

# Educational toolkit to help fight gender stereotypes in secondary school

Challenging learners to discover a world of opportunities based on the example of the transport sector







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# INTRODUCTION

# Why this toolkit and the focus on the transport sector?

Dear teacher, the toolkit you have in your hands is the result of a request from the European Commission for an educational toolkit that could fight gender stereotypes taking the example of the transport sector.

The design and activities of the toolkit were formulated on the basis of several facts. The first fact is that, at present, only 22 % of the people working in the transport sector in the European Union (EU) are women. Many girls do not consider a career path in the transport sector because of gender stereotypes and expectations that lead them in a different professional direction.

Second, the transport sector and what it entails to work in it remain largely unknown by girls and boys alike.<sup>3</sup> The truth is that the transport sector, as it becomes more and more technological and environmentally friendly, can be a very satisfying and rewarding career option for both boys and girls.

Third, the school system, which is a fundamental part of our society, contributes to the emergence and continuity of gender stereotypes in many ways, for example in the teaching materials and even in teachers' unconscious different expectations from girls and boys. In turn, discussing and exploring unknown or unexpected career options for boys and girls can be an opportunity to break through gender stereotypes in and beyond the classroom.<sup>4</sup>

In summary, the main purpose of this toolkit is to make young learners understand that occupations are not reserved for a particular gender while they learn about the transport sector as a possible career option for anyone.

We sincerely hope that all the users of the toolkit will enjoy working with it as much as we have enjoyed developing it.<sup>5</sup>

# Who is this toolkit for?

This toolkit has been developed for secondary school teachers and secondary school young learners (14–15 years old). It aims to support teachers to organise discussions in the classroom to effectively address gender stereotypes, based on the example of the transport sector.

Other than secondary school teachers, this toolkit also allows school leaders and school counsellors to challenge gender stereotypes in schools, where an environment free of stereotypes may lay a firm foundation for children to grow up freely and develop their unique interests and talents.

In addition to the above-mentioned target groups, teachers, school leaders and school counsellors are also encouraged to share their work around the toolkit with the learners' parents whenever possible.

<sup>1</sup> Eurostat (2019). Employment by sex, age and economic activity (NACE Rev. 2) - 1 000 (lfsa\_egan2). Retrieved from: <a href="https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfsa\_egan2&lang=en">https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfsa\_egan2&lang=en</a>.

<sup>2</sup> Gendered aspirations are clearly evident at five years of age. See, for example, OECD (2021). The Future at Five. Gendered aspirations of five-year-olds. Retrieved from: <a href="http://www.oecd.org/education/school/early-learning-and-child-well-being-study/">http://www.oecd.org/education/school/early-learning-and-child-well-being-study/</a>

<sup>3</sup> See, for example, European Commission (2017). Study on a Pilot Project: Making the EU Transport Sector Attractive to Future Generations. Retrieved from: <a href="https://ec.europa.eu/transport/themes/social/studies/social\_mt">https://ec.europa.eu/transport/themes/social/studies/social\_mt</a>.

<sup>4</sup> See, for example, EIGE (2016). Gender in education and training. Luxembourg: Publications Office of the European Union. Retrieved from: <a href="https://eige.europa.eu/publications/gender-education-and-training">https://eige.europa.eu/publications/gender-education-and-training</a>.

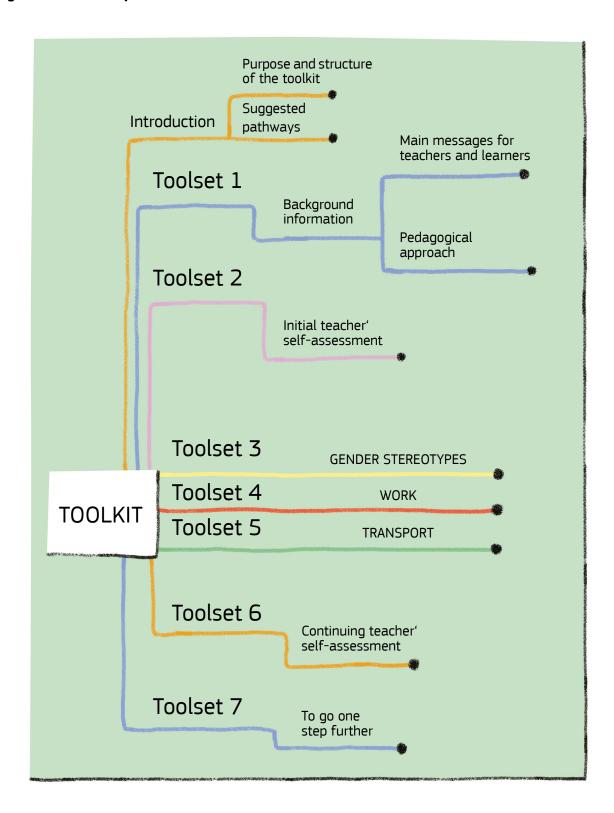
<sup>5</sup> See also European Commission (2021). Educational toolkits to help fight gender stereotypes based on the example of the transport sector: Final study report on the development of the toolkits. DOI: 10.2832/11827.

## What does it contain?

The toolkit contains the following toolsets:

- <u>Toolset 1: Background information.</u> This toolset provides an important entry to the whole toolkit. It
  contains the main messages for teachers and learners, and the pedagogical approach on which the
  toolkit is based.
- Toolset 2: Initial teachers' self-assessment. This toolset offers tools that will allow you to analyse
  where you stand regarding gender-sensitive pedagogy, and all the issues raised in the toolkit. You are
  encouraged to explore any of the self-assessment tools, or all, prior moving on to using the toolkit
  in the class. This self-assessment is meant to stimulate self-reflection and gain a complete view of
  the complexity of the issues underlying the activities.
- Toolset 3: Gender stereotypes. This toolset comprises a set of learning activities that will allow you
  and the learners to tackle different gender stereotypes and explore the extent to which schools are
  stereotype-free environments or not.
- <u>Toolset 4: Work.</u> Learning activities in this toolset help you explore two main aspects. First, you will
  be able to analyse how gender stereotypes are particularly present in the world of work. Second, you
  will examine how important career decisions are made in a person's life and the influence they have
  in a person's future and personal development access to work-life balance, goods and services,
  etc.
- Toolset 5: Transport. Continuing the progression from Toolsets 3 and 4, the learning activities in
  this toolset will allow you to further engage with gender equality while getting better acquainted
  with some of the current occupations in the transport sector. The toolset also offers the possibility
  to get acquainted with the prospect of future occupations in transport, as well as the skills such
  occupations will require.
- Toolset 6: Continuing teachers' self-assessment. This toolset invites you to reflect on the experience
  of having worked with the toolkit in class, and in what ways this experience has changed your
  perceptions about gender-sensitive pedagogy and all the other issues raised in the toolkit.
- Toolset 7: To go one step further. Finally, this toolset provides you with the opportunity to personally explore further, if you wish, all the matters that have been tackled in the whole toolkit. It offers glossaries, references to key data, selected resources and further reading.

Figure 1. Visual map of the toolkit



#### THE STRUCTURE OF THE LEARNING ACTIVITIES

Toolsets 3, 4 and 5 are a collection of **25 different activities** to be done with learners in class or in an online learning environment. The learning activities relate to the main messages of the three toolsets (i.e. gender stereotypes, work and transport). Moreover, these activities aim to improve learners' thinking skills and develop their capacity for empathy. They also introduce different cooperative strategies and thinking routines.

For ease of use, all the learning activities in Toolsets 3, 4 and 5 share the following key characteristics:

- ✓ **Common template**: All the activities use the same template, which will provide you with clear information, resources, handouts, step-by-step guidance needed for the development of the activity, tips and ideas for variations or extensions of each activity.<sup>6</sup>
- ✓ Emphasis on metacognition: At the end of each activity, there is a key section dedicated to debriefing, a fundamental part of the activity, as it concludes with a reflection on the learning experience. The core principle of this debriefing is the assertion that we do not learn from the experience, but we learn by thinking about the experience (metacognitive reflection). Thus, the debriefing session helps learners process and make meaning of the lessons learnt; this is mainly enabled by questioning, which allows learners to understand, reflect and maximise the benefits of the learning experience. It provides teachers with useful information for evaluation, through reflection on what was positive and what could be improved the next time they use the activity, and for assessment, by supporting learners' growth and understanding (assessment for learning).
- ✓ **Opportunities for multidisciplinarity:** The toolkit constitutes an important collection of **resources that can be used across the whole curriculum** and this includes language of schooling and foreign languages, as the toolkit is **accessible to download in 24 different languages**.

# Where should you begin?

From the beginning to the end, the sequencing of the toolsets and activities in this toolkit follows the logic of **progression**. At the same time, the toolkit has been designed in a way that it allows you to **develop your own pathway**. The toolkit provides a context and the contents to pursue specific interests. You may pick and choose material according to your own needs and inspiration. As you browse through the toolsets and the learning activities, you might do so asking yourself the **three why questions** to make your own selection (see Figure 2).<sup>7</sup>

The toolkit also offers **suggested pathways to the learning activities** (see the next section) according to specific learning goals, which are clearly specified under each pathway. These pathways vary in length and complete different learning aims and relevant sequences. It is possible to follow one or several of the recommended pathways.

WHY might this matter to people around me?

WHY wight this matter to the world?

Figure 2. The '3 Whys' thinking routine

# Suggested pathways to the learning activities

The learning activities follow an internal coherence that will guide you in your progression along the three main concepts explored (i.e. gender stereotypes, work and transport). However, for ease of use, there are **eight suggested pathways** varying in length, which can be completed to answer the specific interests listed below. The purpose of the suggested pathways is to offer a flexible approach for teachers to adapt the learning activities to the needs of their particular context.

<sup>6</sup> Inspired by different templates developed by Learn to Change, Change to Learn: https://www.learntochange.eu/.

<sup>7</sup> The '3 Whys' thinking routine was developed by Project Zero, a research centre at the Harvard Graduate School of Education. More information is available at <a href="https://pz.harvard.edu/sites/default/files/The%203%20Whys.pdf">https://pz.harvard.edu/sites/default/files/The%203%20Whys.pdf</a>.

## 1. Opening up to new expectations

Use this pathway to guide the learners along a path of discovery where all the main issues of the toolkit will be explored — gender stereotypes, career choices and the transport sector.

- Activity 1: Uncovering women's history Learners research how different content in textbooks and curricula are important avenues towards equality within education.
- Activity 3: What is expected of me? Learners question the social construction of gender stereotypes and confront their own perceptions of societal expectations related to gender.
- Activity 9: Where I will be in 10 years' time? Learners explore how they see their careers in 10 years and discover the implications of their choices and compare their choices with those of the class.
- Activity 16: Don't panic, I am a mechanic! Learners discover the variety of jobs in the transport sector
- Activity 17: My dream job Learners broaden their exposure to different perspectives on future
  careers and improve their understanding of career opportunities and motivation to aspire to their
  dream careers.

# 2. Challenging gender stereotypes

In this pathway, the learners have the opportunity to challenge gender stereotypes in three different dimensions — life, the world of work and the transport sector.

- Activity 7: Real men aren't caring ... or are they? Learners discover that gender relations are
  a complex multilevel system of difference and inequality that comprises, but is not limited to, roles
  and identities at the individual level, patterns of behaviours and organisational practices at the
  community level and cultural beliefs and distribution of resources and power at the society level.
- Activity 8: Researching gender segregation in the labour market Learners research and discover the patterns of concentration of women and men in different fields and positions.
- Activity 16: Don't panic, I am a mechanic! Learners consider the skills needed to perform certain jobs in the transport sector and discuss whether such skills can be considered gender neutral.
- Activity 19: Suppose that there is gender balance in the transport sector Learners discover
  the different transport modes and infer why gender balance in transport is positive for a democratic
  society.

## 3. Thinking about my future careers

The focus of this pathway is the world of work. Learners will have the opportunity to explore their own future expectations and examine different career options.

- Activity 9: Where I will be in 10 years' time? Learners explore how they see their careers in 10 years and discover the implications of their choices and compare their choices with those of the class.
- Activity 12: Could it be me? Learners discuss why it is important to make carefully considered
  decisions regarding career choices. There are a few key decisions for structuring one's life and career
  choice is one of them.
- Activity 16: Don't panic, I am a mechanic! Learners discover the variety of jobs in the transport sector.
- Activity 17: My dream job Learners broaden their exposure to different perspectives on future
  careers and improve their understanding of career opportunities and motivation to aspire to their
  dream careers.
- Activity 21: Transport jobs are not for women! Learners identify the different skills (such as specific or general/transferable, hard and soft skills) required to work in the transport sector.

## 4. Greening of the economy and the sustainability of transport sector

This pathway guides the learners in their exploration of the sustainability of the transport sector.

- Activity 18: The exceptional system of sustainable urban mobility Learners discover what is sustainable urban mobility.
- Activity 22: Transport is sustainable mobility Learners reflect about the relation between transport and sustainability and the value of green, efficient means of transportation.
- Activity 23: Future transport jobs will be green and technological Learners explore how the
  transport sector will be using new technologies and acknowledge the importance of technical and
  digital skills in the transport sector.

## 5. A path towards STEM for girls and boys

This pathway aims to stimulate learners' interest in the fields of science, technology, engineering and maths (STEM).

- Activity 2: Write three names Learners explore the connection between gender stereotypes and biases in society and what is taught in schools and recognise there are fewer women figures in textbooks and other learning resources compared to men.
- Activity 10: Look around and tell me what you see Learners infer that educational and curricular
  options of boys and girls are markedly stereotyped and discuss ways of ensuring that we can all can
  make choices free from gender stereotypes.
- Activity 17: My dream job Learners broaden their exposure to different perspectives on future
  careers and improve their understanding of career opportunities and motivation to aspire to their
  dream careers.
- <u>Activity 22: Transport is sustainable mobility</u> Learners reflect about the relation between transport and sustainability and explore how to improve transport in the future.

