to learning.

One way to achieve this is to support our colleagues in becoming more language-aware. Language awareness is sensitivity to, and an understanding of, the language demands of our subject and the role these demands play in learning. A language-aware teacher plans strategies and scaffolds the appropriate support to help learners overcome these language demands.

### Why is it important for teachers of other subjects to be language-aware?

Many teachers are surprised when they receive a piece of written work that suggests a learner who has no difficulties in everyday communication has had problems understanding the lesson. Issues arise when teachers assume that learners who have attained a high degree of fluency and accuracy in everyday social English therefore have a corresponding level of academic language proficiency. Whether English is a learner's first language or an additional language, learners need time and the appropriate support to become proficient in academic language. This is the language that they are mostly exposed to in school and will be required to reproduce themselves. It will also scaffold their ability to access higher order thinking skills and improve levels of attainment.

### What are the challenges of language awareness?

Many teachers of non-language subjects worry that there is no time to factor language support into their lessons, or that language is something they know little about. Some teachers may think that language support is not their role. However, we need to work with these teachers to create inclusive classrooms where all learners can access the curriculum and where barriers to learning are reduced as much as possible. An increased awareness of the language needs of learners aims to reduce any obstacles that learning through an additional language might present.

This doesn't mean that all teachers need to know the names of grammatical structures or need to be able to use the appropriate linguistic labels. What it does mean is that we all need to understand the challenges our learners face, including their language level, and plan some strategies to help them overcome these challenges. These strategies do not need to take a lot of additional time and should eventually become integral to our process of planning, teaching and reflecting on our practice. We may need to support other teachers so that they are clear about the vocabulary and language that is specific to their subject, and how to teach, reinforce and develop it.

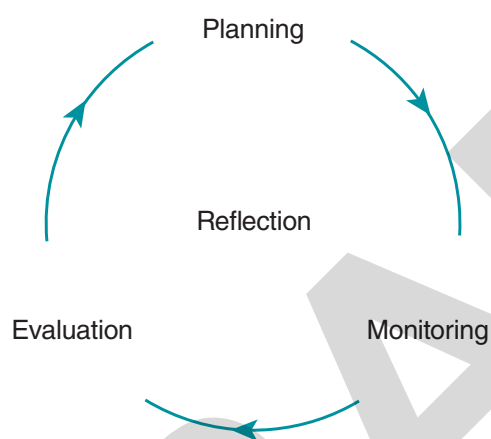
Cambridge Lower Secondary Global Perspectives Stage 7 provides a glossary of terms for use by teachers and learners. Each section in this Teacher Book outlines the subject-specific words and phrases for that section and teachers are encouraged to produce their own Language Support handouts for learners as appropriate.

## Metacognition

### What is metacognition?

Metacognition describes the processes involved when learners plan, monitor, evaluate and make changes to their own learning behaviours. These processes help learners to think about their own learning more explicitly and ensure that they are able to meet a learning goal that they have identified themselves or that we, as teachers, have set.

Metacognitive learners recognise what they find easy or difficult. They understand the demands of a particular learning task and are able to identify different approaches they could use to tackle a problem. Metacognitive learners are also able to make adjustments to their learning as they monitor their progress towards a particular learning goal. The following diagram shows a helpful way to think about the phases involved in metacognition.



During the planning phase, learners think about the explicit learning goal we have set and what we are asking them to do. As teachers, we need to make clear to learners what success looks like in any given task before they embark on it. Learners build on their prior knowledge, reflect on strategies they have used before and consider how they will approach the new task.

As learners put their plan into action, they are constantly monitoring the progress they are making towards their learning goal. If the strategies they had decided to use are not working, they may decide to try something different.

Once they have completed the task, learners determine how successful the strategy they used was in helping them to achieve their learning goal. During this evaluation phase, learners think about what went well and what didn't go as well to help them decide what they could do differently next time. They may also think about what other types of problems they could solve using the same strategy.

Reflection is a fundamental part of the plan–monitor–evaluate process and there are various ways in which we can support our learners to reflect on their learning process. In order to apply a metacognitive approach, learners need access to a set of strategies that they can use and a classroom environment that encourages them to explore and develop their metacognitive skills.

### Why teach metacognitive skills?

Research evidence suggests that the use of metacognitive skills plays an important role in successful learning. Metacognitive practices help learners to monitor their own progress and take control of their learning. Metacognitive learners think about and learn from their mistakes and modify their learning strategies accordingly. Learners who use metacognitive techniques find it improves their academic achievement across subjects, as it helps them transfer what they have learned from one context to another context, or from a previous task to a new task.

## What are the challenges of developing learners' metacognitive skills?

For metacognition to be commonplace in the classroom, we need to encourage students to take time to think about and learn from their mistakes. Many learners are afraid to make mistakes, meaning that they are less likely to take risks, explore new ways of thinking or tackle unfamiliar problems. We, as teachers, are instrumental in shaping the culture of learning in a classroom. For metacognitive practices to thrive, learners need to feel confident enough to make mistakes, to discuss their mistakes and ultimately to view them as valuable, and often necessary, learning opportunities.

Cambridge Lower Secondary Global Perspectives Stage 7 encourages learners to develop their metacognitive skills by providing opportunities for individual reflection at the end of each lesson, for example by asking learners to consider what helped them learn best in the lesson and what skills they still need to work on.

## Skills for Life

How do we prepare learners to succeed in a fast-changing world? To collaborate with people from around the globe? To create innovation as technology increasingly takes over routine work? To use advanced thinking skills in the face of more complex challenges? To show resilience in the face of constant change? At Cambridge, we have been working on how we can help you with this.

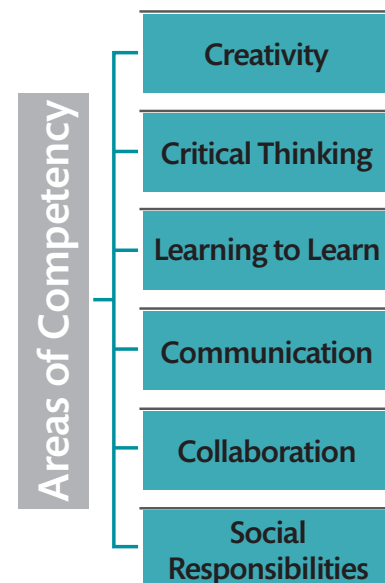
### The Cambridge Framework for Life Skills

Many frameworks exist that aim to address the skills and competencies learners' need to succeed through the levels of their education and on into the world of work for the 21st century. At Cambridge, we are responding to educators who have asked for a way to understand how all these different approaches to life skills and competencies relate to their teaching at all levels and support development of the Cambridge Learner Attributes, and how they can support and evidence the development of these skills by their learners through their learning.

So, we analysed the basic components of these global competencies frameworks and interpreted the different approaches and initiatives to create a common framework of life skills and competencies that can be successfully delivered through teaching at all levels of the Cambridge Pathway.

We have grouped these skills into six main Areas of Competency that can be incorporated into teaching, and have examined the different stages of the learning journey, and how these competencies vary across each stage.

For each of these areas, we have broken down the practical component skills, to help you to understand what each competency involves.



### The six key Areas of Competency

The six key skills areas that we will be supporting in our Teacher's Book and Learner's Skills Book are explained below.

#### 1 Creativity

The ability to generate original and innovative ideas or alternatives that are viewed as being valuable and meaningful. Some attributes of creativity are: divergent thinking, imagination,

cognitive flexibility, tolerance for ambiguity or unpredictability and intrinsic motivation. We have identified three key competencies within the area of creativity in an educational context:

- the skills needed to participate in creative activities
- creating new content from one's own ideas or other resources
- discovering and expressing one's personal identity and feelings through creative activities.

## 2 Collaboration

Collaboration is often described as being a key skill for 21st century education. Some advantages of collaboration over individual problem-solving are effective division of labour, use of information from multiple sources, perspectives and experiences, higher level of creativity and quality of solutions. When people are involved in verbal interaction, they are not simply sharing information but they are supporting each other in collective thinking. This collaborative allows participants to achieve more than they can get alone. We have identified three key competencies within the area of collaboration:

- taking personal responsibility for one's own contribution to a group task
- listening respectfully and responding constructively to others' contributions
- managing the sharing of tasks in a project.

## 3 Communication

Communication is a vital professional and life skill, involving sharing information, ideas and knowledge between people. It is an active process in which elements such as non-verbal behaviour and individual styles of interpreting and ascribing meaning to events have significant influence. Mastering effective communication is a skill learners need for effective and efficient sharing of information, ideas or knowledge in educational and work settings which can be developed and honed at all levels and stages. We have identified seven key competencies within the area of communication:

- using appropriate language/register for context
- managing conversations
- overcoming one's own language gaps
- participating with appropriate confidence and clarity
- supporting others to communicate successfully
- structuring content
- using language for effect.

