Careers in Initial Teacher Education

User guide and presentation notes

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Careers in Initial Teacher Education (CITE)

# Introduction

Careers information, advice and guidance has traditionally focussed on students in secondary school. However, there is a growing understanding that children are starting to think about ‘what they want to be’ at a much younger age, and that they are ‘ruling out’ possible careers before they leave primary school.

The aim of these CITE training materials is to support primary trainee teachers to include careers related learning in their teaching from the start of their career. However, it could also be used as CPD for teachers who are already teaching in a school.

The subject focus of the careers introduced are science and maths, however, the underpinning principles in each session are suitable for a whole school approach to career related learning.

# Outline of the resources

The CITE training materials consist of three training sessions and associated ‘gap’ tasks. Each training session should last about 1.5 hours to allow for discussion. The time required for each gap task will vary. After each gap task participants will complete a reflective evaluation writing exercise.

*Session 1: Careers Education and Unconscious bias*

This session provides an introduction to the gendered nature of subject and career choices that children and young people make, and how unconscious bias can contribute to this. It also explores how to reduce these effects.

*Gap task 1: Exploring unconscious bias in primary schools.*

Three analysis and reflection tools that look at different aspects of the school environment, ideal for trainee teachers on their first placement.

* Tool 1 – Classroom Interactions Analysis Tool
* Tool 2 – Literature Analysis Tool
* Tool 3 – Display Content Analysis Tool

*Session 2: Career aspirations in primary school*

This session explores NUSTEM research on the career aspirations of children aged between 8 and 11. It then introduces the Primary Careers Tool[[1]](#footnote-1) – an online resource to support the inclusion of careers related learning into curriculum planning. The Tool is a database of over 100 different jobs which can be sorted by National Curriculum topic in Science and Maths. A simple model of adding the job into lessons is also demonstrated.

*Gap task 2: Planning and teaching using the Primary Careers Tool*

Trainee teachers choose a maths or science topic that they will be teaching in the weeks after the session and then, using the provided powerpoint template, include a career linked to that topic in their teaching.

*Session 3: Employability characteristics and role models*

This session considers some of the characteristics that help to make people successful in their chosen careers. It introduces the STEM Person of the Week[[2]](#footnote-2) resource and presents findings from research on the use of role models and STEM Person of the Week.

*Gap Task 3: Planning and teaching using STEM Person of the Week.*

Trainee teachers choose a maths or science topic that they will be teaching in the weeks after the session and then use one of the STEM Person of the Week cards to introduce characteristics, and then identify and praise pupils showing those characteristics during the lesson.

# Using the CITE resources

## Who can deliver the training?

CITE training can be delivered by university and school based teacher trainers, or careers professionals. They could also be delivered by teachers responsible for CPD in school.

The presenter notes provide comprehensive guidance on how each session should be structured, what resources are required, participant activity (and indicative points to make) and details of background reading that the presenter should be aware of prior to leading the session.

## How should the training be structured for ITE students?

There are two suggested delivery structures that could be used to deliver CITE to trainee teachers. The timings will need to be synchronised so that the training sessions are delivered just before, or during, the placements that students will undertake.

*Model 1: Three year B.Ed course*

In this model, the CPD is embedded through the three years of the course. In year 1, as part of their professional practice studies, all students attend training session 1 on unconscious bias and complete gap task 1.

In year 2 and 3, all students can attend training sessions 2 and 3, or they can be offered as an option for those students that are specialising in either maths or science. This will depend on the structure of the B.Ed course.

*Model 2: One year course e.g. PGCE, SCITT*

In this model, the CPD is delivered over the space of a single year. The sessions would be timed to coincide with the first and second placement. The gap task for training session 1 is an observation activity, so fits in well with the first placement. The gap tasks for training sessions 2 and 3 are teaching activities so fit with the second placement that the student undertakes. Table 1 indicates possible timings for the activities.