# 6. To develop your learners' thinking skills

This pathway offers differentiated learning, providing for diverse thinking and learning styles.

- <u>Activity 5: I see, I think, I wonder</u> Learners differentiate between what is objective and what is subjective while they question self-awareness and self-reflection about gender stereotypes.
- Activity 9: Where I will be in 10 years' time? Learners explore how they see their careers in 10 years and discover the implications of their choices and compare their choices with those of the class.
- Activity 14: Projecting the transport sector across time Learners discover and discuss why the transport sector plays a unique role in modern life.
- Activity 22: Transport is sustainable mobility Learners reflect about the relation between transport and sustainability and explore how to improve transport in the future.

# 7. The importance of work in our society and a balanced representation of women

Through this pathway you can explore in depth the relevance of work in our society and our way of living, to question whether women and men are fairly represented in all fields of work and why that is important.

Activity 4: Designing a wall newspaper — a special edition on gender issues — Learners conduct research, explore the advantages and learning opportunities of teamwork (e.g. support and cooperation, diversity of talents, perspectives and feedback) and develop critical and creative thinking skills and practise decision-making processes.

- <u>Activity 8: Researching gender segregation in the labour market</u> Learners research and discover the patterns of concentration of men and women in different fields and positions.
- Activity 11: A leader of the 21st century Learners experience cooperative teamwork, whereby they change roles, including the practice of leadership, irrespective of gender.
- Activity 13: I used to think ... but now I think ... Learners compare their ideas at the beginning and at the end of the pathway.
- Activity 19: Suppose that there is gender balance in the transport sector Learners discover
  the different transport modes and infer why gender balance in transport is positive for a democratic
  society.

## 8. The importance of transport in our way of living

Use this pathway to explore the transport sector through different perspectives — the past, present and future — and work opportunities for girls and boys alike.

- Activity 14: Projecting the transport sector across time Learners discover and discuss why the transport sector plays a unique role in modern life.
- Activity 15: What should I know about automation? Learners connect STEM subjects to careers.
- Activity 20: Transport is about lorry drivers Learners recognise the different subsectors of the transport sector, discuss how the transport sector impacts their daily life and grasp the bigger picture of the transport sector.
- Activity 21: Transport jobs are not for women Learners identify the different skills required to work in the transport sector and identify the reasons for the existing gender imbalance.
- Activity 24: Transport is my choice Learners discover the potential of the transport sector in
  offering diverse employment opportunities and acknowledge the potential attractiveness of the
  transport sector for women.

# TOOLSET 1: BACKGROUND INFORMATION

# Main messages for teachers and learners

The rationale of the toolkit has two dimensions designated as the *tools* and the *practice* of the toolkit (Table 1). The toolkit offers all the necessary *tools*. The teachers, with their different skills, talent, expertise and sensitivity, develop and operationalise the *practice* of the toolkit in their context.

Table 1. Overview of the toolkit dimensions

	Structuring concepts	Approaches	Educational aims	Gender-sensitive pedagogy
Tools	<ul> <li>Curricula are not neutral (formal, hidden and null)<sup>8</sup></li> <li>Schools are stable and solid institutions, with their own specific culture</li> </ul>	<ul> <li>Curriculum</li> <li>Pathways</li> <li>Toolsets</li> <li>Glossary</li> <li>Links to external resources</li> </ul>	<ul> <li>Providing         early learning         interventions</li> <li>Broadening         learners' horizons         (real-world         experiences)</li> <li>Acting as role         models: 'We         become what we         see around us'</li> </ul>	<ul> <li>Developing self-awareness of own thoughts, beliefs, feelings, motivations and biases</li> <li>Developing a contextual and empathic understanding of the other</li> </ul>
Practice	<ul> <li>Advancing gender balance</li> <li>The teacher is a facilitator of change</li> <li>Learning is a cognitive, emotional and social activity</li> </ul>	<ul> <li>Change as         <ul> <li>a process</li> </ul> </li> <li>Culturally         <ul> <li>responsive</li> <li>teaching and</li> <li>learning</li> </ul> </li> <li>Participative and active methods</li> </ul>	<ul> <li>Debunking gender stereotyping</li> <li>Empowering learners</li> <li>Developing key competences for lifelong learning</li> <li>Gender balance</li> </ul>	<ul> <li>Towards achieving gender literacy 9</li> <li>Promoting a gender-sensitive environment</li> </ul>

<sup>8</sup> The 'formal curriculum' can be generally understood as the intentionally taught knowledge and skills in courses, lessons and learning activities; the 'hidden curriculum' refers to the norms, values and beliefs unwittingly conveyed in the classroom and the social environment; while the 'null curriculum' refers to what learners do not have the opportunity to learn — the concepts and skills that are not part of their learning.

<sup>9 &#</sup>x27;Gender literacy' is understood here as the ability, confidence and willingness to engage with gender issues, reflect on and change own perceptions, stereotypes and biases.

The **learning activities** provide a context that stimulates reflection and dialogue, in which learners have the opportunity to question and confront their stereotypical thinking and biases and, both as a group and as individuals, to review their perceptions. Teachers should be attentive to learners' behaviours that denote that such learning is being processed, such as expressing own beliefs and feelings, accepting critical feedback, active listening, revising own opinions after listening to others' arguments, paying attention to verbal and non-verbal communication and choosing cooperation rather than competition.

The activities were developed around the debunking of gender stereotypes, while engaging with the possibilities that the transport sector offers in terms of career pathways to both girls and boys.

### Messages related to debunking gender stereotypes

- Stereotypical expectations based on socially fixed norms for boys and girls are a root cause of gender inequality. They affect self-perception and well-being, the ways we interact with others and have a strong influence on whether and how individuals participate in education and training and the world of work.
- Gender stereotypes have a negative impact on both girls and boys as they limit individual aspirations, choices and freedom. In school, gender stereotypes strongly affect a young person's classroom experience, preferences of boys and girls for certain disciplines and overall perception of their abilities.
- Gender stereotypes are often combined with other stereotypes such as those based on race or ethnic origin, religion or belief, disability, age or sexual orientation.
- Assumptions about gender may be conscious or unconscious and can result in different treatment of one group compared to another.
- Addressing gender stereotypes throughout the education cycle is key to enabling children to have
  equal opportunities independent of their gender. This includes examining the norms, values and
  beliefs unwittingly conveyed in the classroom and the social environment (hidden curriculum) and
  what learners do not have the opportunity to learn (null curriculum).
- Challenging gender stereotypes in school can help to reduce gender imbalances in other spheres of life, such as at home or in the workplace.
- Providing girls and boys with new role models has a positive impact on making the best use of their potential.
- Out-of-school and family contexts are often rich in implicit messages related to gender; teachers have a responsibility to make the implications of such messages visible and challenge them.

## Messages related to the importance of the transport sector

- Mobility and transport matters to us all. From daily commuting to work, visiting family and friends, tourism, to the proper functioning of global supply chains for the goods in our shops and for our industrial production, mobility is an enabler of our economic and social life.
- Free movement of people and goods across its internal borders is a fundamental freedom of the EU and its single market. Travelling in the EU has led to greater cohesion and a strengthened European identity.
- As the second-largest area of expenditure for European households, the transport sector contributes 5 % to European GDP and directly employs around 10 million workers.
- The transport sector is bigger and wider than what young people see and perceive, especially in the 'backstage' of the daily organisational effort to provide the service.
- The most serious challenge facing the transport sector is to significantly reduce its emissions and become more sustainable. Changes in the sector, in particular those relating to automation and digitalisation, are creating new challenges, but the ongoing digital transformation also presents new opportunities.
- Some parts of the transport sector are expected to grow and employ more workers in the future and will be in need of highly skilled workers with competences in engineering and technology.

# Pedagogical approach

The underlying pedagogical principles of the toolkit are the following:

#### Key competences for lifelong learning

In line with the widely adopted competence-based approaches of the European education systems, and following the <u>Council Recommendation</u>, <sup>10</sup> the toolkit aims to develop in learners the key competences for lifelong learning needed for personal fulfilment, a healthy and sustainable lifestyle, employability, active citizenship and social inclusion. Among these competences we can highlight the following:

- numerical, scientific and engineering skills;
- digital and technology-based competences;
- interpersonal skills and the ability to adopt new competences;
- active citizenship;
- entrepreneurship.

#### **Active methodologies**

Although we could date active methodologies as far back as the Socratic method in ancient Greece, it has been in the last decades that we have seen a remarkable movement to make learners the centre of their own learning. As suggested by Barnes (1989), active learning is purposive, reflective, negotiated, critical, complex, situation-driven and engaging.<sup>11</sup>

#### Cooperative learning

Within the ample choice of active methodologies, we favoured cooperative learning because of the way it meets the objectives of this toolkit. In general, it is agreed among teachers that this is an approach that increases learning, self-esteem, a positive attitude towards learning and the acceptance of differences by developing a positive interdependence among learners. In cooperative learning, the goal is not individual success. Success is shared as it depends on each member of the learning community contributing to it (interdependence). Cooperative learning is more motivational and therefore it produces deeper learning, better class relationships, deeper critical thinking and better acceptance of oneself and others.

#### Learning to learn

Learning to think and developing self-regulation skills are key for young people to become more effective and autonomous learners. In combination with cooperative learning, it is an enormously powerful tool. By means of visible thinking routines, 12 the objective is to help learners to understand better what kind of learners they are and how to improve their intrinsic learning capacity.

Teachers support learners by helping them develop the skills they need to be critical and creative in their thinking, and to make hypotheses, weighing different options and their consequences. They help learners become more empathetic by engaging with different viewpoints, and understanding how others think and feel.

Council Recommendation of 22 May 2018 on key competences for lifelong learning (OJ C 189, 4.6.2018, pp. 1–13), <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C</a>, <a href="https://europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C">2018.189.01.0001.01.ENG</a>.

<sup>11</sup> Barnes, D. R. (1989). Active Learning. Leeds University TVEI Support Project.

<sup>12</sup> Visible thinking routines were developed by Project Zero, a research centre at the Harvard Graduate School of Education. More information is available at <a href="http://www.pz.harvard.edu/projects/visible-thinking">http://www.pz.harvard.edu/projects/visible-thinking</a>.

#### **Experiential learning**

In order to promote deeper learning experiences and better engage learners in their learning process Kolb and Kolb's experiential learning cycle<sup>13</sup> has also been considered in the toolkit's design. In this model, a direct experience is provided by the teacher and this experience is followed by individual or group reflections (metacognitive activity). There follows a phase of conceptualisation. In the final phase, learners should reflect about the application of what they have learnt in their own life.

#### Assessment

The toolkit provides 'light' assessment tools that can be applied at different stages in the activities to help teachers and learners in their teaching and learning processes. Assessment is understood in these toolkits as a process supportive of reflection and learning, and different tools are provided for teachers and learners in the suggested pathways.

<sup>13</sup> Kolb, Alice and Kolb, David (2018). 'Eight Important Things to Know About the Experiential Learning Cycle'. ACEL National Conference, <a href="https://experientiallearning.net/listing/8-important-things-to-know-about-the-experiential-learning-cycle/">https://experientiallearning.net/listing/8-important-things-to-know-about-the-experiential-learning-cycle/</a>.

# TOOLSET 2: INITIAL TEACHERS' SELF-ASSESSMENT

# Initial self-assessment tool 1: Questionnaire

#### Focus of the tool

As teachers we do not only teach what we consciously teach. Our learners learn not only what we teach them explicitly, but they also learn when they infer things that we do not teach consciously but are present in schools.

Learners learn that if boys occupy more space in the playground, or if they are louder in class and receive more attention from the teachers, this is because their role in life is dominant. This example corresponds to what we call the hidden curriculum.

Learners also learn that if women are underrepresented in the curriculum, if we do not teach about women artists, scientists or writers, it might be because they are not worth it, there are not many or they are not so good. This example suggests the null curriculum. With such messages, not only are we depriving girls from the reference points they need, but we are also teaching girls — and boys — that women's role in life is secondary.

The focus of this tool is to make teachers aware of the null and the hidden curriculum, just as they are aware of the formal curriculum.

#### To take into account

You do not have to answer the questions in writing if you do not feel like it. The initial self-reflection can be done mentally. However, use of a printed sheet and pen invite for a deeper reflection.

	Questionnaire	Agree	Disagree	Not sure
1	In my school there is no gender discrimination.			
2	In the playground, it is normal for boys to take up more space because they play football.			
3	In my class, I treat boys and girls in the same way.			
4	When a learner is troublesome, I usually say: 'Tell your mother to come in to see me because I need to talk to her.'			
5	I tend to pay more attention to boys because they are noisier. Girls do not need so much attention.			
6	I use inclusive language at school.			
7	There is no such thing as 'games for girls' and 'games for boys'.			
8	Men and women teachers have the same opportunities for promotion and professional development.			
9	Women and men teachers are equally likely to hold leadership positions at school.			
10	My classroom materials (including textbooks, images, reading materials, written assignments) portray men and women with equal respect, potential and in all their diversity.			
11	I do not think there should be 'toys for boys' and 'toys for girls'.			
12	It is fine to say 'men', 'boys' or use the masculine form when you refer both to 'men' and 'women' or 'boys' and 'girls' in general. Everybody understands that the masculine form includes both genders.			
13	The school cannot do much about gender discrimination. That is something learners must learn at home.			
14	In staff meetings, it is normal to hear teachers referring to boys with good marks as 'very intelligent' and to girls with good marks as 'very hard-working'.			
15	The teaching materials I use show women and men equally and reflect the needs and life experiences of girls and boys.			
16	Boys are usually better at science and maths. Girls are usually better at languages.			