## 4 Critical thinking

The higher levels of thinking that learners need to develop enable them to think effectively and rationally about what they want to do and what they believe is the best action. It consists of identifying links between ideas, analysing points of view and evaluating arguments, supporting evidence, reasoning and conclusions. We have identified six key Critical thinking competencies:

- analysing to understand key points and links between ideas.
- evaluating texts, ideas and arguments
- synthesising ideas and information
- identifying and prioritising problems
- evaluating options
- asking effective questions .



## 5 Learning to learn

It is essential that we continue to learn new skills and knowledge throughout our working lives. The aim of education has to focus as much on the skills of learning as on the outputs of learning. We have identified six key competencies within the area of Learning to learn:

- developing skills for participating in learning
- taking control of one's own learning
- reflecting on and evaluating one's own learning success
- identifying and using effective learning techniques and strategies
- making notes, storing and retrieving information
- managing exam preparation.

## 6 Social responsibilities

The 'globalised', fast-changing, and multicultural world offers clear opportunities for young people to interact with others and to access information across time and space. However, it also brings challenges of a magnitude no other generation has faced. Climate change, war and conflict, refugees, poverty, gender and social inequality demand global action and a new practice and discourse in the education of young people. Social responsibilities refer to the rights and duties that come along with being a citizen of a particular nation or state, as well as of a broader global entity. We have identified six key competencies within the area of Social responsibilities:

- understanding one's personal and social responsibilities as a global citizen
- behaving consistently with one's personal and social responsibilities
- showing leadership skills
- understanding one's own and others' cultures
- understanding and discussing global issues
- understanding and managing career development options and techniques

Cambridge Lower Secondary Global Perspectives Stage 7 supports all six key areas of competency. Collaboration and communication are the focus of sections 5 and 6 of the Learner's Skills Book. Activities to develop these skills are also contained within other sections of the Learner's Skills Book as are activities to develop creativity, critical thinking, learning to learn and social responsibilities.

# > Section 1 Research

## Introduction

The learning objectives and learning goals for research skills for Stage 8 are the same as for Stage 7, and focus on:

- Constructing research questions
- Developing information skills
- Conducting research
- Recording research findings.

However, you might also find opportunities within these lessons to develop some of the other Global Perspectives skills. For example, when recording and presenting information, not only will learners be developing

their research skills, they will also be developing their communication skills.

The ideas given in Teacher's Book 8 are suggestions only and the activities can be used with any of the Global Perspectives Challenge topics for Stages 7 to 9, although Worked examples are provided for some learning activities. It is hoped that the ideas in Teacher's Book 8 will help you structure your lessons in an active learning way with input from you as the teacher to help guide and support learners to become more effective and independent researchers.

## Research skills overview

<b>Learning objectives</b>	1.1 Construct relevant research questions 1.2 Identify and begin to reference a range of print and multimedia sources and use them to locate relevant information and answer research questions 1.3 Select an appropriate method and conduct research to test predictions and begin to answer a research question 1.4 Select, organise and record relevant information from a range of sources and findings from research, using appropriate methods
<b>Challenge topic ideas</b>	Migration; Changing communities; Trade and aid; Traffic and infrastructure; Poverty and inequality
<b>Key points</b>	<ul style="list-style-type: none"> <li>• Learners think research is about using a search engine, but often don't know how to use a search engine effectively</li> <li>• Learners copy and paste from information sources rather than making notes and writing in their own words</li> <li>• Research does not just have to be from the internet; learners can use books, newspaper and magazine articles, community newsletters, podcasts, videos; interviews with family, friends, teachers and peers; and questionnaires/surveys</li> <li>• Biased and leading questions are questions such as 'Do you agree that migration is beneficial to society?' and 'Why should we not use single-use plastics?'</li> <li>• Questions that only allow for descriptive responses often start with 'How ...?' or 'What ...?' For example, 'What countries do people come from?' and 'How do people earn money to live?'</li> </ul>

<p><b>Language support</b></p>	<ul style="list-style-type: none"> <li>• Pre-teach key vocabulary: main ideas; topic-specific words; question; statement; identify; explain; evaluate; evidence; judgment; primary research; secondary research; secondary sources of information; newspaper; article; summarise; sub-heading; title; bias; leading question; prediction; reliable; features; characteristics; data; argument; balance; option; convincing; outdated; perspective; issue; reference. Also include any topic-specific vocabulary for the Challenge topics: Migration; Changing communities; Trade and aid; Traffic and infrastructure; Poverty and inequality</li> <li>• Handout of question words with some examples from the topics/subjects: when, what, which, who, where, why and how</li> </ul>
<p><b>Cross-skills links</b></p>	<p><b>2 Analysis</b></p> <p>2.1 Identify ideas and evidence from different perspectives within different sources on a given topic.</p> <p><b>3 Evaluation</b></p> <p>3.1 Evaluate sources, considering the author and purpose, recognising that some sources may be biased.</p> <p>3.2 Discuss the effectiveness of a source, making explicit reference to its development of an argument.</p> <p><b>4 Reflection</b></p> <p>4.3 Consider ways that personal perspective on an issue may have changed as a result of conducting research or exploring different perspectives.</p> <p>4.4 Identify skills learnt or improved during an activity and relate to personal strengths and areas for improvement.</p> <p><b>5 Collaboration</b></p> <p>5.1 The team assign roles and divide tasks fairly, considering skills of team members and time available, and work together to achieve a shared outcome.</p> <p>5.2 The team member introduces useful ideas to help achieve a shared outcome and works positively to resolve conflict, solve problems and encourage other team members to participate, when required.</p> <p><b>6 Communication</b></p> <p>6.1 Present information and arguments clearly with some reasoning, referencing sources where appropriate.</p> <p>6.2 Listen to ideas and information, and offer relevant and well-judged contributions that demonstrate understanding of the issue.</p>

# Starting with research skills: Lesson 1

Lesson 1 focuses on explaining the term ‘research’, and recognising and writing good research questions.

## CAMBRIDGE STAGE 8 RESEARCH LEARNING OBJECTIVES

1.1 Construct relevant research questions

## LEARNING GOALS

To start to:

- explain the term ‘research’
- recognise a good research question
- write a good research question

## How will I know if I reach my goals?

**Good for:** Learners to give examples of their learning from the lesson. They can complete the table at any point in the lesson, but might do it at the end.

## Resources needed

**Learner Skills Book;** your own Language Support Handout (if appropriate); Challenge topic, and good and bad research questions on that topic (e.g. ‘Changing communities’; see Worked example for the starter activity below).

## Prior learning (approx. 5 mins)

**Good for:** Building on previous knowledge, learning and understanding. This might be from Primary Global Perspectives, from other subject areas or from Stage 7 Lower Secondary Global Perspectives.

**Activity:** Identify statements to explain what research is.

**Differentiation for support:** Give learners further options to choose from if they are struggling to come up with their own ideas for task 3. For example: Gaining new knowledge; Using a search engine to find information; Gaining different opinions/viewpoints on a topic; Checking facts/statistics, etc.

**Suggested answers/ideas:** Any reasonable and relevant response. All the suggestions apart from A in task 1 are

correct. The intention is to review what research is and stimulate learners’ own ideas.

Not topic specific.

## Starter activity (approx. 10 mins)

**Good for:** Identifying good research questions and some of the features of good research questions.

**Activity:** Give learners a series of research questions related to the topic (including some good and some bad research questions; see Worked example below). You can elicit the features of a good research question from the class before referring to the Skills Book to do the activity.

**Suggested answers:** Good research questions are based on the features in task 2, so point learners to these in their Skills Book if they are finding this activity a challenge. They should ask themselves: Is this question interesting? Is it clear what the question is asking for? Is the question too broad? Is it too narrow? Is it too vague? Is it a leading question? Can it be answered?

## Worked example for the starter activity

### Challenge topic: Changing communities

#### Ideas for good research questions:

- Does economic migration affect communities in a mainly positive or negative way?
- Can people with different cultures and traditions live together in harmony?
- Is technology responsible for changes in communities?
- Is global warming affecting communities in a mainly positive or negative way?
- Does the growth of travel and tourism affect communities in a mainly positive or negative way?

These are all interesting questions from a Global Perspectives viewpoint. They are clearly worded, not leading and can be answered after research.

#### Ideas for bad research questions:

- What are the issues in your community? (not very clear and quite vague)
- Do you agree that litter is an issue in our community? (a leading question and quite narrow)

- What community issues might concern the elderly population? (quite narrow and quite vague)
- How do you think the community is changing? (not very clear (which community?) and quite broad)
- Why do you like living in the community? (quite narrow)

### Main activity (approx. 20–25 mins)

**Good for:** Producing good research questions about a topic.

**Activity:** Learners produce a mind map of questions about a topic (it can be any topic).

**Differentiation:** Discuss different types of question words as a starting point: when, what, which, who, where, why and how. Also point to the use of the following as suitable starters for good research questions: 'Is ...?'; 'Does ...?'; 'Should ...?'; 'Can ...?' Refer to the good and bad research questions in the Starter activity.

**Ways of working:** Individually and in pairs, to share ideas and clarify own thinking.

Whole-class discussion based on criteria for a good research question.