*Model 3: Current teachers*

The CITE materials are also suitable for use as a year-long CPD for all teachers within a school. This could be led by an external provider or by a senior teacher in the school. The timings are the same as for Model 2.

|  |  |  |
| --- | --- | --- |
| Table 1: Suggested timeline for delivery of CITE in 1 year | | |
| Timing | Training activity | Student activity |
| Half term 1 or 2 (September or October) | CPD 1: Careers Education and Unconscious bias | Gap Task 1: Exploring unconscious bias in primary schools |
| Half term 3 (February) | CPD 2: Career aspirations in primary school | Gap Task 2: Planning and teaching using the Primary Careers Tool |
| Half term 5 (May) | CPD 3: Employability characteristics and role models | Gap Task 2: Planning and teaching using STEM Person of the Week |

## What resources will be needed?

The resources required to deliver the session are provided in the CITE materials. Each session includes additional reading and references, and the presenter will need to obtain these for themselves if they are required. All training sessions will require standard IT projection equipment.

|  |  |
| --- | --- |
| Session 1: Unconscious bias | **Scissors** – 1 pair between 2 participants (including scissors suitable for left handed people)  Session Powerpoint  Slides 6, 7, 10 – print 1 copy for each group of 2 – 4 participants  Slide 21 – print 1 copy between 2 participants  Analysis Tools – print 1 copy per participant |

## 

## Presenter notes

This guide includes presenter notes for all three training sessions. It is recommended that presenters read through the notes in advance of the training, and also explore the further reading included with the slides.

# Measuring Impact

Trainee teachers and their mentors can use the reflective activities to assess the impact of the training on their practice. In addition the training, gap tasks and reflective activities, can be used to evidence the following teacher standards (2012):

Standard 5: Adapt teaching to respond to the strengths and needs of all pupils

* have a secure understanding of how a range of factors can inhibit pupils’ ability to learn, and how best to overcome these
* demonstrate an awareness of the physical, social and intellectual development of children, and know how to adapt teaching to support pupils’ education at different stages of development.

Standard 8: Fulfil wider professional responsibilities

* make a positive contribution to the wider life and ethos of the school
* take responsibility for improving teaching through appropriate professional development, responding to advice and feedback from colleagues.

# Next steps for participants

At the end of the training sessions, participants will be able to include careers related learning in their ongoing curriculum planning and teaching. To enable this the Primary Careers Tool is available on the NUSTEM website, as are further examples of STEM Person of the Week.

For participants who would like to explore the ideas further a reading list is provided at the end of each session presentation.

# NELEP and NUSTEM

The CITE training materials have been developed by the North East Local Enterprise Partnership (NELEP) in collaboration with NUSTEM at Northumbria University.

NELEP is a public, private and education partnership that works with partners to grow the North East’s economy through a Strategic Economic Plan. This acts as a blueprint for activities that need to take place to improve the region’s economy.

NUSTEM is an outreach and research group based at Northumbria University. Their vision is for a vibrant and sustainable STEM sector which meets the needs of learners and employers, reflecting the diversity of wider society.

You can find out more about each organisation at our websites:

NELEP: <https://www.northeastlep.co.uk/>

NUSTEM: [nustem.uk](https://nustem.uk/)