If you were not absolutely sure about some of your answers to some of the statements, or there are features you would like to observe more closely and consciously while you are working with the toolkit with your learners, you can use the space below for your observation and reflection.

What do I need to observe?	What did I find out?

# Initial self-assessment tool 2: Mini task

#### Focus of the tool

This mini task can be used to complement any other tools suggested in this toolset or independently. The objective is to raise your consciousness about the existence of a hidden curriculum and a null curriculum that run parallel to the formal curriculum and that very often go unperceived by learners and teachers alike.

Learners learn that if boys occupy more space in the playground, or if they are louder in class and receive more attention from the teachers, this is because their role in life is dominant. This example corresponds to what we call the hidden curriculum.

Learners also learn that if women are underrepresented in the curriculum, if we do not teach about women artists, scientists or writers, it might be because they are not worth it, there are not many or they are not so good. This example suggests the null curriculum. With such messages, not only are we depriving girls from the reference points they need, but we are also teaching girls — and boys — that women's role in life is secondary.

#### To take into account

You do not have to answer the questions in writing if you do not feel like it. The initial self-reflection can be done mentally. However, use of a printed sheet and pen invite for a deeper reflection.

What is the name of your school? Many schools are named after historical figures. You can run a quick search on the internet and find out how many schools in your region are named after men and women historical figures and explore their profiles. You can list the names below.		
Walk around the school playground during one or two breaks and analyse children's use and participation in the playground. How much space do boys and girls take up? What kind of games do they play? What kind of sports and activities do they do? What parts of the playground do they use? How do they interact with each other? Are there are any significant differences in the behaviour of girls and boys and younger and older learners? You can write your observations below.		

You can browse through the materials you use in class and analyse whether they contain gender stereotypes. How do the materials portray women and men? Are they represented equally, in the same numbers, with equal respect and potential and in all their diversity? Do the topics, subjects and pictures in your class materials reflect needs and connect to the life experiences of both boys and girls? You can write your observations below.
Before starting to work with the toolkit, you should be especially attentive to the time you interact with your learners for a few days. Did you interact, teach or treat girls and boys in your classroom in the same way? You can write your observations below.
Finally, you can write about any reflections that you have had while doing this mini task and that can be useful while working with the toolkit.

# Initial self-assessment tool 3: Reflection

#### Focus of the tool

Reflection is an important part of teaching and learning. A routine of reflection prior to teaching new topics is an opportunity to update knowledge and perceptions and focus on what is proposed in the toolkit and the reasoning that supports the activities.

This reflection tool draws attention to and raises awareness of gender stereotypes, pitfalls of professional choices and pedagogical practices and alerts for what needs attention outside the classroom and for gender issues related to the world of work. It also addresses overall considerations related to teacher-learner relations.

#### To take into account

The reflection that this tool offers aims to make teachers feel comfortable and able to develop the proposed activities. This tool should be used prior to the activity but can also support teachers' practice during the development of the activities.

#### Questions to draw attention and raise awareness

#### Why the focus on gender?

- How can the concept of gender help us think about the functioning and perpetuation of inequalities between boys and girls, men and women in education and the world of work?
- As educators, what should we pay attention to and how can we help address gender inequalities?
- What is the role of educators in deconstructing stereotypical behaviour and encouraging diverse opportunities for all?
- In languages that differentiate gender, do we pay attention to the language we use with our learners so that they all feel represented?

#### Professional choices and pedagogical practices

- How is the physical space of the classes organised?
- How do we select who speaks in our lessons?
- · Do girls and boys have access to and take the same space?
- Do we have the same expectations from boys and girls when it comes to grades and behaviours?
- Do we avoid assigning separate tasks for girls and boys?
- Do we allow all children to explore their interests without regard to non-stereotyped roles?
- Do we consider how our class material reinforces gender stereotypes? What characteristics do the materials attribute to women and men? Are they represented equally, in the same numbers, with equal respect and potential and in all their diversity?

#### What happens outside the classroom?

- Is the representation of boys and girls in leadership roles balanced?
- Is the school playground a safe place for all?
- Do extra-curricular activities provide a supportive environment that allows children to explore their interests without regard to traditional gender roles?
- Are girls' sport teams equally recognised as boys' sport teams?
- Among the non-teaching staff in your school, how many are women and how many are men?
- In interaction with learners, what are the expectations of non-teaching staff regarding the behaviour of girls and boys?

#### Gender and the world of work

- Have you considered how gender stereotypes shape educational and career choices and aspirations of boys and girls, men and women?
- Have you wondered why women dominate specific fields, such as teaching and care work, but are underrepresented in others, such as engineering and technology, in which men dominate?
- Have you thought about why women still earn less than men and how gender stereotypes contribute to the gender pay gap?
- Have you considered that women remain underrepresented in higher-paid professions, even though
  there are more women university graduates than men in the EU, and that discriminatory social
  norms and stereotypes about women's and men's skills and the undervaluation of women's work are
  some of the main contributing factors?
- Have you considered that in male-dominated sectors, such as transport, women often find themselves in lower-paid and lower-status jobs without good opportunities for promotion and career development, which is a key factor for the existing pay gap between women and men in transport?
- Did you know that the European Commission acknowledges that the share of women workers in the transport sector is well below their share in the overall economy and is undertaking specific measures to render the sector more attractive to women workers?

#### Other overall considerations

- In school, a positive attitude towards a subject is related to positive teacher-learner relations since
  interaction with teachers helps shape the cognitive development and intellectual engagement of
  girls and boys.
- Boys and girls tend to learn more when they feel that their teachers are taking them seriously because they gain confidence and perform better.
- Girls and boys who are better informed about what will help them learn also tend to perform better

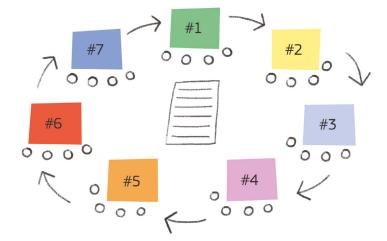
#### Throughout the activities

• Avoid assigning stereotypical gendered roles to learners that may contribute to the internalisation of 'female' or 'male' identities, for example asking boys to build things and girls to take notes. Ensure that the different roles required by the activity are rotated between all learners.

# TOOLSET 3: GENDER STEREOTYPES



# Activity 1: Uncovering women's history



# Subject matter

Citizenship education, social sciences, history, arts, languages.

## **Expected learning outcomes**

#### Learners will:

- gain knowledge about contributions of fascinating women who have shaped our history and issues that are not generally covered within current historical narratives (e.g. the status of women, women's rights movement).
- understand how different content in textbooks and curricula are important avenues towards equality in education and future educational and career choices.

## Preparation and materials

- Prior to the activity, consider revising information on how to organise a gallery walk,<sup>14</sup> if needed. In settings, turn on 'auto-translate' to watch the video with subtitles in your own language.
- Flip-chart paper, coloured markers, scissors, glue for the learners to create posters.
- Information sources on women's history (e.g. <u>Europeana</u><sup>15</sup> website, local sources of Women's History Month, 'herstory' campaign and other collections) for the learners' online research.
- Activity 1: The gallery walk observation sheet to print and distribute to all learners.

# Key focus and issues

Mainstream history records have minimised or ignored the contributions of women to different fields and the effect that historical events had on women as a whole. This activity provides a possibility to revise the historical narratives and challenge or expand the stories we are generally told. It opens the gateway towards understanding that gender equality is a social, rather than a women's goal, which benefits all.

<sup>14 &</sup>lt;a href="https://www.youtube.com/watch?v=dPLk\_aVhYwg">https://www.youtube.com/watch?v=dPLk\_aVhYwg</a>.

<sup>15</sup> https://blog.europeana.eu/tag/womens-history/.

# LESSON DIRECTIONS

Step 1 20 min. Explain to the learners that they will be creating a poster for a gallery walk. The learners carry out online research to discover contributions of fascinating women who have shaped our history and issues that are not generally covered within current historical narratives (e.g. the status of women, women's rights movement). Based on the gathered information and material, they create a poster on a flip-chart paper. Learners decide the title of the poster, size of the visual materials, key messages and highlights.

Select a date for the gallery walk and discuss any related details with learners

Step 2 20 min. Before the day of the gallery walk, set up the gallery space. Number and place posters on different walls in a room, leaving enough space between posters to comfortably view the gallery.

Hand out <u>Activity 1: The gallery walk</u> observation sheet to all learners.



On the day of the gallery walk, instruct the groups to walk around the gallery and stop at the posters created by other groups. Give groups around three minutes per poster to observe and fill in the observation sheet, emphasising that the focus of the observation is to highlight the posters' key messages.

Step 4 20 min. Leave the posters in the room. Debriefing (can be done in next class).

### Tips and remarks

- Feel free to select other resource material.
- During the gallery walk, the groups explore the posters containing a variety of written and visual messages.
- Use the observation worksheetsto keep learners focused on the observation activity.

## IDEAS FOR DEBRIEFING

- Conduct a question and answer (Q & A) session: let each group share observations and ask questions/clarifications about other posters and relevant groups react.
- Summarise key ideas, making sure that learners grasp that many aspects of women's history are
  not included in history books. Being aware of this omission is key for a better understanding of how
  gender stereotypes are strongly embedded in our societies.

## VARIATIONS AND EXTENSIONS

- Instead of observation worksheets, ask learners to write their questions on sticky notes and place them next to each poster. Conduct debriefing in the same way as with questions in the worksheets.
- · Invite other classes and teachers to the gallery walk.
- Draw attention to even lesser-known stories about and issues affecting women of marginalised backgrounds (e.g. women in minority ethnic groups, queer, migrant and refugee women).

### **ACTIVITY 1: THE GALLERY WALK OBSERVATION SHEET**

Every learner brings this observation sheet to each station to complete the task.

D	escribe what you see:	
1	Write something that is surprising.	
2	Write something that interests you.	
3	Write something you like.	
4	Write one question you have.	
5	Write one thing you do not want to forget.	
6	Write one thing you would like to share.	
7	What is the key message of the poster (assessment)?	





# Activity 2: Write three names

# Subject matter

Social sciences, history, citizenship education, science, art, tutorship and all other subjects for the follow-up activities.

## **Expected learning outcomes**

#### Learners will:

- learn about incredible women and men (they are likely to be more familiar with the latter), from the past and present to compensate for likely gaps in the curriculum;
- explore the connection between gender inequalities in society and what is taught in schools and recognise there are few women figures in textbooks and other learning resources;
- explain how different content in textbooks and curricula are important avenues leading to (in) equality in education and future career choices.

## Preparation and materials

- Learners divided into groups of three or four.
- The <u>Activity 2: Write three names worksheet</u> printed and distributed for each group.
- Groups can compete among themselves (for highest score overall, or highest number of identified women).

# Key focus and issues

- Women's contributions have largely been overlooked and consequently omitted from the curriculum and mainstream culture and history records. This activity helps to fill the gap by emphasising women's accomplishments in history, next to men's. Learners explore possible role models, suggesting they can grow up to be whatever they wish, regardless of gender or what other people think.
- The focus is also on questioning the reasons why there might be so few women in certain fields (e.g. unequal division of domestic work and care between women and men, gender stereotypes and laws that have shaped or even banned entry of women into certain educational fields and professions) and the different ways in which their contributions have been rendered invisible (e.g. scientists whose research and findings were claimed by their husbands, artists and authors who had to disguise themselves as men).

# LESSON DIRECTIONS



Distribute the Activity
2: Write three names
worksheet to all groups
and give them time to
fill it in.



Ask learners to discuss their chart in the group.



Debriefing in the whole class.

## IDEAS FOR DEBRIEFING

Discuss the following questions:

- In which categories was it more difficult to fill in the names?
- Was it easier/more difficult to fill in names of contemporary or historical characters?
- Assuming this is the case, why was it more difficult
  to fill in the women's names? Is it because there are
  fewer relevant historical women or because we do not know about them? In both cases, why is that
  so?
- Do textbooks offer a proper representation of women?
- Why is it important that relevant women are as fairly represented as men in textbooks and other education materials?

# VARIATIONS AND EXTENSIONS

- Challenge learners individually or in groups to prepare a brief biographical presentation of the relevant figures. Let learners analyse their textbooks from different subject matter and compare the representation of women and men. How many women and men are there and how are they represented?
- Explore both the narrative of women's suppression as well as the positive role of men taking action for gender equality. In nearly every remarkable woman's biography, there is a man (e.g. a brother, father, friend, teacher) who saw her as an equal, championing her dreams and talents. In contrast, behind a man's success, there is likely to be a good deal of women's contributions and invisible work.
- Organise a cinema session and project a film about any of these inspiring women. A quick internet search will provide many titles.

### Tips and remarks

- Use the internet to check potentially unknown names that learners may provide.
- · Set time limit to fill in the sheet.
- Depending on the subject matter, adjust the categories as needed or limit in a geographical or time scope.

#### **ACTIVITY 2: WRITE THREE NAMES WORKSHEET**

Write between one and three names in each box. The names may belong to any historical period and they may be from your country or any other. A correct answer scores one point.

Women scientists	Men scientists	Women Nobel Prize winners	Men Nobel Prize winners
Women artists	Men artists	Women writers	Men writers
Women composers	Men composers	Women inventors	Men inventors
Women politicians	Men politicians	Women historical figures	Men historical figures

Total score: \_\_\_\_\_ /48



# Activity 3: What is expected of me?

# Subject matter

Citizenship education, social sciences, history.