**Different opinions/perspectives:** Also encourage learners to see if their questions allow for different perspectives. For example, the good research questions in the Worked example above all allow for the development of different perspectives, while the bad research questions do not.

**Learner response and feedback:** Any suggested questions about the topic should be accepted for the mind map activity. Then encourage learners to focus on the features of a good research question to produce their three best questions.

### Independent reflection activity (approx. 5–10 mins)

**Good for:** Encouraging learners to consider what is helping them learn in lessons. Ask them to be as honest as they can. There is no correct response, and they can choose more than one option. Encourage learners to reflect on other skills they have used this lesson as well as research skills. They can choose the examples they think they have used and add further ones as appropriate. This activity can be done in class, at home or in self-study time.

## Starting with research skills: Lesson 2

Lesson 2 focuses on being able to select appropriate research methods, explain what texts are about and summarise information from texts in the learner's own words.

### CAMBRIDGE STAGE 8 RESEARCH LEARNING OBJECTIVES

- 1.3 Select an appropriate method and conduct research to test predictions and begin to answer a research question
- 1.4 Select, organise and record relevant information from a range of sources and findings from research, using appropriate methods

### LEARNING GOALS

To start to:

- select appropriate research methods to begin to answer a research question
- summarise information from texts into own words

### How will I know if I reach my goals?

**Good for:** Learners to give examples of their learning from the lesson. They can complete the table at any point in the lesson, but might do it at the end.

### Resources needed

**Learner's Skills Book;** your own Language Support Handout (if appropriate); Challenge topic and text for that topic (e.g. 'Changing communities; see Worked example for the main activity below).

## Prior learning (approx. 5 mins)

**Good for:** Building on previous knowledge, learning and understanding. This might be from Primary Global Perspectives, from other subject areas, Stage 7 Global Perspectives or from the last Stage 8 Global Perspectives lesson.

**Activity:** Learners choose which they think is the best research question. Encourage them to look at the work they did on research questions in the last lesson and to share their choice and the reasons for this choice with the class.

**Differentiation for challenge:** Give learners further research questions and ask: ‘Is this a good research question? Why / Why not?’ You might also recap using the research questions on the Challenge topic ‘Changing communities’ from the last lesson.

**Suggested answers/ideas:** Elicit the features of a good research question from Lesson 1. The best research question is A because it is interesting and neither too broad nor vague. It can be answered after research, and it is not a leading question. It also allows for the development of different perspectives on the impact of urbanisation on biodiversity and ecosystem loss.

Does not need to be topic specific.

## Starter activity (approx. 5 mins)

**Good for:** Identifying the best ways of finding out information.

**Activity:**

- 1 Learners list as many ways of finding information as they can.
- 2 Pair discussion and then whole-class discussion to produce a list on the board and for learners to consider and write down the best ways of finding information to answer the question chosen for the Prior Learning activity.

**Suggested answers/ideas:** Based on the question ‘Does urbanisation result in biodiversity and ecosystem loss?’: internet websites, environmental organisations specifically concerned with threats to wildlife from building programmes, etc., articles from news agencies such as *The Guardian*, *The Hindustani Times* and *The Huffington Post*, local newspapers and newsletters if applicable, interviews with family and friends, etc.

## Main activity (approx. 25–30 mins)

**Good for:** Exploring the content of a text and explaining what it is about in the learner’s own words.

**Activity:**

Give learners a text (see Worked example below to read and to give a title to). The text can be on any topic, but it should have no title and should be at least three paragraphs long, so that learners can give a sub-heading for each paragraph and write two sentences in their own words to summarise each paragraph.

- 1 Learners read through the text; they decide on a title and list all the topic-specific words in the table. They then discuss with their partner and agree on the best title. Next they share these topic-specific words with their partner to gain further ideas. Class discussion can determine the best title for the text and share all the topic-specific words.
- 2 Learners discuss the text with a partner. They individually read through each paragraph again and give each paragraph a suitable sub-heading. For each paragraph, learners then write two sentences in their own words to show understanding of the information. Learners discuss their sub-headings and paragraph summaries with a partner and gain peer feedback.

**Differentiation:** Text lengths can vary. Three paragraphs are suggested, but texts can be shorter or longer according to learners’ needs. You might read the text together as a class, perhaps displaying it on the board. You can discuss and model reading comprehension strategies; for example, skimming for the gist and repeated words for clues about the main ideas in the text, etc. If learners find producing paragraph summaries a challenge, ask them to write bullet point notes of the key ideas in each paragraph.

**Ways of working:** Individually, in pairs, and whole class to share ideas and clarify own thinking.

**Different opinions/perspectives:** Encourage learners to see if there are any different perspectives in the text. For example, for the Worked example, the perspective is very much in favour of having healthy children who spend time outside rather than inside watching television and playing on computers. This text is written from a global perspective, although that is implied rather than explicit as the text refers to children all over the world. It also has a local perspective as local communities feel that it’s important to encourage children to play outside.

**Learner response and feedback:** The summaries of the paragraphs should be in the learner's own words and should include words/phrases from the table in task 1. Encourage learners to look back at this table to write their paragraph summaries, and to work together and agree on the paragraph summaries.

**Suggested answers:** These will vary according to the text.

## Worked example for the main activity

### Challenge topic: Changing communities

Resource for Lesson 2: Text about children not connecting enough with nature

- 1 Nowadays, more than ever before, children all over the world are not spending enough time outdoors connecting with nature. Reasons for this include the increasing use of technology for activities on social media and gaming as well as spending free time watching television. School pressures also mean less time is spent outside as children complete homework that mostly requires writing or researching using a computer. Parents don't want their children outside getting dirty and many children are not allowed to play outside for fear of traffic or strangers.
- 2 Having very little contact with the natural world around them and not connecting enough with nature is having a massive impact, not only on children's physical health but also on their mental health. Increasing obesity among children is the most obvious physical sign of a daily routine of sitting in a classroom and then sitting at home at the computer instead of running around outside. Studies have also shown that mental health is affected, and that children who lack contact with nature are more aggressive than those who get outside for even just five minutes of activity a day.
- 3 Outdoor activity can improve self-esteem, confidence and emotional well-being, increase happiness and reduce aggressive tendencies. It also helps children to keep a healthy weight. In fact, many local communities are so much in favour of promoting childhood well-being that they are actively encouraging children to enjoy the outdoors. Volunteers supervise outdoor play areas such as parks and outdoor

activity centres where children can meet other children and take part in outdoor activities, from climbing trees to studying wildflowers and animals.

#### Suggested answers:

- 1 Suggested title: 'Why children need to spend time in nature/outdoors'.  
Topic-specific words/phrases: children; nature; outdoors; mental and physical health; parks; activity centres; local communities etc.
- 2 a Suggested sub-headings: 1. Reasons for not spending time outdoors; 2. Consequences of lack of outdoor activity; 3. Benefits of outdoor activity.  
b Suggested paragraph summaries:
  - 1: Children don't spend much time outside because there's a lot of traffic. Parents worry about strangers taking their children. Technology is the main reason why children don't spend time outside.
  - 2: If children don't do physical activity outside, childhood obesity will increase / get worse. Children can also suffer from mental health issues such as lack of confidence and low self-esteem.
- 3 Being outside has many benefits such as keeping healthy physically and not putting on weight. There are communities where outdoor activity is encouraged and volunteers help supervise children playing in parks.

### Independent reflection activity (approx. 5–10 mins)

**Good for:** Encouraging learners to consider what they found interesting during the lesson. Ask them to be as honest as they can and to choose just one option. There is no correct response. Encourage explanation, but not all learners will be able to do this. Encourage learners to reflect on how they used evaluation skills this lesson; for example, to give feedback on the titles for the text or the paragraph sub-headings. This activity can be done in class, at home or in self-study time.

## Starting with research skills: Lesson 3

Lesson 3 focuses on using a search engine to find relevant information and referencing sources of information accurately.

### CAMBRIDGE STAGE 8 RESEARCH LEARNING OBJECTIVES

- 1.2 Identify and begin to reference a range of print and multimedia sources and use them to locate relevant information and answer research questions
- 1.3 Select an appropriate method and conduct research to test predictions and begin to answer a research question
- 1.4 Select, organise and record relevant information from a range of sources and findings from research, using appropriate methods

### LEARNING GOALS

To start to:

- realise the importance of referencing information sources
- find relevant information about a topic
- reference sources of information accurately

### How will I know if I reach my goals?

**Good for:** Learners to give examples of their learning from the lesson. They can complete the table at any point in the lesson, but might do it at the end. At the end of this lesson, learners set their own learning targets before they move on.

### Resources needed

**Learner's Skills Book;** your own Language Support Handout (if appropriate); Challenge topic and research reference(s) for that topic (e.g. 'Changing communities'; see Worked example for the starter activity below).

### Prior learning (approx. 5 mins)

**Good for:** Building on previous knowledge, learning and understanding. This might be from Primary Global Perspectives, from other subject areas, from Stage 7 Global Perspectives or from previous Stage 8 lessons.

**Activity:** Learners choose why it's important to give credit to other people's work by choosing responses from A–D. They can choose as many answers as they like.