Careers in Initial Teacher Education (CITE) Training

# Session 1 – Unconscious bias

Presenter notes

|  |  |  |
| --- | --- | --- |
| **Slide** | **Presenter notes** | **Participant activity** |
| 1&2 | Introduce self and, depending on the group, ask them to introduce themselves. | Short introductions. |
| 3 | The aim of CITE is to support trainee teachers to include careers related learning in their teaching from the start of their career. The project consists three CPD sessions with associate gap task.  *Additional info:*  Previously careers information, advice and guidance was focussed on students in secondary school. However, there is a growing understanding that children are starting to think about ‘what they want to be’ at a young age.  Consequently, CITE aims to help teachers include careers related learning in primary teaching.  The training, and activities, can be used to evidence the following teacher standards (2012)  Standard 5: Adapt teaching to respond to the strengths and needs of all pupils   * have a secure understanding of how a range of factors can inhibit pupils’ ability to learn, and how best to overcome these * demonstrate an awareness of the physical, social and intellectual development of children, and know how to adapt teaching to support pupils’ education at different stages of development.   Standard 8: Fulfil wider professional responsibilities   * make a positive contribution to the wider life and ethos of the school * take responsibility for improving teaching through appropriate professional development, responding to advice and feedback from colleagues.   *References and extra reading:*  <https://www.gov.uk/government/publications/teachers-standards>  <https://www.educationandemployers.org/career-related-primary/> |  |
| 4 | Timeline of the training.  This slide can be adapted depending on the context that the training sessions are being used in.  The timeline given is for a model which takes place over a single year.  Another possible model is for CITE to be included in a three year BEd course, in which case, there could be one session each year.  Each session has an associated activity and reflective prompt for students to use as a ‘gap task’. There is time at the beginning of session 2 and session 3 to allow students to share their reflections. |  |
| 5 | We start by looking at what jobs an imaginary class of thirty children might do for employment. This is an analysis of the current job market NOT a prediction of the future job market.  You can see that there would only be 7 children involved in STEM fields and 15 involved in non-STEM fields.  Additional information:  The data are taken from the Office for National Statistics Labour Force Survey 2016. The data for the UK were scaled to represent a class or 30 pupils – with data rounded up or down to the nearest half-child for presentation purposes.  Those not in employment include those that are not actively looking for work – e.g. early retirement, caring for others, illness etc.  References:  <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes> |  |
| 6 | *Hand out a copy of this slide for discussion – text is difficult to see on the screen.*  This slide shows the breakdown of employment by gender.  Participants should discuss the diagram.  Ask: What do they notice? Are they surprised by this? If not, why?  If there is time, or if this is a large group, spend some time taking feedback of key discussion points. | Small group discussion.  If time, feedback discussion points. |
| 7 | *Hand out a copy of this slide for discussion*  Having looked at the gender split in employment, this slide goes back in time a little bit to look at A-level entries. The diagram shows the percentage of A-level exam entries for 2019 split by gender.  Again, participants should discuss the data.  Ask: What do they notice? Are they surprised by this? If not, why?  If there is time, or if this is a large group, spend a short time taking feedback of key discussion points.  Additional information:  The data are taken from the JCQ A-level exam entries for 2019.  Note that the absolute entry number for different subjects can be quite different.  For example: there were more girls taking A-level Physics (8799 students) than took A-level French (5840 students), and more boys taking A-level Psychology (16500 students) than A-level Computing (9649 students) or A-level Further Mathematics (10380 students).  Reference:  <https://www.jcq.org.uk/examination-results/a-levels/2019/main-results-tables> | Small group discussion.  If time, feedback discussion points. |