## **Expected learning outcomes**

#### Learners will:

- question social construction of gender stereotypes and confront their own perceptions of societal expectations related to gender;
- explore the concept of gender stereotypes;
- recognise that assumptions about boys and girls and women and men may be conscious or unconscious and can result in different treatment of one group compared to the other.<sup>16</sup>

## Preparation and materials

- Prior to the activity, consider exploring <u>Toolset</u>
   <u>7: To go one step further</u> for the glossaries and other material on the key concepts, such as gender stereotypes and gender equality.
- Show the trailers of 'The Mask You Live In' and 'Miss Representation' 18 to learners. In settings, turn on 'auto-translate' to watch the videos with subtitles in your own language.
- Sticky notes.



# Key focus and issues

This activity raises awareness on the creation and enforcement of gender stereotypes through societal expectations and the harmful ways they impact girls and boys, men and women. Gender stereotypes can limit the development of the talents and abilities of boys and girls, women and men, as well as their educational and professional choices and life opportunities in general. They both result from, and are the cause of, deeply entrenched attitudes, values, norms and prejudices.19

<sup>16</sup> This is a staple activity on gender stereotypes, with several versions and variations available online. See, for example, <a href="https://www.pcc.edu/illumination/wp-content/uploads/sites/54/2018/05/gender-role-boxes-glbtq-and-sexism-exercise.pdf">https://www.pcc.edu/illumination/wp-content/uploads/sites/54/2018/05/gender-role-boxes-glbtq-and-sexism-exercise.pdf</a> and <a href="https://www.usip.org/sites/default/files/files/Exercise-2-Act-like-a-Man-Act-like-a-Lady.pdf">https://www.usip.org/sites/default/files/files/Exercise-2-Act-like-a-Man-Act-like-a-Lady.pdf</a>.

<sup>17</sup> https://www.youtube.com/watch?v=hc45-ptHMxo.

<sup>18 &</sup>lt;a href="https://www.youtube.com/watch?v=W2UZZV3xU6Q">https://www.youtube.com/watch?v=W2UZZV3xU6Q</a>.

<sup>19</sup> https://eige.europa.eu/thesaurus/terms/1222.

# LESSON DIRECTIONS

Step 1

Write 'Be a man' on one half of the board

Instruct the learners to discuss in pairs what words, ideas or expectations come to mind when thinking about being a man. Guiding questions could include: What does it mean to act like a man? Does this vary in different activities, e.g. sports, work, dating, parenting, etc.? Ask the learners to write their answers on sticky notes and place them under the heading 'Be a man' on the board.

Step 2 20 min. Write 'Be a woman' on the other half of the board.

Instruct learners to discuss in pairs what words, ideas or expectations come to mind. Guiding questions could include: What does it mean to act like a woman? Does this vary in different activities, e.g. sports, work, dating, parenting, etc.? Ask the learners to write their answers on sticky notes and place them under the heading 'Be a woman' on the board.

Step 3

Once both sides of the board are completed, rewrite the headings on the board and tell learners that now there are two different lists on the board: 'Stereotypes about men' and 'Stereotypes about women'.

Draw a box around each list.

Step 4

Explain to learners that the boxes contain the lists of attitudes and behaviours that societies traditionally expect girls and boys to adopt as they are growing up.

Explain that these societal expectations are learned through the process of socialisation and not something boys and girls are born with.

Step 5 20 min. Initiate the discussion by asking the learners: Where do we get these stereotypical messages from? Divide learners into groups. Ask one group to discuss the different origins of such messages (e.g. media, schools and other institutions, family and peer environment) and how they are linked to the lists of behaviours and attitudes listed on the board. Ask another group to discuss what names girls and boys are called, when they step out of the stereotype boxes, and write those names on sticky notes that are placed outside but next to the two boxes on the board.

Step 6

Explain that we may have the wrong impression that gender equality is already a reality. Highlight that realising gender equality is a continuing and challenging task and we still have a long way to go. Achieving gender equality implies positive changes for everyone. Therefore, everyone has a role to play in this effort.

Step 7 20 min.

Debriefing.

### Tips and remarks

- Consider the role of gender stereotyping in school culture and the effects of not fitting into the stereotypes.
- Explore the link between gender stereotyping and inequality.

## IDEAS FOR DEBRIEFING

Discuss the following questions:

- What was the most relevant thing you learned today? Why?
- · What was more difficult to understand? Why?
- · Which lifestyles, values and points of view were represented? What (if any) are still missing?
- Who creates these messages? With what purpose? How can we be more resilient to such messages?
- · Look at the boxes again. How do you think it feels when someone does not fit these stereotypes?

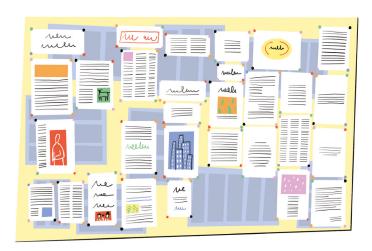
## VARIATIONS AND EXTENSIONS

- Show both trailers again and ask learners to make comments reflecting on today's learning. This can be done as homework or in a follow-up lesson.
- Adapt the activity for younger learners by taking responsibility for writing and simplifying all terms and questions.



### ± 55 min and project work

# Activity 4: Designing a wall newspaper – a special edition on gender issues



### Subject matter

Citizenship education, social sciences, history, information and communications technology (ICT), languages, art.

### **Expected learning outcomes**

#### Learners will:

- practise conducting research and develop newspaper content;
- develop critical thinking, creative language, literacy and social skills;
- practise teamwork, collaboration and decision-making.

### Preparation and materials

- Prior to the activity, consider exploring <u>Toolset 7: To go</u>

   one step further for glossaries and other material on the key concepts.
- An example of a newspaper to show to the learners so they understand the various elements of a newspaper (design and layout) and know what content and information to gather.
- Access to the internet for online research and if possible a printer (or copies of newspapers and photographs learners can use).
- Sheets of paper, markers, pencils, scissors.
- A free wall in the classroom to display the learners' work.

### Key focus and issues

Learners explore in-depth a variety of gender issues as newspaper producers. This is a great opportunity for project work, with collaboration at its heart, and multidisciplinary learning, wherein the skills, knowledge and modes of thinking are joined.



Explain the activity and discuss practical arrangements with learners. Ask the learners to discuss and decide on what the content of the newspaper is (target audience, layout and design, key messages, division of roles, etc.). Divide the learners into smaller groups. Instruct each group to take responsibility for developing a specific section of the newspaper.



In coordination with learners, schedule small-group and whole-class meetings to supervise and assist the groups, as needed.

Ask the learners to combine their sections into a class newspaper and place it on the wall.



Explain to learners that once they decide on the topics to be covered in the newspaper, they should conduct research, write the articles and integrate visual materials.



Debriefing.

### IDEAS FOR DEBRIEFING

- Let learners share experiences from this assignment. Use probing questions if necessary, such as: What sections did you develop and why? What decisions did you have to make and how did you go about it? What went well and what could go better next time?
- Explore work of different groups, bringing to light how learners constructed knowledge and meaning based on their experiences.
- Divide the learners into small groups or in pairs and let them select three sections of the wall newspaper that they found most meaningful or interesting and explain why.

### **VARIATIONS AND EXTENSIONS**

Simplify the project work by producing only one section of the paper or the front page.

### Tips and remarks

- Consider assigning editing and proofreading to different groups than the writers to practise providing feedback to others.
- Reflect with the learners on the division of roles in the project work. Does it reproduce gender stereotypes? Why?
- Make sure that the groups understand their roles and corresponding responsibilities.
   For instance, it should be clear that proofreaders examine the text carefully to find and correct typographical errors and mistakes in grammar, style and spelling.



### Activity 5: I see, I think, I wonder

### Subject matter

Social science, citizenship education, languages, tutorship and other subject matter when adjusted.

### **Expected learning outcomes**

#### Learners will:

- discuss how playgrounds and other school structures are influential mechanisms through which children are exposed to ideas about gender;
- explain how gender may influence their self-segregation (boys playing mostly with boys, and girls playing mostly with girls), the development of their talents and abilities, as well as educational and professional choices;
- make careful observations and thoughtful interpretations.

### Preparation and materials

- Activity 5: Picture for learning to display in the lesson.
- Activity 5: I see, I think, I wonder worksheet to distribute to learners.

### Key focus and issues

The thinking routine 'I see, I think, I wonder'20 challenges learners to take a critical look at how differently space is taken up by boys and girls and the implications this may have for their personal development, self-perception and even career prospects. The activity focuses also on guiding learners in their thinking process, namely by helping them differentiate between what they objectively see and can describe and what they think or would like to know about what they see (i.e. between what is objective and subjective).

### LESSON DIRECTIONS



Display <u>Activity 5: Picture for learning</u> and ask learners to write down individually 'what they can see' in the <u>Activity 5: I see, I think, I wonder worksheet</u>. Make sure that they simply describe what they can see objectively.

<sup>20</sup> This thinking routine was developed by Project Zero, a research centre at the Harvard Graduate School of Education. More information is available at <a href="https://pz.harvard.edu/resources/see-think-wonder">https://pz.harvard.edu/resources/see-think-wonder</a>.

Step 2

Ask them to do the same in response to 'what they think'.

Step 4
3 min.

Let learners compare their ideas with those of their classmates.

Step 3
3 min.

Ask them to do the same in response to 'what they wonder'.

Step 5

Debriefing in the whole group.

### IDEAS FOR DEBRIEFING

Discuss the following questions:

- Is this playground similar or different to your own? How?
- In your experience, do girls and boys play the same or different games and sports on the playground? How are they similar or different?
- · What affects how and which games and sports girls and boys play?
- What could be the consequences of boys and girls using the playground similarly or differently for your interests, talent development or even future career choices?

### VARIATIONS AND EXTENSIONS

- Visit your school playground and compare it with <u>Activity 5: Picture for learning</u>. You can let learners prepare an observation list beforehand.
- Challenge physical and spatial separation according to gender and comment positively on healthy, supportive and fulfilling cross-gender friendships and relationships.
- Explore/research with the learners more exhaustively what skills and competences can be developed from the different way the playground is used and the implications for future career choices (e.g. are boys more likely than girls to develop their space orientation better because of the games and sports they play, and consequently choose certain career paths?).

### Tips and remarks

- Make sure learners only write what they see, what they think and what they wonder.
- Challenge some of the answers in case objective and subjective ideas are mixed up.

### **ACTIVITY 5: PICTURE FOR LEARNING**

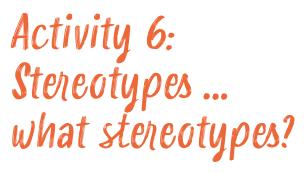
Look at the following picture and talk to your classmates about what you see, think and wonder.



### **ACTIVITY 5: I SEE, I THINK, I WONDER WORKSHEET**

	I see
What do you <b>see</b> ? What details stand out?	
	I think
What do you <b>think</b> is going on? What makes you say that?	
	I wonder
What makes you wonder? What broader questions does this image raise for you?	







### Subject matter

Social science, history, citizenship education, tutorship, arts.

### **Expected learning outcomes**

#### Learners will:

- explore men and women role models in pop culture and entertainment, such as in TV series, digital media, music, magazines, comics and gaming;
- discuss the relationship between attributing certain qualities to women and men and associating specific school subjects and occupations with a specific gender.

### Preparation and materials

Learners divided into groups of four. If possible, the groups should be gender balanced.

### Key focus and issues

Popular culture, media and new technologies play a major role in children's lives. This activity aims to help learners reflect how gender stereotypes are exacerbated in these spaces and their impact (e.g. in terms of their perception of others, their professional choices).

Step 1

Ask the learners to write an individual list of their top five magazines, comics, digital media, video/ online games, songs and TV series. Alternatively, consider asking the learners to bring relevant material to class to illustrate their top five.

Step 3

Ask the learners in each group to make a list of 10 adjectives that best describe how men are represented in their material and 10 adjectives that best describe how women are represented.

Step 2

Ask the learners to compare their lists in their group.

Step 4 12 min.

Debriefing.

Tips and remarks

interested in.

Consider researching the songs, games, magazines, digital

media, etc. that the learners are

### IDEAS FOR DEBRIEFING

- Discuss the following questions:
- In small groups: Do girls and boys like the same songs, video games, magazines, digital media? Think of the video games you have recently played, the video clips you have recently watched, the magazines you have recently read, how do they represent boys and girls, men and women?
- In big groups or in the whole class: What are the consequences of these representations for your life? How do they influence the decisions you make, your behaviour and future career choices?

### VARIATIONS AND EXTENSIONS

- Challenge learners to rethink or rewrite the analysed material to a version without gender biases.
- Seek out learners' material or experiences with non-stereotyped characters, such as female characters with realistic body types or passion for maths and science and non-aggressive male characters with an interest in care-giving and dancing. How do these characters go against what society expects of them?
- Explore the concerns confronting transgender and gender-non-conforming students and <a href="https://www.non.conformingstudents">how to be a trans\* ally<sup>21</sup></a>. In settings, turn on 'auto-translate' to watch the video with subtitles in your own language.

<sup>21</sup> https://www.youtube.com/watch?list=PLyfdph9z-mJwZBVa0bqN6wzSaXlgOezeY&v=E05VTkknW6E&feature=youtu.be&ab\_channel=AshHardell.



# Activity 7: Real men aren't caring ... or are they?

### Subject matter

Citizenship education, civics, history, social sciences, geography, arts.

### **Expected learning outcomes**

Learners will discover that gender relations are a complex multilevel system of difference and inequality that comprises, but is not limited to, roles and identities at the individual level, patterns of behaviours and organisational practices at the community level and cultural beliefs and distribution of resources and power at the society level.