**Differentiation:** Learners can work in pairs and then share with another pair.

**Suggested answers/ideas:**

- 1 Any reasonable and relevant response. It is unlikely that learners will choose A. This is not really a reason to give credit to another's work, although authors do sometimes get paid if someone photocopies a page of their book, for example. B, C and D are all relevant. Encourage learners' own ideas.
- 2 Further ideas might be: because citing another's work gives credibility to your own work; it provides evidence for points you make so that your work is not just assumption or opinion, etc.

Not topic specific.

### Starter activity (approx. 10–15 mins)

**Good for:** Evaluating references to see what's missing or inaccurate, and writing own reference accurately.

**Activity:** Learners look at the reference given (on the board or a handout) and identify if anything is missing from it. The whole class could examine the same reference, or you could give different references to different pairs / small groups, but this will make the activity longer. See Worked example below for some ideas. You might want to discuss with the class what needs to be included in a reference before this activity, or you can do it after the activity to see what learners remember from Stage 7.

Can be topic specific.

## Worked example for the starter activity

### Challenge topic: Changing communities

Use the same topic for the Starter and the Main activities.

Ideas for made-up references, although you can use actual references instead.

- a Williams. *Humans cause loss of biodiversity*. [Online] Available at: [https://www.gardenlife/loss of biodiversity](https://www.gardenlife/loss-of-biodiversity) (Accessed 07/06/2019).
- b (2018). *Countries need to compete for migrants to strengthen their economy*. [Online] Available at: <https://www.conversations/migration> (Accessed 02/06/2019).
- c Shah, D. (2019). *Women's equal rights in the workplace*. [Online] Available at: <https://www.timeshindustani/employment/women>.
- d Werners, F. *Technology changes society*. [Online] Available at: <https://www.technologyandsociety> (Accessed 02/06/2019).
- e Dela, S. (n.d.). [Online] Available at: <https://www.thefuture.com> (Accessed 02/06/2019).
- f (2018). *The impact of artificial intelligence on society*. [Online] Available at: <https://www.watchthisspace> (Accessed 03/06/2019).

#### Suggested answers/ideas:

- 1 No.
- 2 a) No date; b) No author; c) No date accessed; d) No date; e) No title of article; f) No author.
- 4 Answers will vary. A website reference should include the title of the article, date, author, website address and date accessed.

## Main activity (approx. 20–25 mins)

**Good for:** Enabling learners to do their own research and consider how they reference the articles they find.

**Activity:** You might start by talking through and showing learners how to conduct research to find the information they are looking for. You can use the 'think aloud' approach using these steps:

- Show learners what you are doing, using your computer attached to the screen and connected to the internet.
- Use a search engine and say for example, 'So, I need to find out about changing communities. Last time

I did research, I started by putting the topic into the search engine. So, I'll try that.'

- Do this, then say, 'There are too many results ... wow ... 160 000. I need to narrow my search. I'll change it to "the impact of climate change on communities" to see if I get fewer results. It's also more specific.'
- Then add, 'Wow, there's still a lot of results, but I just want newspaper articles, so I can add that. I'll search for "the impact of climate change on communities" plus "newspaper article" and see what happens.'
- Say, 'That's better – I now have some actual news agencies I've heard of. Right, so I need to ignore sites that have "Ad" – they'll be trying to sell me something, so that's the first two. It leaves a couple that look interesting. I'll try this one.'

**Ways of working:** Whole class when conducting the 'think aloud' strategy. Individually and in pairs to share ideas, clarify own thinking and give feedback.

**Different opinions/perspectives:** Encourage learners to find news articles that contain different perspectives and, when researching and skimming articles, to check their relevance to the topic.

**Learner response and feedback:** Stress that, at the moment, it doesn't matter that learners don't do referencing correctly as this is a skill that can be developed over the next levels (developing ... and getting better at ...) and Stage 9, but they should try to reference other people's work and keep a list of the sources of information they use. Peer feedback is important so learners can clarify their own understanding and gain ideas from their peers – a valuable part of learning about referencing.

**Suggested answers:** Will depend on the chosen news articles but all references should include the author, date the article was published or '(n.d.)' if there is no date, title of the article, website address and date accessed by the learner.

## Independent reflection activity; Self-assessment; Challenge topic review (approx. 15–20 mins)

**Good for:** Encouraging learners to consider their learning in lessons. Ask them to be as honest as they can. There is no correct response, and they can choose more than one option. Encourage learners to reflect on how they have used collaboration skills in the lesson, for

example, by sharing ideas with a partner or in a small group, or by helping someone else in the lesson.

Learners also complete the self-assessment to set their own learning targets before they move on. Learners think about and shade where they think they have reached at this time in their learning. ‘With help’ refers to guidance given (pointing a learner in the right direction, although examples should still come from the learner); for example, from the teacher, other learners, previous work done by the learner in the Skills Book.

For the Challenge topic review, learners explore the topic used in this section to develop research skills.

These activities can be done in class, at home or in self-study time.

#### Suggested examples:

- 1.1 *Construct relevant research questions.* Features of a good research question: a question that is interesting; not leading; not too broad, too narrow or too vague; or that allows for information to be found/an answer. An example of a good research question: ‘Does economic migration impact communities in a mainly positive or negative way?’

An example of a bad research question: ‘What is economic migration?’

- 1.2 *Identify and begin to reference a range of print and multimedia sources and use them to locate relevant information and answer research questions.* To acknowledge/recognise someone else’s ideas; give credibility to own ideas, etc.
- For example, ‘Smith, K. (2018). *The impact of artificial intelligence on society*. [Online] Available at: <https://www.watchthisspace> (Accessed 03/06/2019).’
- 1.3 *Select an appropriate method and conduct research to test predictions and begin to answer a research question.* Places to get information from: interviews, questionnaires/surveys, internet searches, newspapers, magazines, books. To know what family/friends think: interviews, questionnaires, questionnaire(survey)s. To use a search engine, you need to put in specific terms for the information you need to find.
- 1.4 *Select, organise and record relevant information from a range of sources and findings from research, using appropriate methods.* Any relevant example.

## Developing research skills: Lesson 4

Lesson 4 focuses on writing a good research question and further questions to help answer this research question. It follows on from work done on research questions in Lesson 1.

### CAMBRIDGE STAGE 8 RESEARCH LEARNING OBJECTIVE

- 1.1 Construct relevant research questions

### LEARNING GOALS

To develop knowledge and understanding about:

- the features of a good research question
- how to write a good research question
- how to write sub-questions to help answer a research question

### How will I know if I reach my goals?

**Good for:** Learners to give examples of their learning from the lesson. They can complete the table at any point in the lesson, but might do it at the end.

### Resources needed

**Learner's Skills Book;** your own Language Support Handout (if appropriate); Challenge topic, sub-topics relevant to the Challenge topic and optional handout on the features of a good research question e.g. ‘Changing communities’; (see Worked example for the main activity below).

### Prior learning (approx. 5 mins)

**Good for:** Building on previous knowledge, learning and understanding. This might be from Primary Global Perspectives, Stage 7 Global Perspectives, from other subject areas or from previous Stage 8 Global Perspectives lessons (especially Lesson 1).

**Activity:** Learners write down the features of a good research question: a question that is interesting, not leading,

not too broad, too narrow or too vague, and a question that allows for information to be found / an answer.

**Differentiation:** Allow learners to look back in their Skills Book to Lesson 1. Some will not need to. Learners work in pairs for support. Each pair can share with another pair for further ideas.

**Suggested answers/ideas:** Any reasonable and relevant response, but responses will be from Lesson 1 or Stage 7 Global Perspectives.

Not topic specific.

## Starter activity (approx. 10 mins)

**Good for:** Judging the quality of research questions.

**Activity:** Learners give reasons why the questions are bad research questions and make them into better research questions.

**Ways of working:** Individual, pair and perhaps whole-class discussion.

**Suggested answers/ideas:**

- 1
  - a Questions starting with 'What ...?' lend themselves to description (rather than analysis and evaluation) and to one answer. This question is not very interesting from a Global Perspectives viewpoint; it is too narrow and, although it can be answered, this will only be in a simple, factual way after research. There is no element of argument/debate on which to reach a conclusion. It also does not allow for the development of different perspectives (global or national/local). A better question would be: 'Is global warming causing biodiversity and ecosystem loss?'
  - b 'Why ...?' questions tend to require an answer that is an explanation. They do allow for analysis but not for evaluation. This question is also too narrow as it refers to 'my town' and, while it is interesting, it is not arguable and a conclusion cannot be reached. There is unlikely to be very much information available to answer the question and it might rely on just the opinions of local people. A better question would be: 'Is homelessness an important global issue?'
  - c This is a leading question as it asks 'Do you agree ...' and assumes that tourism is good for a community. The question is too vague, as it's not clear what is meant by 'a community'. It cannot be argued. A better question would be: 'Is tourism mostly beneficial or harmful for communities?'
- 2 You can ask learners to start each of their 'better' questions with 'Is ...?' to see if they can come up

with questions that are interesting, and can be argued and answered. You might also do this part of the activity as a whole class after further discussion about the features of a good research question:

- Clear: Does the sentence structure of the question make sense? Is it a question? Would someone else know what you are asking?
- Focused: Is the question too broad, making it hard to answer? Is the question too narrow, making it hard to find enough information?
- Arguable: Does your research question allow you to form an opinion? Does it allow you to support this opinion with evidence?