| 8 - 11 | We are going back in time again – this time to look at career aspirations for primary school children from NUSTEM research.  Slide 8  NUSTEM have designed the STEM Career Knowledge and Aspirations tool (STEMKAT) which we have used to evaluate the effectiveness of the work that we do in primary schools over the longer term (Emembolu et al, 2020).  STEMKAT presents a list of 30 jobs to children. The jobs represent all sectors of employment and different levels. They were chosen to ensure that there were jobs that most children would know (teacher, vet, fire fighter, shop assistant) as well as some that they might not know (lawyer, entrepreneur).  Research participants were Year 3 and year 5 children from 6 North East primary schools (450 children). The children were given the list of jobs. They first sorted them into jobs they knew and jobs they didn’t know. The jobs that they didn’t know were removed from the list of jobs. They then sorted the remaining jobs they knew into jobs they’d ‘like to do’, jobs they ‘would not like to do’, and ‘not sure’.  Slide 9 shows the basic findings of the first data set that was collected in 2015. We will look at the fourth bullet point in more detail.  Slide 10  *Hand out a copy of this slide for discussion*  This slide shows the top 10 jobs chosen by boys and girls and the percentage of pupils that included that job in their ‘would like to do’ or ‘not sure’ categories.  Participants should discuss the data.  Are there any patterns that they notice? Anything surprising.  *Notes:*  There are only two jobs that are common to both boys and girls: athlete and game tester.  The STEM jobs that girls are interested in are mainly healthcare related: vet, nurse, doctor (and game tester).  The STEM jobs that boys are interested in are physical science related: game tester, mechanic, pilot, astronaut, and engineer.  The full list of jobs was:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Actor/Actress | Detective | Farmer | ***Mechanic*** | ***Surveyor*** | | Athlete | *Doctor* | ***Game Tester*** | *Nurse* | Teacher | | ***Astronaut*** | ***Engineer*** | Hairdresser | ***Pilot*** | Tennis Player | | Author | Entrepreneur | Judge | Politician | ***Technician*** | | Banker | Estate Agent | Lawyer | Shopkeeper | *Vet* | | Civil Servant | Firefighter | Librarian | Soldier | *Zoologist* | | italicized jobs shows occupations classified as general STEM  jobs in bold show jobs classified as core STEM | | | | |   Slide 11  This slide adds in the salary range for the jobs shown on slide 10. The data is taken from the national Careers Website job explorer.  Point out the difference in average salary for girls and for boys. Choices in primary school have potential long term consequences for future earning potential.  Slide 12  The research literature suggests that children and young people are move likely to aspire to a career if it matches their self-concept (Archer and DeWitt, 2013).  In our society, science is seen as something that is done by ‘clever people’, and so children and young people who think of themselves as clever are more likely to aspire to a science career.  NUSTEM research found that girls are less likely to self-identify as *clever*, and more likely to self-identify as *kind.* (Padwick et al, 2016). This early self-identification has implications for children’s future science participation, and goes someway to explain the gender split seen in the STEM jobs shown in the table on slides 10 and 11.  *References*  Archer, L., & DeWitt, J., (2013). ASPIRES: Young people’s science and career aspirations, age 10–14. Final project report. London: Department of Education and Professional Studies, King’s College London.  Emembolu, I., Padwick, A., Shimwell, J., Sanderson, J., Davenport, C., Strachan, R. (2020) Using action research to design and evaluate sustained and inclusive engagement to improve children’s knowledge and perception of STEM careers. International Journal of Science Education, DOI: 10.1080/09500693.2020.1729442.  Padwick, A., Dele-Ajayi, O., Davenport, C., Strachan R. (2016) Innovative methods for evaluating the science capital of young children. IEEE Frontiers in Education Conference. DOI: 10.1109/FIE.2016.7757680 | Small group discussion.  If time, feedback discussion points. |
| 13 | Ask the group to discuss the question on the slide: What might explain this disparity?  Notes:  Some ideas that might come up include  Opportunities that children see around them.  Girls might do roles that would fit in within childcare because they are aspiring to be a parent.  TV and media influences (e.g. Peppa Pig has only female teachers).  Models in society are already weighted.  Culture playing a role.  Peer pressure.  Clarify ideas about broadening aspirations – there is nothing wrong with aspiring to parenthood or other caring role, but it is worth broadening the aspirations so that young people know what opportunities are available to them.  At this point you might also receive answers which relate to inherent differences in preferences between genders. This will be addressed further in the next two slides, however, it is worth pointing out the different way in which children are treated from an early age, and how that might affect their preferences.  The short video of an experiment from the BBC documentary ‘No more boys and girls’ which dressed children in ‘opposite gender’ clothes and asked adults to interact with them clearly shows that the ways that children were played with, and the toys there were offered, strongly depended on whether the adult thought they were a boy or a girl. <https://www.youtube.com/watch?v=nWu44AqF0iI>  *Further reading*  Cordelia Fine (2010) ‘Delusions of Gender’, ISBN: 978-1848311633  Gina Rippon (2020) ‘The Gendered Brain’, ISBN: 978-1784706814 | Small group discussion  If time, feedback discussion points. |