### Preparation and materials

### Key focus and issues

This activity consists of group work and collective sharing. It focuses on a review of the key concepts, such as gender stereotypes, norms, discrimination and roles. The latter encompass a range of behaviours and attitudes that are generally considered acceptable, appropriate or desirable for a person based on their gender. These gendered expectations are widespread in our societies and shape children's educational and career paths.

- Prior to the activity, consider exploring <u>Toolset 7: To go one step further</u> for glossaries and other material on the key concepts.
- · Flip-chart paper, glue and markers.
- Copies of <u>Activity 7: Texts handout</u> for the different groups.
- · Magazines or newspapers containing pictures of women and men.
- A rearranged classroom, with grouped desks for three to five learners.
- If possible, learners divided into six groups of three to five learners (two groups of girls, two groups of boys and two mixed groups). Otherwise, all learners divided into mixed groups.

Step 1

Provide groups of girls with texts 1 and 2 from the Activity 7: Texts handout. Provide groups of boys with texts 3 and 4. Provide mixed groups with text 5 and magazines or newspapers. If all groups are mixed, distribute all the texts among the different groups.

Step 2
3 min.

Explain that the activity includes group work, collective sharing and developing a critical view of what behaviours society expects from girls and boys, men and women.

Explain the different tasks:

Step 3 30 min.

- The groups of boys and girls read and discuss the text. The aim is to reflect, discuss and reach a common and critical perspective on the text. Learners can use markers and flipchart paper to express their critical perspective. On top of the sheet, they should write the title of their reflection.
- The mixed groups create a collage on the roles, behaviours and attitudes arbitrarily assigned or associated with girls and boys, women and men, using the material from the magazines and newspapers.

On top of the sheet, they should write the title of their collage.

 All groups select a speaker to present their work.



Ask each group of boys and girls to present their work in five minutes, explaining the common critical perspective and how and why it was reached.

Ask the speakers of the mixed groups to present the collage and explain why the different pieces were selected. All flip-chart posters can be displayed on the wall.

Step 5 20 min.

Debriefing

### Tips and remarks

Keep in mind that even though we live in more progressive societies than our ancestors, we need to remember that gendered expectations are still deeply ingrained into our culture. Often, they are hard for people to see unless they are pointed out. Schools provide crucial spaces and avenues towards dismantling as well as preventing gender stereotypes.

### IDEAS FOR DEBRIEFING

Discuss the following questions:

- Can you think of other behaviours expected or associated with girls and boys, men and women that the texts did not mention?
- Why might this topic matter to you? Why might it matter to people around you (family, friends, teachers, etc.)?
- Did you enjoy the tasks? Was this discussion useful for you? Why is that?
- Did the activity change the way you think about gender?
- · How do you feel after this activity?

### VARIATIONS AND EXTENSIONS

Read one text at a time from the Activity 7: Texts handout and discuss it with the learners.

#### **ACTIVITY 7: TEXTS HANDOUT**

#### Text 1: Real men do not cry

Men grow up believing that crying is a sign of weakness. While adults will often say soothing things to crying children to calm them down, boys are more likely to be told by parents, teachers and their peers that they should not cry and be brave instead. This makes boys bottle up their emotions and prevents them from overcoming them effectively. Since it is acceptable for girls to cry, people associate crying with femininity and weakness. Despite this gender stereotype, science shows that crying helps regulate emotional stress and is widely considered a healthy outlet.

#### Text 2: Real men are breadwinners

Even though both women as well as men participate in the professional world, most men still identify themselves as breadwinners and, in general, are expected to make a greater contribution financially towards the family than women in a traditional role. This expectation upholds traditional gender roles and reduces the likelihood of men's involvement in unpaid work carried out primarily by women, such as housework and caring for children and other dependants. Furthermore, a growing body of research also demonstrates the harmful impacts of traditional gender roles on men, particularly in terms of their mental health.

#### Text 3: Women are quiet and passive

Many girls change from vibrant, talkative children to quiet and timid adolescents. There seems to be a shift as soon as girls and boys enter adolescence, where their attitudes and beliefs about gender change dramatically. Once girls become teens they are seen as vulnerable and in need of protection, leading many to hide their assertiveness in order to conform to society's beliefs. Gender norms that say women should be polite and quiet lead many women to suppress their feelings in their relationships and remain discreet in the workplace.

#### Text 4: Women should look flawless

Just like men are expected to have a fit, muscular body, women face immense pressure from society to look attractive. Women are inundated with advertisements about beauty products, which are usually promoted by gorgeous models through television and magazines. These images are internalised and send the message to women that their worth is tied to their appearance. The pressure to look flawless affects women from all walks of life.

#### Text 5: Gender stereotypes and the media

Pop culture, entertainment and digital media tremendously influence and shape the qualities, attitudes and behaviours we expect from boys and girls, men and women.

### TOOLSET 4: WORK



### ± 65 min. and project work

### Vertical gender segregation

Women and men are concentrated in different grades, levels of responsibility or positions, with women being overrepresented in lower levels and lower-paying roles.

### Activity 8: Researching gender segregation in the labour market

### Horizontal gender segregation

Women and men are concentrated in different occupations, with women being over-represented in jobs with worse working conditions and career prospects than men.

### Subject matter

Citizenship education, civics, history, social sciences, English language, maths, ICT.

### **Expected learning outcomes**

#### Learners will:

- research and discover the significance of gender segregation in the labour market:
- relate gender segregation to the gender pay gap and explore women's over-representation in jobs that are essential, yet economically and socially undervalued;
- recognise the existence of barriers women face in the labour market.

### Preparation and materials

- Prior to the activity, consider exploring Toolset 7: To go one step further for the glossaries and other material on the key concepts, such as occupational and vertical gender segregation in the labour market, the gender pay gap and the glass ceiling.
- · Learners in small groups (of not more than four to five members, preferably mixed gender).
- Various sources, such as publications, newspapers and magazines, books, data databases.
- Access to the internet for a literature search.
- Activity 8: Worksheet for all learners.

### Key focus and issues

Learners carry out project work in groups in a form of research on different topics. In the end, groups share their findings, while the overall meaningmaking occurs with debriefing.



Explain to the learners that each group has around one month to carry out research on gender inequalities in the labour market. Inform the learners that they should report weekly on their project work to the teacher and clarify any questions or doubts they have. Inform the learners that once the groups are finished with their research, they will share their findings in class.

Step 2 15 min. Instruct the groups to research situations and look for evidence on one of the following topics:

- horizontal gender segregation and its possible causes;
- the gender pay gap in different sectors and occupations and its possible causes;
- vertical gender segregation and the glass ceiling, exploring the barriers and solutions to overcome them;
- the links between gender segregation in the labour market and gender segregation in education.

Inform the learners that the research can be restricted to a country context, or open in terms of geographical scope. Instruct the learners to use a variety of sources for their research and register their findings in Activity 8: Worksheet. Ask learners to provide an overview of the sources used in their research. Inform learners that they could also draw on opinions of family members, acquaintances, etc.

Step 3

Monitor the work progress of the learners every week.

Tips and remarks

internet.

· Consider making it a

multidisciplinary activity, in collaboration with other

teachers. Use maths and ICT subjects to explore statistics

and English to browse on the

Recap with the learners the

key principles for working

with various sources and understanding their credibility.



Dedicate time for sharing the findings and debriefing.

### IDEAS FOR DEBRIEFING

Discuss the following questions:

- In your view, are women and men treated equally in the world of work in this country? And are they treated equally elsewhere? How does the situation make you feel?
- How much do you think caring responsibilities affect men's and women's careers? Has this changed?
- · Were you surprised with your findings? Why is that?
- Is the way you now think about these issues influenced by your research?
- Did you enjoy this research? What are your concluding remarks?
- Are there any other issues you would like to discuss or research?

### VARIATIONS AND EXTENSIONS

Each member of the group can be assigned a specific responsibility. The group would communicate to the teacher the responsibility of each member of the group.

### **ACTIVITY 8: WORKSHEET**

Source/date	Finding



### ± 30 min. and time for learners' presentations

### Activity 9: Where I will be in 10 years' time?

### Subject matter

Citizenship education, civics, history, social sciences.

### **Expected learning outcomes**

#### Learners will:

- explore how they see their careers in 10 years, discover the implications of their choices and compare their choices with those of others in the class:
- develop creative thinking and problem solving and connect with real-life situations and understand their complexity;
- practise navigating different opinions and perspectives and practise self-reflection

### Preparation and materials

• Coordinate with the learners what materials (if any) they will need for their presentations.



### Key focus and issues

This is a forward-looking storytelling activity. It provides an opportunity for hands-on learning to help learners focus their attention on what is essential and, specifically, to think positively about the time they spend at school and compare the potential choices or plans for their future careers.

Step 1
10 min.

Explain to the learners that this is a storytelling activity and that they should describe how they see their professional lives in 10 years and how they got there. Ask the learners to clearly explain the reason for any choices made in their story. Inform the learners that they are free to decide how they will tell their story (e.g. through writing, a stand-up comedy, video recording, collage, poster, mind map, interview, postcard written for someone). Give each learner five minutes for their presentation.



Schedule the time for presentation. Encourage learners to be creative in their stories. Remind the learners to follow the structure of a good story, which has a beginning (awakening curiosity), a middle (ensuring progression of the story) and an end (conclusion).



Ask the learners to share their presentations



Debriefing.

### IDEAS FOR DEBRIEFING

Discuss the following questions and reflect on whether, how and why learners' thinking has changed:

- Did you enjoy this activity? Why is that?
- Was it difficult for you to think about your future professional self? Why?
- What new ideas or questions do you have?
- What learning(s) can you take from this activity into your personal life?
- Did you consider your gender while you were projecting your future?

### VARIATIONS AND EXTENSIONS

Any 'what if ...?' activity allows for the development of storytelling skills.



### Activity 10: Look around and tell me what you see



### Subject matter

Citizenship education, social sciences, history, tutorship, career counselling.

### **Expected learning outcomes**

#### Learners will:

- explore the patterns of horizontal gender segregation in the labour market and the links to educational choices and career paths:
- understand that aspirations are shaped by gender stereotypes.

### Preparation and materials

Done partly individually and partly in groups of three to four.

### Key focus and issues

Already by the age of five, children's aspirations appear to be affected by gender stereotypes.<sup>22</sup> While boys aspire for traditionally male-dominated professions, girls show a greater interest in caring-related roles. These trends are persistent into adulthood, with gender stereotypes having a strong impact on the subject choices and types of careers that young people are aware of and aspire to pursue. This activity challenges stereotypes about jobs and focuses on raising learners' aspirations and broadening horizons free from gendered constraints, and showing the relevance of what they are learning to later in life

<sup>22</sup> OECD (2021). The Future at Five. Gendered aspirations of five-year-olds. Retrieved from: <a href="http://www.oecd.org/education/school/early-learning-and-child-well-being-study">http://www.oecd.org/education/school/early-learning-and-child-well-being-study</a>.



Ask learners to make two lists. In the first list, they should list the jobs done by 10 to 20 women they know personally (e.g. family members, neighbours, friends). In the second list, they should do the same but for 10 to 20 men.



Ask learners to analyse the lists in groups, establish the patterns and explain the reasons for the differences observed.



Debriefing.

### IDEAS FOR DEBRIEFING

Discuss the following questions:

- What differences did you find between the two lists?
   How do the differences in your lists make you feel?
- · Can women and men do any job?
- Why do you think men and women end up choosing different career paths?
- Can we observe the same patterns in school? Are girls and boys inclined to choose subjects associated with their gender? Do you (as a girl/as a boy) fit in the pattern?
- What are the factors that influence girls' and boys' educational and career choices (family referents and expectations, likes and dislikes for certain school subjects, working conditions)?
- · Why are career decisions important in a person's life? How do they influence a person's life?

### VARIATIONS AND EXTENSIONS

- Use different material to create the lists of jobs with the learners (e.g. magazines, advertisements).
- Let the learners interview some of the women and men included in the lists. Agree on a common list of questions in the class beforehand, exploring the choices behind their career paths.
- Invite women professionals from male-dominated sectors or men professionals from femaledominated sectors to the class to interact with the learners.

### Tips and remarks

Reflect with the learners on both horizontal and vertical gender segregation.



± 45 min.

### Activity 11: A leader of the 21st century



### Subject matter

Citizenship education, social sciences, history, tutorship, career counselling, ICT.

### **Expected learning outcomes**

#### Learners will:

- · practise social, collaboration and decision-making skills;
- experience cooperative teamwork, whereby learners change roles including the practice of leadership irrespective of gender.

### Preparation and materials

- Done partly individually, and partly in groups of three to four.
- · Activity 11: Personal information worksheet for each learner.
- Activity 11: The 21st-century leader worksheet for every group.

### Key focus and issues

This activity prompts learners to envisage the key qualities and roles of leaders in 21st-century organisations.

Step 1 2 min.

Ask the learners to fill in Activity 11:



Ask the learners to walk around the classroom and team up (in groups of three to four) with those classmates with whom they share some of their

Step 3 4 min.

and share their personal information.

Step 4 2 min.

Tell the learners that an important new director.

members of the recruitment board developing the profile of the best candidate.

Step 5 7 min.

strategy and Activity 11: The 21st-

(including skills, traits and attitudes). For example, learner 1 writes the first idea about the topic and passes a new idea. The sheet goes around several times in the group until all the learners have finished adding their

Step 6 7 min.

Encourage the group to agree on the top 10 characteristics defining the

Step 7 3 min.

Instruct all groups to post their sheet on the wall and read the different lists

Step 8 5 min.

Ask the whole class to agree on a

Step 9 10 min.