## Main activity (approx. 20–25 mins)

**Good for:** Gaining further information to help answer a research question.

**Activity:** Learners choose one of the topics you show/ give them. They work through the tasks in pairs.

**Differentiation:** Learners work in pairs for support. You could create a handout with all the features of a good research question on it. (Is it interesting? Is it leading, too broad, narrow or vague? Can it be answered? Is it clear? Is it focused? Is it arguable?) The handout could also include explanations and examples.

**Ways of working:** In pairs and small groups to share ideas and clarify own thinking.

**Different opinions/perspectives:** Encourage learners to see if their questions allow for the development of different perspectives at global, local or national levels.

**Learner response and feedback:** Encourage learners to give feedback to each other based on the features of a good research question.

**Suggested answers/questions based on the Challenge topic 'Changing communities':**

Learners are developing their ability to write a good research question (see Worked example below for answers to the different tasks). The sub-questions can be used when doing research using the internet or to ask a visitor to school.

## Worked example for the main activity

### Challenge topic: Changing communities

Sub-topics for learners to choose from: economic migration; gender inequality; global warming; growth of tourism and travel; homelessness; increase in use of the internet and technology; loss of biodiversity; poverty; unemployment; urbanisation.

- 1 Any relevant response, e.g. There's a lot of construction going on in my city and I'm interested to know more about the reasons for this and the consequences of this.
- 2 Three questions for the sub-topic 'Urbanisation':
  - What is urbanisation?
  - What is the problem with urbanisation?
  - What can be done about urbanisation?
- 3 The questions above all start with 'What?' This means that the answers will be descriptive. The questions are too narrow. They are not arguable, making it difficult to reach a conclusion to answer the questions.
- 4 One possible research question: 'Is urbanisation a problem?'
- 5 It is interesting; it's not very clear (a problem for whom?); it is arguable.
- 6 Reworded question: 'Does urbanisation affect communities?'
- 7 Learners check their questions with you.
- 8 Reworded after feedback: 'Does urbanisation affect communities in a mainly positive or negative way?'
- 9 Questions to ask a community leader:
  - Why do you need to build more houses?
  - Is it possible to save space by building upwards rather than outwards?
  - Do you think it's important to have parks where children can play?
  - Does having more houses mean more shops

and businesses?

- Are you going to provide more public transport systems such as trains, buses and trams?
- Are you going to make the roads better/wider/longer, etc.?
- Is there a sports centre in the building plans?
- Will there be more schools?
- How much money will this new development cost?
- Is this new money or money taken from somewhere else, such as the budget for green spaces?

### Independent reflection activity (approx. 5–10 mins)

**Good for:** Encouraging learners to consider their learning from the lesson. They should apply what they have learnt to judge the quality of the question: 'How do young people become unemployed?' The question is not a good research question. It is not very clear what the answer will be; it is not very interesting from a Global Perspectives viewpoint; it is too narrow and it is not arguable. It also does not allow for the development of different perspectives. A better question would be: 'Is youth unemployment a global issue?' or 'How does youth unemployment affect communities?' Encourage learners to reflect on their use of communication skills during the lesson; for example, by rewording their questions after feedback. This activity can be done in class, at home or in self-study time.

## Developing research skills: Lesson 5

Lesson 5 focuses on different research methods and writing relevant questions to gain information about a topic.

### CAMBRIDGE STAGE 8 RESEARCH LEARNING OBJECTIVES

- 1.1 Construct relevant research questions
- 1.3 Select an appropriate method and conduct research to test predictions and begin to answer a research question

### LEARNING GOALS

To develop knowledge and understanding about:

- different research methods
- good questions for a questionnaire/survey
- writing questions to gain relevant information

### How will I know if I reach my goals?

**Good for:** Learners to give examples of their learning from the lesson. They can complete the table at any point in the lesson, but might do it at the end.

## Resources needed

Learner's Skills Book, your own Language Support Handout (if appropriate), Challenge topic (e.g. 'Changing communities'; see Worked example for the main activity below).

## Prior learning (approx. 5–10 mins)

**Good for:** Building on previous knowledge, learning and understanding. This might be from Primary Global Perspectives, Stage 7 Global Perspectives lessons, from other subject areas or from other Stage 8 Global Perspectives lessons.

**Activity:** Learners choose which research method(s) is/are most suitable for developing a local perspective about an issue/topic. Encourage learners to explain their choice(s).

**Differentiation:** Learners can work in pairs and share their ideas with another pair or the whole class.

**Suggested answers/ideas:** Any reasonable and relevant response.

- A A questionnaire allows you to put specific questions to local people (friends, family, people in the community) to gain relevant information about a topic.
- B An interview allows you to talk to people to find out what they think about a topic.
- C The internet might not be a suitable choice to develop a local perspective, unless a community newsletter or blog is published on the internet.
- D A local newspaper might be suitable to find out what local people think about a topic.

Reasons will vary. If looking to develop a local perspective, primary research methods are more likely to be suitable (asking in school or the community via interviews, surveys, questionnaires) than secondary research methods (internet books, etc.)

Not topic specific.

## Starter activity (approx. 10 mins)

**Good for:** Discussion about how to write good questions for a questionnaire/survey to gain information.

**Activity:** Learners put the five options in order, starting with the one they think is the most important when writing questions for a questionnaire.

**Suggested answers/ideas:** All the options are important. Responses will vary. Encourage discussion about what makes a good question.

Not topic specific.

## Main activity (approx. 20–25 mins)

**Good for:** Identifying good and bad questions when writing questionnaires.

**Activity:** Discussion about why the questions are good/bad relating to clarity, topic, whether the questionnaire questions contains bias or are leading questions. Learners write another five questions relevant to the topic and check with a partner to see if they are good questions.

**Differentiation:** Encourage learners to look back at the Starter activity. Individual work as challenge or in pairs for support.

**Ways of working:** Individually and/or in pairs to share ideas, clarify own thinking. Whole-class discussion about good/bad questions on questionnaires to conduct primary research.

**Different opinions/perspectives:** Encourage learners to see that in the questionnaire questions 2, 4, 6, 9 and 10 in the Worked example below are designed to gain their personal perspective (even if some are not very good questions), which might be different from the perspective of their peers.

**Learner response and feedback:** Encourage learners to discuss the quality of the questionnaire questions in pairs or as a class, once they've had time to answer them.

**Suggested answers/questions based on the Challenge topic 'Changing communities':**

Learners are developing their ability to write good questions by evaluating the questions from the Worked example, so any reasonable response is acceptable. Refer learners back to the Starter activity and to the Tips in their Skills Book.

Questions should:

- be clearly worded so that the researcher gets the information they need
- relate to the topic of the study
- be able to be answered fairly quickly
- be clear in what they are asking
- not be leading or contain bias.

See Worked example below.

## Worked example for the main activity

### Challenge topic: Changing communities

Primary research questionnaire: To find out how local people feel about the use of cars and public transport.

Name .....

Male  Female

Age .....

1 How often do you use public transport in a week?  
 0–2 times  3–5 times  6–8 times   
 9 or more times

2 Do you agree that there are too many cars on the roads?  
 Yes

3 How often do you walk to school in a week?  
 Never  A lot

4 Do you think cars are responsible for air pollution?  
 Yes  No   
 Why? .....  
 .....

5 How often do you go to the cinema?  
 Always  Never

6 Do you or do you not like doing the following?  
 Travelling by car  
 Using public transport  
 Walking to school

7 How often do you help the elderly in your community?  
 Never  1–2 times per week   
 more than 3 times per week

8 How often do you suggest that you and your parents travel more by public transport?  
 Never  1–2 times per week   
 3–4 times per week  5 or more times per week

9 Do you like going everywhere by car?  
 Yes

10 Do you agree that global warming is responsible for biodiversity and ecosystem loss?  
 Yes

Thank you for filling in my questionnaire.

### Suggested answers:

Name: Probably doesn't need to be included unless you want to follow up with further questions / an interview.

Male/Female: Useful if comparing information between these two groups.

Age: Useful if analysing information gained according to age groups.

- 1 This is a good question as it is clear, specific and related to topic. It could be broken down further into different types of public transport.
- 2 This is a leading question with only one option, so it is not a good question.
- 3 Although related to the topic, this question is not specific (lacking in choices) and is open to interpretation as to what is meant by 'a lot'.
- 4 This is a fairly good question because of the room to explain. Although some people might not answer the 'why' part, because it would take time to write an answer, the question would still give some information about views on whether cars cause air pollution.
- 5 This is not relevant to the topic.
- 6 This is not clear enough as there are two choices in the question.
- 7 This is not relevant to the topic.
- 8 This is a good question – clear, specific and related to the purpose and topic.
- 9 As there is only one option available, this is a leading question.
- 10 This is a leading question and not relevant to the purpose, which is to find out about the use of cars and public transport.