| 14&15 | In the next two slides participants will start to unpick the reasons for some of the gender differences in career choices that we have looked at so far.  There has been a tendency in society and in psychology to attribute observed differences in behaviour to EITHER genetic causes OR societal causes. It makes for simple stories.  Slide 14 gives three possible explanations for the differences we’ve seen in previous slides.   1. The choice differences we see are due to genetic differences between genders   This gives rise to the ‘Men are from Mars, women are from Venus’, or ‘men can’t multitask’ type of idea. If this idea was correct, then there should be clear differences in brains that can be linked to the different behaviours. However, this is not the case. This article from the NY Times is a useful read <https://www.nytimes.com/2018/12/03/opinion/male-female-brains-mosaic.html> .  If this explanation was correct, we would expect to see similar percentages of women in science research in different regions of the world as can be seen in the 2016 UNESCO data.   * 48.2% for Central Asia * 45.1% for Latin America and the Caribbean * 41.5% for Arab States * 39.3% for Central and Eastern Europe * 32.7% for North America and Western Europe * 31.8% for Sub-Saharan Africa * 23.9% for East Asia and the Pacific * 18.5% for South and West Asia   (<http://uis.unesco.org/sites/default/files/documents/fs55-women-in-science-2019-en.pdf>)   1. There are personality differences between people that are due to genetics, and that influences their choices   Psychologists have long been interested in differences in personality. One popular model of personality traits is known as the Big Five. This model suggests that there are five key traits that form our personalities: Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism. Studies of identical and non-identical twins show that there are higher correlations between aspects of personality between identical twins than between non-identical twins – suggesting a genetic contribution to personality. However, these studies don’t explain all of the differences between pairs of twins.   1. Children’s attitudes and beliefs are shaped by the society that they grow up in.   A third possibility is that our attitudes and beliefs are socially constructed. We know how to behave as a girl, or as a British person because we have seen and been taught how to behave in this way. Think about queueing. This is an inherently British trait – we have been shown how to queue since we were very little (lining up in play group, being told to wait when getting on the bus etc). That behaviour is socially constructed: there isn’t a genetic reason why we queue and people from other cultures don’t. Similarly, we are ‘taught’ how to behave in gender appropriate ways from birth through praise and approbation of those around us, and the images that we see in society.  *References and further reading:*  <https://www.psychologistworld.com/personality/five-factor-model-big-five-personality>  Maltby, J., Day, L., Macaskill, A., (2017) Personality, Individual Differences and Intelligence. 4th Ed. ISBN: 978-1292090511. Especially Chapters 7 and 8. |  |
| 15 | Evidence suggests that the first explanation is wrong – there is no such thing as a male brain or a female brain – there are only human brains.  There is evidence that personality is influenced, in part, by genetics.  Much of psychology would now say that there is a strong interaction between nature and nurture – they can’t be separated.  Our personalities and choices are influenced both by our genetics and by the society in which we grow up. There is also a growing awareness that the brain is ‘plastic’ for longer than once thought, and that our experiences can shape our brain even later in life. Thus how we are treated, or what we do, can shape our brain.  Thus, the differences that we see in children’s career and subject choices are likely to be due to the interplay of genetics (personality) and society.  *References and further reading:*  Article about some of the uses of brain plasticity in therapeutic circumstances. <https://www.wired.co.uk/article/game-your-brain> |  |
| 16 | The session now moves on to consider the network of influences that surround a child, both in the formal education, but also in the informal day-to-day life.  We are looking at who or what might influence children in their career aspirations, their exam choices and their career choices. |  |
| 17& 18 | Show slide 17 and ask participants to name as many influencers as possible  Slide 18 provides a range of different answers, with teachers and schools highlighted – because they are the two influencers that we are interested in for this project. | Small group discussion  If time, feedback discussion points. |
| 19 | Having looked at the problem of gendered career choices, we now begin talking about our (teachers) contribution to the problem.  Emphasise that this is not about judging them as teachers or as people, but that there are consequences which arise because we have grown up within a society that proscribes a person’s choices and actions depending on their gender. |  |