### Tips for teachers

- Steps 1–3 promote a positive interdependence among the group members by encouraging them to share things about each other, and will be useful particularly in settings where learners are not used to working in groups.
- Skip steps 1–3 if you decide to team up the learners in a different way.

### IDEAS FOR DEBRIEFING

- What did you learn about the other members of the group that you did not know before and you found interesting?
- Are there any school subjects that are more related to the characteristics of a 21st-century leader than others? In which way?
- Do you think school prepares you for these skills?
- Are there any characteristics on the list that are specific of men/women?
- Do you think men and women have different leading styles? Explain.

### VARIATIONS AND EXTENSIONS

- Complement with Activity 12: Could it be me? in which learners explore their own skills and attitudes.
- Visit a real company and interview hiring managers. Learners should develop interview questions beforehand, preferably in a cooperative way.
- Adapt the activity to any other position, ideally those that are not well known to youth or are especially prone to gender stereotyping.

### **ACTIVITY 11: PERSONAL INFORMATION WORKSHEET**

Fill in the following information about yourself.

Your name	
Favourite sport	
Favourite pet	
Favourite place	
Favourite hobby	

### **ACTIVITY 11: THE 21ST-CENTURY LEADER WORKSHEET**

The 21st-century leader:	



### Activity 12: Could it be me?



### Subject matter

Citizenship education, social sciences, history, tutorship, career counselling, ICT.

### **Expected learning outcomes**

Learners will:

- discuss why it is important to make wellthought-through decisions about their career;
- analyse and evaluate their own best-fit career possibilities.

### Preparation and materials

- Best done as a follow-up to <u>Activity 11:</u>
   <u>A leader of the 21st century</u>, in which the learners reflected on the characteristics defining a 21st-century leader.
- Done partly individually, and partly in groups of three to four.
- Groups can remain divided as in <u>Activity 11:</u>
   <u>A leader of the 21st century.</u>

### Key focus and issues

This activity focuses on encouraging learners to analyse their knowledge, skills and attitudes, strengths and weaknesses and assess their own career possibilities.



Explain that there is an advertisement in the newspaper: 'Leading transport company in the region is looking for a new managing director', and ask learners to revise the list of characteristics defining the 21st-century leader.

Step 3

finished adding their ideas.

Distribute the lists in the classroom so

that a common list of ideas is agreed

is written and adds a new idea. The

sheet goes around several times in

the group until all the learners have

Step 2

In groups, using the 'round robin' cooperative strategy (as in Activity 11: A leader of the 21st century), ask the learners to reflect on the specific skills, knowledge and attitudes one needs to manage a transport company. The learners take several turns to list these characteristics. Learner 1 writes the first idea about the topic and passes the activity sheet on to learner 2, who reads what



Ask the learners to reflect individually on their strengths and weaknesses as potential leaders of this company.



Debriefing.

### IDEAS FOR DEBRIEFING

- Are there any school subjects that could be more relevant for the development of characteristics of the managing director in a transport company? Can you provide specific examples?
- · Are there any characteristics on the list that are specific to women or men? Explain.
- Did any of your strengths or weaknesses surprise you?

### VARIATIONS AND EXTENSIONS

Adapt the activity to any other position, ideally those that are not well known to youth or are especially prone to gender stereotyping.



± 30 min.

## Activity 13: I used to think ... but now I think ...

### Subject matter

Citizenship education, social sciences, history, tutorship, career counselling, languages.

### **Expected learning outcomes**

#### Learners will:

- compare their initial and current views and reflect on whether and how their perceptions, ideas and thoughts have changed;
- improve metacognitive skills by exploring and communicating to others what they know.

### Preparation and materials

- Prior to the activity, other toolkit activities were done with the learners.
- Consider reviewing briefly the activities you have done to revise the key issues discussed with the learners.
- · Post-it notes.
- · Activity 13: I used to think ... but now I think ... worksheet to distribute to all learners.
- · Done partly individually, and partly in groups of three to four.

### LESSON DIRECTIONS



Review briefly the activities done in Toolset 4: Work (or Toolsets 3 and 4).



Instruct each learner to select a concept that has changed their views, write it on a post-it note and stick it on the board.

Key focus and issues

Through means of a thinking routine, the activity focuses

on stimulating reflection

among learners on their

assumptions about the

discussed gender issues

and resolving any pending questions learners may have.



Hand out the Activity 13: I used to think ... but now I think ... worksheet and ask the learners to reflect on their thoughts and views before and after.



Read the post-it notes on the board.



Ask the learners to compare and discuss their activity sheets in groups.



Debriefing

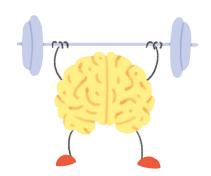
### IDEAS FOR DEBRIEFING

Develop questions for debriefing stemming from the learners' notes.

### VARIATIONS AND EXTENSIONS

Applicable to any other issues and topics that may arise.





### **ACTIVITY 13: I USED TO THINK BUT NOW I THINK ... WORKSHEET**

l use	d to think		
•			
•			
but	t now I think		
•			
•			

### TOOLSET 5: TRANSPORT



# Activity 14: Projecting the transport sector across time

### Subject matter

Citizenship education, history and social sciences, geography and sciences, design and technology, ICT, tutorship and career counselling.

### **Expected learning outcomes**

Learners will discuss and understand the importance of the transport sector in everyday life.

### Preparation and materials

- Prior to the activity, consider revising key information on the transport modes for goods and people — air, rail, road, waterborne transport (maritime and inland waterways), including public passenger transport (urban and rural).
- Activity 14: Transport modes picture to project in class.
- · All learners seated around a couple of grouped desks.
- One to two sheets of flip-chart paper divided in three columns (see an example in <u>Activity 14: Transport</u> modes picture).
- Activity 14: Projecting the transport sector flip chart and markers in three different colours (blue, black and green).
- 'An Animated History of Transportation'<sup>24</sup> and 'Transport
   Trends for Today and Beyond'<sup>25</sup> online videos to project
   in class as part of debriefing to help learners grasp basic
   information on transport across time. To watch the videos
   with subtitles in your own language, in settings, turn on
   'auto-translate'.

### Key focus and issues

One of the main challenges for addressing gender imbalance in the transport sector (only 22 % of women work in the sector) is that boys and girls tend to choose educational and career paths according to traditional gender roles. At the same time, young people do not know transport occupations well and would be more inclined to consider the sector if provided with adequate information. This activity fills the void by increasing learners' understanding of the transport sector across a broad span of time reaching into the past and the future.

<sup>24 &</sup>lt;a href="https://www.youtube.com/watch?v=FaLCQo8NJFA">https://www.youtube.com/watch?v=FaLCQo8NJFA</a>.

<sup>25</sup> https://www.youtube.com/watch?v=AasAQ3EA\_9w.

Step 1
10 min.

Project the Activity 14: Transport modes picture and refer to the different transport subsectors: air, rail, road, waterborne transport (maritime and inland waterways), including public passenger transport (urban and rural).

Step 2 5 min. Ask learners: What would your life be like if there was no transport? Learners brainstorm ideas collectively (quickly, as this is a motivational exercise).

Step 3

Ask learners: What do you know about the transport sector? In pairs, learners rapidly share their ideas and map what they think they already know. Learners write on the flip-chart paper what they already know using the blue markers. They should write all their notes in the same direction, from top to bottom, for example.

Step 4

Ask the learners to imagine the transport in the past — 10, 50 and 100 years ago. Again, learners in pairs share and write their ideas on the flipchart sheet using the black markers.

Step 5

Ask learners to imagine the future and think about transport in 10, 50 and 100 years from now. Again, learners in pairs share their ideas, after which they write them on the flip-chart sheet using the green markers. This step requires some imagination, but not fantasy.

Step 6

Stick the flip-chart sheets to the wall or the board.

Step 7 15 min. Debriefing.

### IDEAS FOR DEBRIEFING

- First, project the video 'An Animated History of Transportation' and ask learners in pairs to compare their thoughts with the information in the video, focusing on differences, similarities and gaps. Second, project the 'Transport Trends for Today and Beyond' video and do the same.
- · Discuss the following questions:
  - Was it difficult to imagine the past and the future? Why is that?
  - How do we know what we know about the past?
  - What are the major changes in the transport sector that you envisioned? Why is that?
  - How do you view transport now after comparing your findings with the information in the videos?

### Tips and remarks

- Make sure that in the end it is easy for all to see the flip-chart sheets and the categorisation by different colours. This way it is possible to view learners' thoughts at a glance.
- Guide the learners towards understanding the importance of the transport sector in everybody's everyday life.
- Aim to challenge gender stereotypes attached to the transport sector in your own presentation and exchange ideas with learners through the activity.
- Instead of using flip-chart paper, you can divide the board into three different columns.

<sup>26</sup> https://www.youtube.com/watch?v=FaLCQo8NJFA.

<sup>27</sup> https://www.youtube.com/watch?v=AasAQ3EA\_9w.

### VARIATIONS AND EXTENSIONS

- Consider exposing learners to the benefits public transport brings to your community and the environment, the design and reasons for infrastructure that accommodates passengers with special needs and why certain rules apply when you travel on a bus, tram, underground, etc.
- In Cyprus, Poland and Greece, join the 'Adopt a Ship programme'<sup>28</sup> to learn how your current and future quality of life is dependent on seafarers, shipping and the maritime community.
- Explore a whole diversity of current and future occupations in the transport sector, with the help of the Skillful Project posters on the <u>aviation jobs from 2020 to 2035</u><sup>29</sup>, <u>road jobs 2020</u><sup>30</sup> and 2035<sup>31</sup>, <u>the future of rail and rail jobs from 2020 to 2035</u>, <u>maritime jobs 2020</u><sup>32</sup> and 2035<sup>33</sup>.

#### **ACTIVITY 14: TRANSPORT MODES PICTURE**



<sup>28 &</sup>lt;a href="http://www.adoptaship.org/">http://www.adoptaship.org/</a>.

<sup>29 &</sup>lt;a href="http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15223">http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15223</a>.

<sup>30</sup> http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15221.

 $<sup>31 \</sup>quad \underline{\text{http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15222.}}$ 

<sup>32 &</sup>lt;a href="http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15225">http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15225</a>.

<sup>33</sup> http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15226.

### **ACTIVITY 14: PROJECTING THE TRANSPORT SECTOR FLIP CHART**

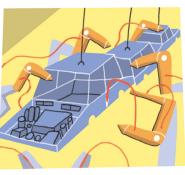
Flip-chart paper to be divided in three columns:

Blue	Black	Green



### ± 55 min. and project work





# Activity 15: What should I know about automation?

### Subject matter

ICT, physics, design and technology, sciences, maths, citizenship education, tutorship and career counselling.

### **Expected learning outcomes**

#### Learners will:

- collect information on automation and infer what might be the impact of automation on their career choices;
- connect STEM subjects to career opportunities;
- relate automation with a positive shift in gender balance in labour (e.g. as work becomes less physically demanding or jobs no longer require long absences from home).

### Preparation and materials

- Prior to the activity, consider revising the concept of <u>automation</u><sup>34</sup> in general and in relation to <u>transportation</u>.<sup>35</sup>
- 'What Is Automation?'<sup>36</sup> and 'There Is More to STEM Than You Think'<sup>37</sup> online videos to project in class. To watch the videos with subtitles in your own language, in settings, turn on 'auto-translate'.
- Activity 15: STEM and transferable skills handout to distribute to all learners.

### Key focus and issues

Automation and digitalisation are changing the way careers are defined. The skills demanded by employers require a priority focus on STEM. It is expected that future careers will rely heavily on 21st-century skills, such as critical thinking, creativity, cultural awareness, collaboration and problem solving. In this context, this activity focuses on automation trends in the world of work and the impact it may have on learners' career choices. By researching the consequences of increased automation, learners become aware of what opportunities their career choices need to take into consideration.

<sup>34 &</sup>lt;a href="https://www.britannica.com/technology/automation">https://www.britannica.com/technology/automation</a>

<sup>35 &</sup>lt;a href="https://www.britannica.com/technology/automation/Transportation">https://www.britannica.com/technology/automation/Transportation</a>.

<sup>36 &</sup>lt;a href="https://www.youtube.com/watch?v=xb6Xj1gfljc">https://www.youtube.com/watch?v=xb6Xj1gfljc</a>

<sup>37</sup> https://www.youtube.com/watch?v=wwzmF-8o724&feature=emb\_logo



will be responsible for researching a specific topic related to technological affecting the future of work. At the a clearer view of the trends affecting their future and will be better equipped to navigate their educational and career paths.

Step 2 20 min.

select different research topics for the

- · What are the opportunities and challenges for automation in
- · How has the use of technology and innovation helped in advancing gender
- and innovation brought for gender
- · What jobs will disappear and what new jobs will be created in the
- · Are robots taking over women's

and men's jobs in the transport sector? Do women and men face the same risk of automation?

Step 3 10 min.

on the timeline of the project. learners and inform them that pairs are expected to develop their work using the skills mentioned in the

will be shared in a five-minute they solved their difficulties, how they

Supervise and assist learners with the

Step 4

Ask the pairs to share their presentations.

Step 5 20 min.

### Tips and remarks

- Automation and digitalisation have decreased the reliance on strength in many professions, allowing young people more than ever to choose career paths according to their preferences.
- It is important that learners understand what STEM subjects offer in terms of career choices and development of the transferable skills employers are looking for.

#### IDEAS FOR DEBRIEFING

- · Discuss the following questions:
  - Did you enjoy developing this project? Why?
  - Did you pay attention to using the STEM and transferable skills in your work? Give examples.
  - Was it difficult to choose the topic and decide on the presentation? Give examples.
  - · What are the key messages from all presentations?
  - Do these messages affect the way you think about your future career? In what way?
  - · Is there any other comment you would like to share?
- Project the online video 'There Is More to STEM Than You Think' 39 to wrap up the activity.