### Independent reflection activity (approx. 5–10 mins)

**Good for:** Encouraging learners to consider what helped them learn today (e.g. sharing ideas with a partner, evaluating good and bad questions, etc.) Encourage learners to reflect on how they have used reflection as well as research skills this lesson (e.g. by considering what has helped them learn best today). This activity can be done in class, at home or in self-study time.

## Developing research skills: Lesson 6

Lesson 6 focuses on designing a questionnaire to gain information to help answer a research question. It follows on from Lesson 5, identifying the characteristics of a good question for a questionnaire.

### CAMBRIDGE STAGE 8 RESEARCH LEARNING OBJECTIVES

- 1.2 Identify and begin to reference a range of print and multimedia sources and use them to locate relevant information and answer research questions
- 1.3 Select an appropriate method and conduct research to test predictions and begin to answer a research question
- 1.4 Select, organise and record relevant information from a range of sources and findings from research, using appropriate methods

### LEARNING GOALS

To develop knowledge and understanding about:

- recognising good questions to test predictions
- writing questionnaires to gain relevant information
- selecting information to write questions
- referencing sources of information

### How will I know if I reach my goals?

**Good for:** Learners to give examples of their learning from the lesson. They can complete the table at any point in the lesson, but might do it at the end.

### Resources needed

**Learner's Skills Book;** your own Language Support Handout (if appropriate); Challenge topic and a series of statements related to that topic (e.g. 'Changing communities'; see Worked example for the starter activity below).

### Prior learning (approx. 5–10 mins)

**Good for:** Building on previous knowledge, learning and understanding. This might be from Primary Global Perspectives, Stage 7 Global Perspectives, other subject areas or from previous Stage 8 Global Perspectives lessons.

**Activity:** Learners decide which of the questions are good questions to test the claim 'Cars are the main source of air pollution in a city'.

**Differentiation:** Learners can work in pairs for support. Whole-class discussion to clarify which are good questions and why.

**Suggested answers/ideas:** Any reasonable and relevant response.

A is a leading question with only one choice, so it is not a good question.

B is a good question with two choices but also space for other answers. It is clear, related to the topic and not a leading question or biased. It will also help test the claim.

C is not related to the claim.

D is clear, relates to the claim but only gives two choices, although it does allow for explanation. The question could be improved if it had 'other' as one of the choices for people to complete.

### Starter activity (approx. 10–15 mins)

**Good for:** Revisiting question words in preparation for writing a questionnaire.

**Activity:** Asking questions to find out more information related to a statement and giving reasons for their choice of their best question.

Individual, pair and whole-class discussion.

**Suggested answers/ideas:** Any reasonable questions, no correct answers. See Worked example below.

### Worked example for the starter activity

#### Challenge topic: Changing communities

You can give each pair one of the suggested statements below, or show all the statements and ask learners to choose one.

**Statement ideas:**

- Increasing crime is changing communities.
- Urbanisation is changing communities.
- Poverty causes homelessness.
- Increased population leads to increased traffic.
- Cars cause air pollution.
- Care for the elderly within the community is suffering because of a lack of funding.
- Lack of facilities for young people causes an increase in crime.
- More leisure and entertainment opportunities would result in less crime.
- Urbanisation is causing biodiversity and ecosystem loss.
- Lack of public transport is responsible for air pollution.

Example questions for the statement: ‘Cars cause air pollution.’

- When are most cars on the road?
- What else might be causing air pollution?
- Which part of the city is most affected by air pollution?
- Who is responsible for monitoring air pollution in the city?
- Where is air pollution a problem?
- Why are there so many cars on the road at one time?
- How can we prevent the use of cars in the city?

Any reasonable questions; no correct answers.

**Main activity (approx. 20–25 mins)**

**Good for:** Creating questions for a primary research questionnaire to gain information related to the topic and referencing sources of information which learners use to write their questions.

**Activity:** Remind learners of the topic and purpose of their study; for example, testing the claim that cars are responsible for air pollution in cities by asking the question ‘Are cars responsible for air pollution in cities?’ Should you wish learners to do a different topic, note that they will use the same research question in Lessons 7–9.

**Differentiation:** Learners can work in pairs for support. Put characteristics of good questions on the board or refer learners back to the Tips in their Skills Book.

**Ways of working:** Pairs to share ideas, clarify own thinking and as support. Pairs can share with another pair for the questionnaire evaluation in task 3.

**Different opinions/perspectives:** Encourage learners to write questions to gain different opinions about whether cars are responsible for air pollution in cities.

**Learner response and feedback:** Encourage learners to give feedback to each other by answering the questions in task 3 in the Skills Book.

**Suggested answers/questions based on the Challenge topic ‘Changing communities’:**

Learners are developing their ability to write good questions to conduct primary research, so allow any reasonable questions to do with the topic. Stress the importance of using the characteristics of good questions for primary research when judging the quality of research questions.

Ask learners to give their questionnaire to ten people (family, friends, classmates) to complete before the next lesson. They should collect the completed questionnaires and bring them to the next lesson.

**Independent reflection activity; Self-assessment; Challenge topic review (approx. 15–20 mins)**

**Good for:** Encouraging learners to consider their learning and progression in learning during lessons. Ask them to be as honest as they can. For example, they might have found thinking of non-leading questions to be a challenge. They might have asked their partner or you to check some or explain what a leading question is again. Encourage learners to reflect on other skills (analysis, evaluation, reflection, communication, collaboration) they have used this lesson, as well as research skills; for example, using evaluation skills to evaluate another pair’s questions.

Learners also complete the self-assessment to set their own learning targets before they move on. Learners think about and shade where they think they have reached at this time in their learning. ‘With help’ refers to guidance given (pointing a learner in the right direction, although examples should still come from the learner); for example, from the teacher, other learners or previous work done by the learner in the Skills Book. For the Challenge topic review, learners explore the topic used in this section to develop research skills.

These activities can be done in class, at home or in self-study time.

**Suggested examples:**

- 1.1 *Construct relevant research questions.* Features of a good research question: question that is interesting; not too broad, too narrow or too vague; that is not leading and does not contain bias; a question that allows for information to be found / an answer. Examples of good research questions: 'Are cars responsible for air pollution?' and 'Is economic migration good for communities?'
- 1.2 *Identify and begin to reference a range of print and multimedia sources and use them to locate relevant information and answer research questions.* To acknowledge/recognise someone else's ideas and give credibility to their own research. Example

reference: Grey (2019). *Communities are losing their traditions and culture.* Whatdowethink [online] Available at: <https://www.whatdowethink/> (Accessed 20/06/2019).

- 1.3 *Select an appropriate method and conduct research to test predictions and begin to answer a research question.* A local newspaper or newsletter, interview, questionnaire(survey), questionnaire. Example question to test prediction: 'Does building more houses cause habitat loss for wildlife?'
- 1.4 *Select, organise and record relevant information from a range of sources and findings from research, using appropriate methods.* Any relevant example.

## Getting better at research skills: Lesson 7

Lesson 7 focuses on the use of primary research to gain information, and how to organise and record the information gained from primary research. It follows on from work done in Lessons 5 and 6.

### How will I know if I reach my goals?

**Good for:** Learners to give examples of their learning from the lesson. They can complete the table at any point in the lesson, but might do it at the end.

### CAMBRIDGE STAGE 8 RESEARCH LEARNING OBJECTIVES

- 1.3 Select an appropriate method and conduct research to test predictions and begin to answer a research question
- 1.4 Select, organise and record relevant information from a range of sources and findings from research, using appropriate methods

### Resources needed

**Learner's Skills Book;** your own Language Support Handout (if appropriate); source of information for the Starter activity (see Worked example for the starter activity below); Challenge topic for the Main activity (e.g. 'Changing communities' to help answer the research question 'Are cars responsible for air pollution in cities?' from Lesson 6, or any other topic learners wrote their questionnaire about in Lesson 6).

### LEARNING GOALS

To get better at:

- understanding how research helps test a prediction
- recording information gained from primary research
- presenting information gained from primary research

### Prior learning (approx. 5–10 mins)

**Good for:** Building on previous knowledge, learning and understanding. This might be from Primary Global Perspectives, Stage 7 Global Perspectives, from other subject areas or from previous Stage 8 Global Perspectives lessons (especially Lessons 5 and 6).

**Activity:** Review learning about testing predictions from Lesson 6.

**Differentiation:** Allow learners to look back in their Skills Book. Some will not need to. Learners can work individually / in pairs and then share ideas with a partner / whole class.

**Suggested answers/ideas:** Any reasonable and relevant response.

- 1
  - a A prediction is a statement about what you think will happen or what you think is causing something to happen.
  - b To test a prediction, you need to ask the right type of question.
- 2 Research helps test a prediction as you can ask people their views on the prediction, you think you know the answer to.

Not topic specific.