| 20&21 | *Give a copy of slide 21, and a pair of scissors to pairs of participants.*  This slide is used to illustrate how our brain can interpret information based on what we have experienced.  Ask participants: Which square, A and B, is the lighter colour?  Most participants say that square B is the lighter square. In fact they are the same colour.  Ask participants to carefully cut out square A and put in where square B is. They will ‘see’ that the square changes colour and becomes lighter as it moves from position A to position B. If they move it back to position A it will become darker again.  This is an optical illusion which arises because we are interpreting the 2D image as if it was a 3D object. We have learnt that chess boards have squares of alternating colours, and that objects in shadow are brighter than they appear. Our experience (our bias) means that we interpret the diagram to see the two squares as being different shades of grey, even though they are identical. | Cutting out small shape and looking at the colour of the square. |
| 22&23 | This slide presents a riddle which relies on stereotypes.  Participants (because we’ve been talking about gender) may give the answer ‘mother’  However, when out of this context, many people will provide other possible (but statistically less likely) answers such as ‘step dad’, ‘new husband’, ‘gay dad’.  Slide 23  We have an ingrained stereotype of a surgeon which is often male. And that colours our answer to the riddle.  Ask participants to give other careers-related stereotypes that they can think of.  The fact that careers related stereotypes come to mind easily shows how ingrained they are. There are also issues about language (e.g. fireman, binman, dinner lady/nanny) which shape our ideas.  It is important to note that we hold the stereotypes whether we agree with them or not. Our quick, automatic response will often revert to these stereotypes, and it takes effort to think of the alternative. | Read and answer the riddle.  Whole/Small group discussion |
| 24 | Myra Sadker and David Sadker spent 25 years looking at the experience of school for girls in America. They used a range of research methods, including direct observation of classroom practice.  Some of their findings are shown on this slide.  *References and further reading*:  Sadker, D., Zittleman, K.R., 2009 Still Failing at Fairness: How Gender Bias Cheats Girls and Boys in School. ISBN: 978-1416552475 |  |
| 25 | This slide presents more recent research from 2016. The researchers worked in 6 schools across Sweden, and observed video recordings of 14 teachers and 195 pupils (85 boys and 110 girls). Their focus in this study was on the interactions between teachers and pupils. They looked at all interactions (general classroom instructions etc.) and interactions that were focussed specifically on science.  The data from the study show that male and female teachers both interact more with boys than with girls, but that the difference is greater for male teachers. This applies regardless of whether all interactions were looked at, or just science specific interactions.  Note that the difference was present for female teachers – they are showing gendered interactions because of the gendered nature of society.  You might also want to discuss the different types of praise interactions that may be used with boys and girls and the effect of that on pupils: girls are praised for ‘goodness’, and boys praised for effort. (Dweck, 2006). This can lead to girls thinking that their abilities are innate and unchangeable, and boys thinking that they can develop ability through effort and practice.  *References and further reading*  Dweck, C. (2012) Mindset. ISBN: 978-1780332000  Eliasson, N., Sorensen, H., Karlson, K.G., 2016. Teacher-student interaction in contemporary science classrooms: is participation still a question of gender? International Journal of Science Education, 38:10, 1655-1672.  <https://www.psychologytoday.com/us/blog/the-science-success/201101/the-trouble-bright-girls>  The power of words: How to give praise that motivates and empowers girls. <https://www.amightygirl.com/blog?p=26248> |  |
| 26 and 27 | This slide provides suggestions of five different ways in which bias might affect children’s education in primary.  Print out the slides from UB Primary Bias Discussion Exercise and share with participants – the second slide in each case provides further points to support the main statement.  1. The pattern of classroom interactions can unintentionally reinforce messages of expected and accepted behaviours.   * Boys are more likely to shout out and so get more time * Teacher punishes an entire class for the actions of a minority * Girls are often used as a behaviour management strategy.   2. Ideas about what children are ‘good’ at, and subsequently what paths are open to them are embedded at an early age.   * The phrase ‘typical boy writer’ becomes an excuse for low achievement * Extra-curricular clubs conform to gender stereotypes * Children can be selected for extra-curricular activities based upon strengths and confidence   3. Many texts uphold traditional stereotypes.   * Non-fiction texts often portray scientists as men in white lab coats, reinforcing the stereotype * Fiction texts: Heroes are usually male. Women and girls often need saving.   4. There is a surprising amount of sexist language and behaviour used in society and this can be picked up and imitated by young children.   * ‘Don’t be such a girl’. * ‘Man up’. * ‘Can I get two strong boys to help carry some books?’   5. Cultural change will only be achieved in all members of the school community are involved, including parents and carers.   * Text taken from a homework handout. ‘Please find attached some tricky words, works we can’t sound out. … the children will find it very useful to know these words by sight. Try making another set and play pairs, snap or hunt the tricky word around the house. Boys particularly like the latter because it’s physical and competitive especially if you use a timer. See if you can spot tricky words when you’re out and about or when you’re reading books together.’   6. Teaching materials and displays can reinforce gender stereotypes.   * Images used in displays often conform to gender stereotypes. * Presentations and resources can include stereotypes and stereotypical language.   Note that this discussion may provide challenging for participants and will need to be handled carefully. They can also be directed towards additional information as appropriate.  Slide 27 provides some additional prompts for consideration about language in the classroom.  The phrase ‘OK guys, pens down’ is often the most controversial example of a gendered statement that might be heard in the classroom. Participants might feel that ‘guys’ has become a non-gendered term. However, as with many ‘generic’ terms, the default is male – consider who you would draw or describe if you were drawing a group of males. As teachers, it is worth considering if there are other terms that could be used to ensure that both boys and girls are included.  This blog post describes one company’s attempt to think about gender inclusive language to replace ‘hey guys’. <https://www.hotjar.com/blog/gender-inclusive-language-workplace/>  UNESCO produced guidelines on gender-neutral language in 1999. Although old, the principles still hold and you can download a copy from [here](https://unesdoc.unesco.org/ark:/48223/pf0000114950?posInSet=1&queryId=a45a3fc4-738d-4da4-96c8-fa1bbf7833b2). If you want to find out more searching for ‘gender-neutral language’ will provide many examples from different professions and organisations. | Small group discussion of the five statements on the slide. |
| 28 | This slide contains some initial strategies that could be used to start to tackle the issue of unconscious bias in classrooms.  Further detailed ideas can be found in materials produced by Improving Gender Balance Scotland: <https://www.iop.org/education/teacher/support/girls_physics/resources/file_69612.pdf> |  |
| 29 | This slide contains a brief summary of the session so far. |  |
| 30 - 31 | This slide introduces the ‘gap task’ and the three tools that were created to support participants to think about bias and gender in primary schools.  Participants should choose one (or more) of the Tools and use it to examine gender and careers in their placement school. They could also use the exercise as a prompt for discussion with their school based mentor about unconscious bias in the school context.  Tool 1: Classroom Interactions Analysis Tool  This tool allows students to look closely at the classroom interactions that take place during their observations of teaching. Emphasise that *Tool 1 should only be used with* ***permission*** *of the teacher being observed*. In order to reduce observation effects, it is also suggested that participants ask permission, and then wait a little while so that the teacher behaviour is not affected.  Tool 2: Literature Analysis Tool  This tool allows students to look at the main and supporting character in a children’s story book, and how they are described.  Tool 3: Display Content Analysis Tool.  This tool allows students to look at displays around the school and examine careers content that may be included.  It is important to note that these tools are not intended to be an assessment of the school, but opportunities for the participants to think reflectively about gender and careers. | Share each tools and give participants time to look at them.  Discuss possible uses. |
| 32 | To support the participants to reflect on the CPD and their learning, each tool has reflective prompts on the back. These are intended to guide thinking about the issues they have explored using the tool. The reflective prompts are common to all three tools.  You may wish to ask participants to complete the activity within a set period of time, and return their completed forms to you.  Alternatively, you may wish to ask them to bring the completed forms to the next training sessions | Discuss reflective activity. |
| 33 | Ensure that participants know what their next steps are, and have thought about which tool they would like to use.  Participants may wish to complete the documents by hand, or electronically. You should send copies of the tools electronically to them after the session.  If the date for training session #2 is known, include it in this slide. |  |
| 34 | Include your contact details. |  |
| 35&36 | References and further reading. |  |

1. <https://nustem.uk/primarycareers/> [↑](#footnote-ref-1)
2. <https://nustem.uk/stem-person-of-the-week/> [↑](#footnote-ref-2)