#### VARIATIONS AND EXTENSIONS

Visiting a company with automated technologies and talking to workers would be a great learning opportunity for young people.

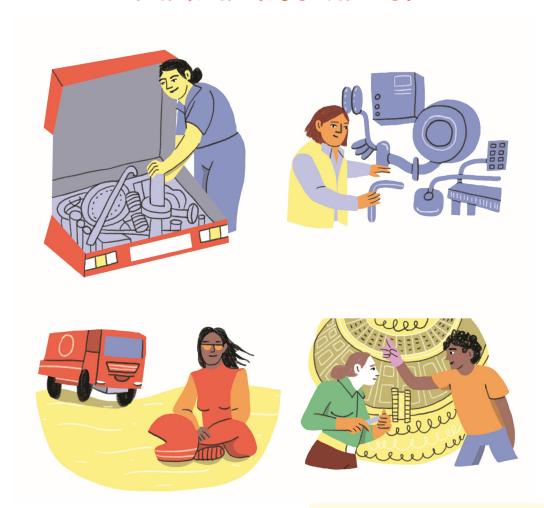
#### **ACTIVITY 15: STEM AND TRANSFERABLE SKILLS HANDOUT**

Practise and develop your STEM and transferable skills (STEM stands for 'science, technology, engineering and mathematics')		
Employers look for:	Transferable skills to solve real world problems	
<ul> <li>Analytical skills — analysing and interpreting information and assessing the best course of action.</li> <li>Scientific skills — breaking down complex scientific concepts and systems.</li> <li>Mathematical skills — accurately gathering and analysing data. Applying simple and complex equations to solve problems.</li> <li>Technical skills — troubleshooting and debugging a complex technological system or repairing a machine.</li> </ul>	<ul> <li>problem solving</li> <li>creativity</li> <li>critical analysis</li> <li>teamwork</li> <li>independent thinking</li> <li>initiative</li> <li>communication</li> <li>digital literacy</li> </ul>	



± 45 min.

# Activity 16: Don't panic, lam a mechanic!



#### Subject matter

Physics, design and technology, English, history and social sciences, ICT, tutorship and career counselling.

#### **Expected learning outcomes**

#### Learners will:

- consider the skills needed to perform certain jobs in the transport sector and discuss if such skills can be considered gender neutral;
- discover the variety of jobs in the transport sector;
- connect STEM subjects to career opportunities.

#### Key focus and issues

Despite similar achievement scores among girls and boys, the overwhelming majority of students studying and working in STEM fields are men. Gender stereotypes have a major impact on students' interest in STEM subjects and their aspirations to pursue a career in STEM fields. This activity focuses on raising awareness on lesser-known career paths that both boys and girls can follow. It takes the example of women mechanics but opens up other possibilities.

#### Preparation and materials

- Prior to the activity, you can watch the 'STEM Alliance Bringing Industry and Education
   Together'<sup>40</sup> video. To watch the videos with subtitles in your own language, in settings, turn on 'autotranslate'.
- · Activity 16: Job characteristics handout to print and distribute to groups of three or four.
- <u>'A Female Mechanic Hopes to Inspire Girls to Get into the World of Vehicle Repair</u>'<sup>41</sup> online video to project in class. Alternatively, try to find a video from your own context inspiring girls to pursue a career in transport mechanics.
- · Learners divided into groups of three or four.

#### LESSON DIRECTIONS

Step 1

Distribute the Activity 16: Job characteristics handout to all the groups and explain that each group will have to list three known professions that meet the job characteristics listed in the handout.



Ask the learners to share their findings and strike through the jobs listed on the board that do not require STEM studies.

Step 2 5 min.

Ask the learners to share their listed jobs and write them on one side of the board.

Step 6

Project the video 'A Female Mechanic Hopes to Inspire Girls to Get into the World of Vehicle Repair'<sup>42</sup> and be attentive to learners' remarks. Ask the learners (as applicable, per the listed jobs in the board):

Step 3
5 min.

Ask the learners to look again at the job characteristics and list three known occupations that do not meet most of these characteristics, and proceed as in step 2, using the other half of the board.

- Did you consider a job in mechanics?
- Why did you consider/not consider a iob in mechanics?

Step 4

Explain what STEM subjects are and why they are important. Next, ask students to discuss in groups what jobs listed on the board require STEM education.

Step 7 15 min.

Debriefing.

<sup>40</sup> https://www.youtube.com/watch?v=RTsF02n1I7Q.

<sup>41 &</sup>lt;a href="https://www.youtube.com/watch?v=VP8nZ1UmV4c">https://www.youtube.com/watch?v=VP8nZ1UmV4c</a>

<sup>42</sup> https://www.youtube.com/watch?v=VP8nZ1UmV4c.

#### IDEAS FOR DEBRIEFING

Discuss the following questions:

- · What did you learn today? Give some details.
- · Was it surprising? Why?
- Was it relevant/important/useful? Why is that?
- · How does this fit into your life? Give examples.
- Do you have other examples of male-dominated careers/jobs that women can choose?

#### VARIATIONS AND EXTENSIONS

Read the following quote from Jen Kelly, founder
of Women in Trades Network Ireland, and ask
learners to comment: 'It can be a daunting prospect
to embark on a career in a male-dominated
environment, but things are changing. Where there
may once have been resistance to women working
in these roles, there is now support. We know from

#### Tips and remarks

- There is a lack of knowledge about this career field — the effort needs to begin with making a mechanics career more attractive to women by improving communication and disseminating information at all levels.
- Keep in mind the diversity of transport mechanics jobs (e.g. locomotive, railway, automotive, aircraft, ship, barge, and crane mechanics).
- While there are fewer women mechanics than men, there are nevertheless plenty of examples of fascinating women mechanics in transportation history. Try to search for some in your context.

examples here and overseas that women are exceptional in these jobs. These jobs are great for women. They say that such professions provide them with an improved quality of life through a solid wage and the skills they can use in and out of work.'43

- Explore inspiring stories of girls and women in mechanics and/or other STEM occupations in both the past and present in your context. You can prepare visual resources (photos, online videos, articles) and discuss them in class.
- If you have a chance, invite transport mechanics (ideally women), maintenance technicians or STEM professionals to school (or alternatively visit them).
- Consider participating in activities suggested by the <u>STEM Alliance</u><sup>44</sup>, encouraging the integration of STEM career topics in class.

<sup>43</sup> Levendon, N. (2017, 26 March). 'Women Urged to Start Careers in Mechanical Professions. Irish Times. Retrieved from: https://www.irishtimes.com/business/work/women-urged-to-start-careers-in-mechanical-professions-1.3025397.

<sup>44</sup> For more information, see <a href="http://www.stemalliance.eu/about.">http://www.stemalliance.eu/about.</a>

#### **ACTIVITY 16: JOB CHARACTERISTICS HANDOUT**

Job characteristics

Job stability
Work-life balance
Career progression
Career progression
Job variety
Decent income
Job satisfaction
Communication skills
Problem-solving skills
Teamwork skills
Digital skills



± 60 min.

## Activity 17: My dream job

#### Subject matter

All subjects across the curriculum and career counselling.

#### **Expected learning outcomes**

#### Learners will:

- broaden their exposure to different perspectives on future careers:
- improve their attitudes about career opportunities and motivation to aspire to their dream careers;
- reflect on their secondary school choices and grasp career goals that might be interesting for them.

#### Key focus and issues

This activity focuses on stimulating discussion among learners on how to get their dream job after education. It is important that they identify the steps they should take. For example, what skills and coursework are required. This is also a good opportunity to introduce the concept of lifelong learning, as the ongoing, voluntary and self-motivated pursuit of knowledge for either personal or professional reasons.

#### Preparation and materials

- This activity develops the 'think-pair-share'<sup>45</sup> cooperative learning technique that encourages individual participation, active listening and problem solving. It entails asking a question to learners, letting them take a few minutes to think and then sharing their thoughts with another learner.
- Sitting arrangements that allow for learners to think individually and share in pairs.
- · Activity 17: My dream job handout to print and distribute to all learners.

#### LESSON DIRECTIONS

Step 1 10 min. Inform the learners they will be focusing on their future careers. Distribute the Activity 17: My dream job handout to all learners. Ask the learners to individually read through the interview in the handout and write down two to three thoughts on career choices raised by reading the interview

Step 4

Step 3

10 min.

Ask the learners to explain their partner's ideas.

questions they need to ask
themselves when choosing a career.
Give an example, writing on the board:
what are my interests? If needed, ask

two volunteer learners to write o board the learners' questions.

Step 2

Ask the learners to pair with a classmate and share their thoughts. Suggest that they take turns, listen carefully and ask each other questions in order to understand each other's main ideas.

This thinking routine was developed as part of the Visible Thinking project at Project Zero, Harvard Graduate School of Education. See more at: <a href="http://pz.harvard.edu/sites/default/files/Think%20Pair%20Share.pdf">http://pz.harvard.edu/sites/default/files/Think%20Pair%20Share.pdf</a>.

Step 5

If there are too many questions on the board, consider asking the learners to revise the questions and decide which ones (if any) should be deleted.

Step 6

Debriefing.

#### IDEAS FOR DEBRIEFING

- Ask learners to pair again and organise the questions from the most important to the least important. Pairs share their lists and justify their arrangements.
- Discuss the following questions:
  - What are the relevant learnings today? Why is that?
  - What effect do such learnings have on you? Give examples.
  - Have you thought about your dream job? What steps should you take? What skills should you need?
  - Can we really predict where we are going?
     Explain the concept of lifelong learning and asks learners to relate the concept with information from the interview.

#### Tips and remarks

- It is important that learners are aware of the possibilities they have, the skills they need to develop and the steps they will need to follow to fly high and reach their dream job. They should also grasp that they are entitled to fly high and aspire to any dream job, and that their engagement in schoolwork will help them with that aspiration.
- At the same time, learners should be aware that they might change their options and that lifelong learning is an important dimension of every career path.
- Wrap up by reading the following paragraph: The world of aviation is huge and has a lot of hidden
  occupations. To have an idea, each flying commercial airplane incorporates a big supporting team of
  hundreds of sector-specific professionals, including engineering and maintenance, flight operations,
  air traffic controllers, fuel services, meteorological, digital operations, ground operations, cargo,
  passenger, safety, etc. The transport sector entails a huge number of supporting occupations that
  learners might wish to research and consider when thinking about career paths.

#### VARIATIONS AND EXTENSIONS

- Organise career days and invite guests (e.g. parents or community members) to share their career
  experiences with the learners. This can take an interactive format, for example by setting up stations
  in the room where guests show their daily activities and learners move from station to station and
  ask questions.
- Let learners conduct interviews with different transport sector stakeholders to find out about future work opportunities and skills needed in specific occupations.
- Explore a whole diversity of current and future occupations (2035) in aviation.

#### **ACTIVITY 17: MY DREAM JOB HANDOUT**



Pilot officer Neusa Monteiro interviewed in September 2020

#### How did you become a pilot?

I studied communication technologies and was planning a career in journalism, but when I finished a friend challenged me to compete for the position of flight attendant in the Portuguese Airlines, I was 21 then. When, for the first time in my life, I entered the cockpit while in the air I was dazzled by the view of the sky and the complexity of all the on-board instruments and lights. I knew this was my goal, this was what I wanted to do in life.

#### Didn't you dream about it before?

Not really, how could I dream of what I neither knew nor thought possible? It never crossed my mind. I've never limited myself to the fact that my parents were low paid, but there are things I know a person doesn't dream of.

#### Was it a very difficult process?

Yes, it was. I had to study maths and physics applied to aviation. I hadn't studied any of those subjects in secondary school, so everything took

me longer ... In reality I had to take all the maximum time permitted, I continued to work to pay for my training — it is quite expensive — and I also took a bank loan. In this period, I got married, and I got my multicrew pilot licence when my daughter was five months old. When I finished my course, I waited 4 years for the contest to become a commercial pilot in the Portuguese Airlines, I was 33 when I started. But it was undeniably worth it!

#### How old are you now and what is your position in the Portuguese Airlines?

I'm 35, and I am a pilot officer (or co-pilot) and I sit on the right side of the cockpit. The pilot in command (or captain) sits on the left side. The big difference between the two seats is the flying hours, the experience. I am qualified to fly Airbus 319, 320 and 321. To fly Airbus 330, I need another qualification.

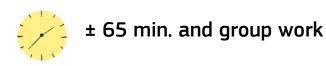
#### Did you feel any discrimination for being a woman?

Yes, but I tried to ignore it. I think it's more connected to the older generations and pilots coming from the air force, where airplanes need more strength to be operated [men are stereotyped as physically stronger than women]. The automation of commercial airplanes has completely changed the scenery.

#### How often are you retrained in the simulator?

Every six months — and it is intense — and whenever there are changes in the planes I am qualified for as a pilot. It is mandatory if for any reason I could not fly for a period.

Source: Authors.



# Activity 18: The exceptional system of sustainable urban mobility

#### Subject matter

Citizenship education, history and social sciences, geography and sciences, physics, maths, design and technology, ICT, tutorship and career counselling.

#### **Expected learning outcomes**

#### Learners will:

- relate transport to urban quality of life and explore zeroemission, intelligent and multimodal mobility;
- explore the concept of sustainability and the importance of effective urban transport for all.

#### Preparation and materials

- Prior to the activity, get familiar with the sources outlined in the <u>Activity 18: Topics for group work handout</u>. If the learners are not able to read in English, add sources in their language.
- Examples of mind maps to show in class (e.g. see <u>Activity 18:</u> <u>Examples of mind maps</u>).
- · Learners divided into groups of four or five.
- Activity 18: Topics for group work handout for every group
  of learners and access to the internet or materials to develop
  the selected topics.
- Flip-chart paper (one to two sheets per group), tape (to tape up two sheets of paper if needed) and markers of different colours.