### Starter activity (approx. 10–15 mins)

**Good for:** Discussion about primary sources of information.

**Activity:** Answering questions about a primary source of information and sharing ideas.

**Ways of working:** Individual, pair and whole-class discussion to clarify thinking and gain new learning.

**Suggested answers/ideas:** See Worked example below.

Does not have to be topic specific.

### Worked example for the starter activity

#### Challenge topic: Changing communities

**Starter activity:** Bar graph as a primary source of information for learners to answer questions about community issues.

People in a local community were given a list of nine issues (transport; housing; environment; technology; health; crime rate; care homes; sport facilities; shopping) and asked to identify the three they thought were the most important to a community. The results are recorded in the bar graph.

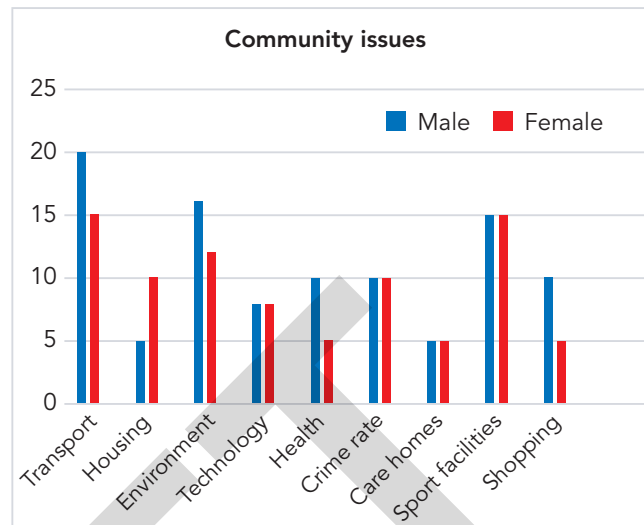


Fig. 1. Community issues. Graph by Eric Holly, 'The Importance of Community Issues.' (Community Newsletter, 20 June 2019).

**Suggested answers/ideas:**

- 1
  - a Primary source as a double bar graph in a community newsletter.
  - b Eric Holly. Nothing else about him is mentioned. However, you might encourage learners to search for the author of a source to verify credentials (this one is made up).
  - c 20 June 2019.
  - d Perhaps to get local people's views on what's important to them in a community; to identify the difference/similarity between what females and males thought important in a community.
  - e Local community groups, the local council, perhaps the national government when deciding how to allocate funds to communities.
  - f It's mostly clear but would benefit from having a title for the number of people axis. It might also be useful to see the questionnaire to clarify what the category 'Crime rate' refers to (whether it's increased crime rate or not), as well as what is meant by 'Environment' and 'Technology'. Discussion can emphasise the importance of creating clear sources of information from data in preparation for the main activity.

## Main activity (approx. 20–25 mins)

**Good for:** Analysing and recording information gained from primary research.

**Activity:** Discussion about ways of recording information gained from primary research.

**Differentiation:** Learners can work in pairs / small groups for support. You can decide the choice of presentation method or allow learners to choose.

**Ways of working:** In pairs / small groups for support. Whole-class discussion about ways of recording information from primary research.

**Different opinions/perspectives:** Stress that primary research methods are a great way of gaining opinions and viewpoints from different groups of people about issues, and can form evidence as part of a perspective. For example, the information gained from neighbours in a community about issues that are important to them can provide evidence for a local perspective that more needs to be done for the community.

**Learner response and feedback:** Encourage learners

to work in pairs / small groups when presenting their information so they can provide continual feedback to each other.

**Suggested answers/ideas:** Remind learners to consider the purpose and audience for the information they have gathered. Either give them the same presentation method or allow them to choose their own way of presenting the information gained from their questionnaire; for example, poster, leaflet, presentation (set a maximum number of slides), blog, summary, bar graph, pie chart, table.

## Independent reflection activity (approx. 5–10 mins)

**Good for:** Encouraging learners to consider their learning from the lesson, what they think has helped them learn, and how they have helped someone else learn today; for example, by working with a partner, joining in discussions, asking for / giving help/support, helping their partner, etc. This activity can be done in class, at home or in self-study time.

# Getting better at research skills: Lesson 8

Lesson 8 focuses on the use of secondary information sources to gain information to help answer a research question.

### CAMBRIDGE STAGE 8 RESEARCH LEARNING OBJECTIVES

- 1.1 Construct relevant research questions
- 1.3 Select an appropriate method and conduct research to test predictions and begin to answer a research question
- 1.4 Select, organise and record relevant information from a range of sources and findings from research, using appropriate methods

### LEARNING GOALS

To get better at:

- understanding when to use primary and secondary information sources
- doing an internet search to find relevant information
- judging the quality of an information source to help answer a research question

## How will I know if I reach my goals?

**Good for:** Learners to give examples of their learning from the lesson. They can complete the table at any point in the lesson, but might do it at the end.

## Resources needed

**Learner's Skills Book;** your own Language Support Handout (if appropriate); Challenge topic and text (e.g. 'Changing communities'; see Worked example for the main activity below).

## Prior learning (approx. 5–10 mins)

**Good for:** Building on previous knowledge, learning and understanding. This might be from Primary Global Perspectives, Stage 7 Global Perspectives, from other subject areas or from previous Stage 8 Global Perspectives lessons (especially Lessons 6 and 7).

**Activity:** Review learning about primary and secondary sources of information by giving examples and discussing when to use primary and secondary information sources.

**Differentiation:** Learners work together for this activity.

### Suggested answers/ideas:

- 1
  - a Primary: interview, questionnaire, survey, bar graph or chart – direct and first-hand.
  - b Secondary: internet, textbooks – indirect, reported, second-hand, existing data.
- 2
  - a Primary: to develop a local perspective about an issue or gain local information.
  - b Secondary: to develop a national or global perspective about an issue or gain information from a wider audience.

Not topic specific.

## Starter activity (approx. 5–10 mins)

**Good for:** Reviewing the steps for effective research using a search engine.

**Activity:** Adding in the missing steps to conduct effective research.

### Suggested answers/ideas:

- 1 Decide what information you need to find.
- 2 Type in key words (between three and six) into the search engine.
- 3 Click on a website to open it.
- 4 Look further down the page beyond the first few results of the search.
- 5 Skim read the text, asking the following questions: Is it easy to follow? Do I understand it? Might it be useful? If so, bookmark it.

If the internet is available in the lesson, you can model the steps aloud, doing a real search. Example search: ‘Increasing numbers of cars are causing air pollution.’

Does not have to be topic specific.

## Main activity (approx. 20–25 mins)

**Good for:** Analysing secondary information sources to gain information to help answer a research question.

**Activity:** Learners answer questions about a given text (see Worked example below).

**Differentiation:** Learners work in pairs / small groups for support. Give the choice of which questions to answer to some learners. The more challenging questions are f–i. Encourage some learners to answer these questions.

**Ways of working:** In pairs / small groups for support. Whole-class discussion about secondary sources of information.

**Different opinions/perspectives:** Stress that secondary research methods are a great way of gaining evidence to support a perspective. For example, for the research question ‘Are cars the main cause of air pollution in cities?’, there are two clear perspectives:

- Yes, cars are the main cause of air pollution in cities.
- No, cars are not the main cause of air pollution in cities.

Evidence for the ‘yes’ perspective might come from national evidence / sources of information, and evidence for the ‘no’ perspective might come from global evidence / sources of information.

**Learner response and feedback:** Encourage learners to work in pairs / small groups to give feedback to each other on the answers to the questions.

**Suggested answers/ideas:** See Worked example.

## Worked example for the main activity

### Challenge topic: Changing communities

**Main activity:** Secondary source of information

#### AIR POLLUTION – A GLOBAL ISSUE?

Jan Feras 14/07/2011

Almost half of all the citizens in America, about 150 million, are reported to live in areas where the air quality is so poor that it is below the government’s recommended level. The cause of this air pollution is not the factories and industrial areas but our everyday transport such as cars, taxis, buses and lorries. The consequence of this is dense smog and people who have trouble breathing. This results in the everyday use of masks to help them go about their business.

Cars are the most polluting of all vehicles. They produce carbon monoxide and nitrogen, and the sheer volume of cars in cities is helping to create an atmosphere that most people find difficult to accept. In 2016, more than half of the nitrogen and carbon monoxide in the air came from transportation.

People are suffering from serious health concerns like bronchitis and asthma. Some researchers are even suggesting that air pollution in cities caused by the number of cars is leading to an increased number of people being diagnosed with cancer. This is a life-threatening disease. The increase in air pollution is also helping to cripple our health system as costs to treat these illnesses increase.

And it's not just cities in America that are being affected by increased air pollution. This is a global issue impacting on citizens across the globe. Air pollution is now our biggest global concern and unless we do something about it, more people will become chronically ill. Our wildlife is also affected, and we have a responsibility to protect it as well as our own health and well-being.

Reference: American Environmental Agency (2019). 'Pollution in the United States of America' [Online], <https://www.environmentalagency/US/pollution/cities.gov> (Accessed 10/08/2019).

#### Suggested answers/ideas:

- a Air pollution – a global issue?
- b Jan Feras
- c 14/07/2011
- d Transportation, mainly cars in cities are the largest source of air pollution. Air pollution is leading to increased illness and loss of wildlife. People are having to protect themselves by wearing masks. It's not just an issue in America, but globally.
- e That something needs to be done and we must take responsibility for reducing the amount of air pollution in cities.

- f Anecdotal evidence about people suffering from health conditions related to air pollution, although some researchers are mentioned. Statistics about the number of people in America living in areas where the amount of air pollution is unacceptable, but no source is cited or referenced. Also, statistics about the amount of nitrogen and carbon monoxide in the air that have come from transportation, but no source cited or referenced.
- g It is fairly convincing as it is logical and the evidence supports the argument made. It would be more convincing if the sources of evidence were cited and referenced and there was evidence to support some of the claims made; for example, 'Cars are the most polluting of all vehicles'.
- h It is not very reliable as the author is unknown – their name does not appear in a cross-reference (the author hasn't written anything else). Some of the information is credible but parts are not; for example, citing cars as the most polluting of all vehicles. The source is also outdated and things will have changed since the article was written.
- i Examples: 'Is air pollution an important global issue?'; 'Is transportation the major cause of air pollution?'; 'Is air pollution in cities the reason for an increase in chronic health conditions?'

#### Independent reflection activity (approx. 5–10 mins)

**Good for:** Encouraging learners to consider their learning from the lesson, what they found challenging and how they addressed this challenge; for example, they needed their partner's help to come up with a research question that the source might help answer. Encourage learners to reflect on how they have used communication skills this lesson; for example, by explaining what the word 'reliable' means to their partner. This activity can be done in class, at home or in self-study time.

## Getting better at research skills: Lesson 9

Lesson 9 focuses on gaining information to present an argument for a particular perspective on an important global issue. It follows on from the work done in Lesson 8.

### CAMBRIDGE STAGE 8 RESEARCH LEARNING OBJECTIVES

- 1.2 Identify and begin to reference a range of print and multimedia sources and use them to locate relevant information and answer research questions
- 1.3 Select an appropriate method and conduct research to test predictions and begin to answer a research question
- 1.4 Select, organise and record relevant information from a range of sources and findings from research, using appropriate methods

### LEARNING GOALS

To get better at:

- referencing sources of information
- finding relevant information to answer a research question
- recording relevant information

### How will I know if I reach my goals?

**Good for:** Learners to give examples of their learning from the lesson. They can complete the table at any point in the lesson, but might do it at the end.

### Resources needed

**Learner's Skills Book;** Challenge topic for the Starter and Main activities (e.g. Changing communities; see Worked example for the main activity below); websites related to the Starter activity pictures (see Worked example for the main activity below); two pictures (see the Starter activity below).

### Prior learning (approx. 5 mins)

**Good for:** Building on previous knowledge, learning and understanding. This might be from Primary Global Perspectives, Stage 7 Global Perspectives, from other subject areas or from previous Stage 8 Global Perspectives lessons.

**Activity:** Review learning about how a search engine is useful for finding information. It is also important that learners know how to use one.

**Differentiation:** Allow learners to work together for this activity and to look back in their Skills Book if necessary.

**Suggested answers/ideas:** A search engine is useful because it enables you to find relevant information to help answer a research question; it helps you to find facts/statistics and evidence to support your own points; it helps you to check information that you might have got from a different source. To know how to use a search engine, you need to:

- decide on the information you need
- type between three and six important key words into the search engine
- look further down the page beyond the first few results of the search
- click on the website to open it
- skim read the text: Is it easy to follow? Do I understand the text? Might it be useful?
- if so, bookmark it.

Further ideas: Keep a list of useful websites; check the credibility of the author by searching for other articles by them; check the reliability of the website (.org; .gov; wiki, etc.); can use videos and podcasts as well as written articles.

Not topic specific.

### Starter activity (approx. 5–10 mins)

**Good for:** Reviewing/sharing words, phrases, issues and perspectives for use in the lesson.

**Activity:** Split the class in half. Give one picture to one half of the class and the other picture to the other half of the class. For example, to gain different ideas for the topic of Changing Communities, you could show the class one picture demonstrating air pollution, and one picture demonstrating water pollution. This could

be a snowball activity (learners share in pairs, then in groups of four and then eights to gain more words and phrases). A snowball activity will take more time.

**Suggested answers/ideas:** Does not have to be topic specific, but the ideas shared will be useful during the main activity.

## Main activity (approx. 20–25 mins)

**Good for:** Evaluating secondary information sources to gain information to help support a perspective.

**Activity:** Learners work in groups of four. For each picture from the Starter activity, give learners a set of three relevant website addresses (see Worked example below) to gain information on their picture/perspective (whether air pollution is a more significant global issue than water pollution or vice versa). They can then use what they know about research to find another information source.

Each team member is responsible for gaining information from one website only. Give a time limit for them to find this information (approx. 10–15 mins).

Teams come together to share their information and discuss the format they might use to persuade the other half of the class of their perspective. If time permits, teams can produce this outcome using the information they have found (podcast, presentation, video clip, leaflet, brochure, board game, etc.) and give feedback. Did the information presented persuade them that air or water is the most significant global issue of the two? How might they be better persuaded?

**Differentiation:** Learners work in groups of four for support and guidance. Select groups to work together or allow free choice. Give the choice of who researches which website address and who finds one of the team's own.

**Ways of working:** Small groups for support and guidance and to develop team-working skills.

**Different opinions/perspectives:** Stress that the aim of the two pictures is to give two different perspectives, either:

- Air pollution is a more significant global issue than water pollution, or
- Water pollution is a more significant global issue than air pollution.

One half of the class finds information in small groups to persuade of the first perspective and the other half the second perspective.

**Learner response and feedback:** Encourage learners to give feedback to each other on the information gained. Ask questions: What did you learn? Were you

persuaded by the argument? Did you change your perspective? Why?

**Suggested answers/ideas:** See Worked example below.

## Worked example for the main activity

### Challenge topic: Changing communities

**Main activity:** Learners work in groups of four. For each picture, give learners a set of three relevant website addresses (see examples below) to gain information from their perspective, and then each team also finds one other information source. Each team member writes a summary to explain why their type of pollution is a more significant global issue than the other type of pollution.

#### Picture and website ideas:

- Air pollution is a more significant global issue than water pollution:  
<https://www.theguardian.com/environment/2018/nov/05/air-pollution-everything-you-should-know-about-a-public-health-emergency>  
<https://www.who.int/air-pollution/news-and-events/how-air-pollution-is-destroying-our-health>  
<https://www.everythingconnects.org/pollution.html>
- Water pollution is a more significant global issue than air pollution:  
<https://www.independent.co.uk/environment/world-water-day-2019-floods-drought-pollution-plastic-waste-a8833616.html>  
<https://www.nrdc.org/stories/water-pollution-everything-you-need-know>  
<https://en.unesco.org/themes/water-security/hydrology/water-scarcity-and-quality>

## Independent reflection activity; Self-assessment; Challenge topic review (approx. 15–20 mins)

**Good for:** Encouraging learners to consider their learning and progression in learning during lessons. Learners consider the most important thing that helped them learn in the lesson; for example, class discussion or working with a partner. Encourage learners to reflect on and explain the skills (analysis, evaluation, reflection, communication, collaboration) they have used this lesson, including research skills.

Learners also complete the self-assessment to set their own learning targets. Learners think about and shade

where they think they have reached at this time in their learning. ‘With help’ refers to guidance given (pointing a learner in the right direction, although examples should still come from the learner); for example, from the teacher, other learners and/or previous work done by the learner in the Skills Book.

For the Challenge topic review, learners explore the topic used in this section to develop research skills.

These activities can be done in class, at home or in self-study time.

### Suggested examples:

#### 1.1 Construct relevant research questions.

Features of a good research question: a question that people care about; a question that is not too broad, too narrow or too vague; a question that allows for information to be found / an answer.

Examples of good research questions: ‘Is economic migration beneficial to communities?’ and ‘Does urbanisation benefit communities?’

#### 1.2 Identify and begin to reference a range of print and multimedia sources and use them to locate relevant information and answer research questions.

To acknowledge/recognise someone else’s ideas:

Maine (2012). *Cars cause the most air pollution*. Motorworld/pollution [online] Available at: <https://www.motorworld.com/pollutions> (Accessed 14/07/2019).

#### 1.3 Select an appropriate method and conduct research to test predictions and begin to answer a research question. Prediction is a statement about what you think will happen or what you think is causing something to happen; for example, ‘Increased traffic will increase levels of air pollution’ or ‘People living in poverty suffer from poor health’.

Any example steps to do an internet search, as listed in Prior Learning notes above.

#### 1.4 Select, organise and record relevant information from a range of sources and findings from research, using appropriate methods. Any relevant example. Learners can use examples from their Skills Book from Lessons 7–9. They can write the source and a sentence or two from it in their own words. Ask them to check that the information:

- is clearly worded
- relates to the topic
- relates to the question
- does not contain words from the source.