# Key focus and issues

This activity focuses on key dimensions of sustainable urban mobility and links it to the daily life of Europeans, their problems and needs. It looks at the European Mobility Week between 2014 and 2020 and the main concerns addressed. The European Mobility Week<sup>47</sup> (16–22 September each year) is the European Commission's awarenessraising campaign on sustainable urban mobility, culminating in the popular 'Car-Free Day'. It promotes behavioural change in favour of active mobility, public transport and other clean, intelligent transport solutions.

#### LESSON DIRECTIONS



Explain that the learners will be creating a mind map on urban mobility. If needed, describe what a mind map is and show some examples.

Each group receives one to two sheets of flip-chart paper with markers of different colours to create the mind map and the Activity 18: Topics for group work handout. Ask the learners to read through the topics in the handout and choose one they want to explore. Allow time for them to make their choices and answer any questions or doubts the learners might raise. Make sure the groups have selected different topics.

Once groups select the topics, explain that learners need to search for answers online. The handout lists a

few sources they can use to answer or develop their topic. Inform the learners that within each group the work needs to be divided. Ultimately, each group member will present their work.

Step 2

Supervise and assist the learners' work.

Step 3 30 min. Ask each group to exhibit the mind map by taping it to the board. Each group member presents the findings. The other groups listen to the presentations and write down questions and comments related to the content of the presentations.

If it is difficult to arrange access to

from the websites and copy them for

the internet, print some materials



Debriefing.

the activity.

Tips and remarks

#### IDEAS FOR DEBRIEFING

- Allow for an orderly Q & A session between the groups, based on the questions and comments written during the presentations.
- Discuss the following questions:
  - Had you ever thought before about what allows for our everyday life to run smoothly and normally?
     What were the major findings?
  - · How do you link the urban mobility system with quality of life of all? Give examples.
  - · Was today's learning relevant? Why?

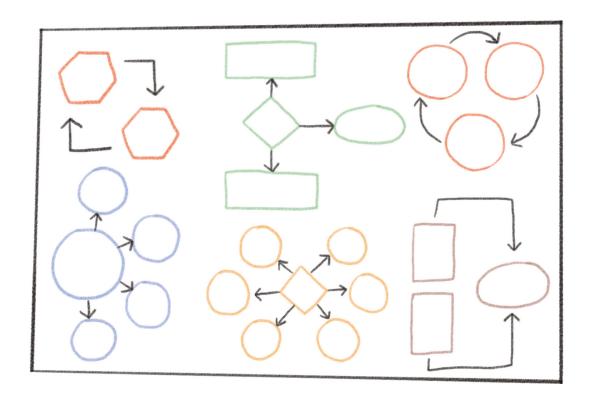
#### VARIATIONS AND EXTENSIONS

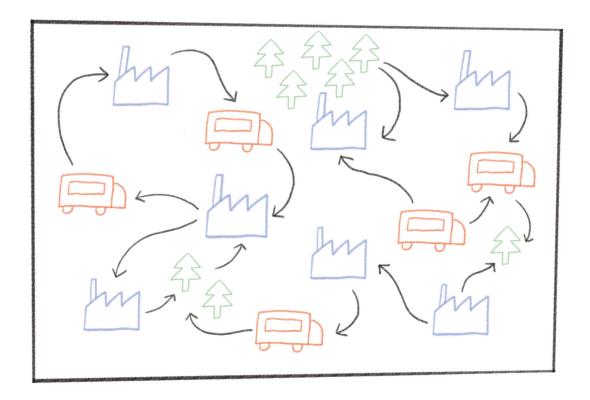
- Watch and be inspired by:
  - 'Why Buses Represent Democracy in Action' 48 by Enrique Peñalosa, the mayor of Bogota (transcript and subtitles available in 29 languages).
  - <u>'The 4 Commandments of Cities'</u><sup>49</sup> by Eduardo Paes, the mayor of Rio de Janeiro (transcript and subtitles available in 30 languages).
- Explore and take part in the activities of the European Mobility Week organised in your communities.

<sup>48</sup> https://www.ted.com/talks/enrique\_penalosa\_why\_buses\_represent\_democracy\_in\_action.

<sup>49</sup> https://www.ted.com/talks/eduardo\_paes\_the\_4\_commandments\_of\_cities/transcript?language=en.

#### **ACTIVITY 18: EXAMPLES OF MIND MAPS**





#### **ACTIVITY 18: TOPICS FOR GROUP WORK HANDOUT**

#### TOPICS FOR GROUP WORK:

- **1. Transport and urban quality of life.** What impacts can transport have on the quality of life in cities? How can we improve quality of life for all in our cities with transport?
- **2. Zero-emission urban mobility.** What is it and why is it important? How has it been promoted and developed in the EU or your country in the last five years?
- **3. Smart and intelligent transport solutions.** What are these and what are the benefits? What are some examples of technological innovation changing European cities?
- **4. Multimodality of urban transport.** What is it and why is it important? What are some examples of how we can make EU cities multimodal?

#### SUGGESTED SOURCES:

- <u>European Mobility Week 16–22 September 2020: Thematic Guidelines</u><sup>50</sup> ('Zero-Emission Mobility for All').
- European Mobility Week 16–22 September 2019: Manual Including Thematic Guidelines and Handbook for Local Campaigners<sup>51</sup> ('Safe Walking and Cycling').
- European Mobility Week 16–22 September 2018: Manual Including Thematic Guidelines and Handbook for Local Campaigners<sup>52</sup> ('Mix and Move!').
- European Mobility Week 16–22 September 2017: Thematic Guidelines<sup>53</sup>
  ('Clean, Shared, and Intelligent Mobility').
- European Mobility Week 16–22 September 2016: Thematic Guidelines<sup>54</sup> ('Smart Mobility. Strong Economy').
- European Mobility Week 16–22 September 2015: Thematic Guidelines ('Choose. Change. Combine').
- European Mobility Week 16–22 September 2014: Thematic Guidelines ('Our Streets Our Choice').
- European Commission (2021). Urban Mobility.<sup>57</sup>

<sup>50</sup> https://mobilityweek.eu/fileadmin/user\_upload/materials/participation\_resources/2020/Thematic\_guidelines\_2020/2020\_EMW\_Thematic\_Guidelines\_layout\_Final.pdf.

<sup>51</sup> https://mobilityweek.eu/fileadmin/user\_upload/materials/participation\_resources/2019/2019\_EMW\_Manual.pdf.

<sup>52</sup> https://mobilityweek.eu/fileadmin/user\_upload/materials/participation\_resources/2018/2018\_EMW\_Manual.pdf.

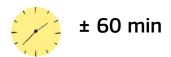
<sup>53 &</sup>lt;a href="https://mobilityweek.eu/fileadmin/user\_upload/materials/participation\_resources/2017/2017\_EMW\_Thematic\_Guidelines.pdf">https://mobilityweek.eu/fileadmin/user\_upload/materials/participation\_resources/2017/2017\_EMW\_Thematic\_Guidelines.pdf</a>.

<sup>54 &</sup>lt;a href="https://mobilityweek.eu/fileadmin/user-upload/materials/participation-resources/2016/Thematic Guidelines 2016.">https://mobilityweek.eu/fileadmin/user-upload/materials/participation-resources/2016/Thematic Guidelines 2016.</a>
<a href="pdf">pdf</a>.

<sup>55</sup> https://mobilityweek.eu/fileadmin/user\_upload/materials/participation\_resources/2015/DTRM\_ ThematicGuidelines2015\_07.pdf.

<sup>56 &</sup>lt;a href="https://mobilityweek.eu/fileadmin/user\_upload/materials/participation\_resources/2014/thematic-guidance-2014.pdf">https://mobilityweek.eu/fileadmin/user\_upload/materials/participation\_resources/2014/thematic-guidance-2014.pdf</a>.

<sup>57</sup> https://ec.europa.eu/transport/themes/urban/urban mobility en.



## Activity 19: Suppose that there is gender balance in the transport sector

#### Subject matter

Citizenship education, history and social sciences, geography and sciences, physics, maths, design and technology, ICT, tutorship and career counselling.

#### **Expected learning outcomes**

#### Learners will:

- discover the different transport modes;
- infer why gender balance in transport is positive for a democratic society.

#### Preparation and materials

- Prior to the activity, consider revising <u>'Women in</u>
   Transport — EU Platform for Change'.58
- <u>'Women in Transport'</u><sup>59</sup> online video to project in class.
- · Activity 19: Infographics to project in class.
- · Learners seated in a circle.
- Blank sheet of paper (A4 format) for each learner.

#### Key focus and issues

This activity is designed for young people to visualise a transport sector where occupations are gender balanced. The transport sector offers the younger generation a variety of career choices they should consider, regardless of their gender - their choices should not be limited by traditional gender stereotypes and beliefs. Mobility and transport matters to us all. From daily commuting to work, visiting family and friends, tourism, to the proper functioning of global supply chains for the goods in our shops and for our industrial production. mobility is an enabler of our economic and social life. Free movement of people and goods across its internal borders is a fundamental freedom of the EU and its single market. Travelling in the EU has led to greater cohesion and a strengthened European identity. As the second-largest area of expenditure for European households, the transport sector contributes 5 % to European GDP and directly employs around 10 million workers. Paradoxically, only 22 % of transport workers are women.

<sup>58 &</sup>lt;a href="https://ec.europa.eu/transport/themes/social/women-transport-eu-platform-change-en-">https://ec.europa.eu/transport/themes/social/women-transport-eu-platform-change-en-</a>

#### LESSON DIRECTIONS

Step 1

Project the 'Women in Transport'60 online video and show Activity 19: Infographics to the learners to demonstrate the problem.

Learners have some time to read the numbers and understand what they mean. Answer any questions that learners might have, and then read slowly:

'With only 22 % of women, the transport sector is not gender balanced. The objective of the 'Women in Transport – EU Platform for Change', launched on 27 November 2017, is to strengthen women's employment and equal opportunities for women and men in the transport sector thanks to the actions brought about by the Platform members.'61

Step 2 10 min. Explain to learners that they should imagine a gender-balanced transport sector and think about and ask one relevant question to promote women's employment and equal opportunities for men and women in the sector. Tell the learners that the questions need to include 'what if' or 'suppose that' and give examples:

- What should I do if I felt my friends were not comfortable with me, should I eat alone?
- Suppose that I needed information to continue my work and my friends do not help me, how could I change their attitude?

Learners take a blank sheet of paper.

Step 3
25 min.

Explain how the activity is developed. Each learner writes one question on top of the sheet of the paper distributed. Each learner hands the paper with the written question to the classmate on their right and receives one paper from the classmate on the left. Then the learner reads the question and writes down any ideas or answers they may have and adds their name for any clarification questions. If the learner has no idea or answer, they hand the sheet to the next person. The activity ends when everybody has their original sheet back

Step 4 15 min.

Sharing and debriefing.

<sup>60</sup> https://www.youtube.com/watch?v=-NqdyrE1hf8

<sup>61</sup> European Commission. 'Women in Transport — EU Platform for Change', https://ec.europa.eu/transport/themes/social/women-transport-eu-platform-change\_en.

#### Tips and remarks

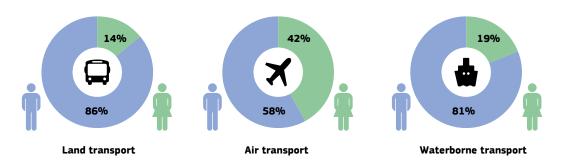
- Guide learners to explore issues
   that relate to women's entry into
   the sector (e.g. gender stereotypes
   about transport professions,
   gender segregation in education,
   concerns about the male-dominated
   environment) as well as their retention
   in the transport sector (e.g. concerns
   about work-life balance, gender
   pay gap). Think also about general
   misconceptions or a lack of knowledge
   that learners might have (e.g. in
   relation to career prospects, physical
   demands).
- You might want to replay the online video once you explain the task, so learners can better focus on the factors behind women's low representation in the transport sector.

#### IDEAS FOR DEBRIEFING

- Read the questions and answers, clarify any issues and ask learners to select the most appropriate answer(s) for each question.
- Wrap up with some remarks that learners may comment on:
  - Imagine a future where girls and boys are equally encouraged to study and work in STEM-related and education, health and welfare fields.
  - Imagine a future of work where there is equal pay for equal work and work of equal value.
  - Imagine a future of work where women's life choices are not constrained by unpaid care and household work.
  - Imagine a future of work where diversity is valued at all levels, and everyone recognises that differences are strengths.

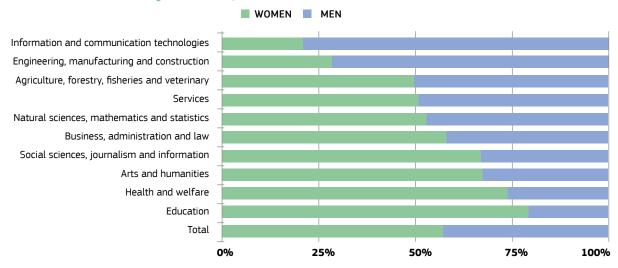
#### **ACTIVITY 19: INFOGRAPHICS**

Only 22% of transport workers are women!



Source: Eurostat (Ifsa\_egan22d), share of women and men employed by transport mode in EU-27, aged 15-64, 2020.

#### How are study fields split along the gender lines in the EU?



Source: Eurostat (educ\_uoe\_grad03), distribution of graduates in tertiary education by field of education in EU-27, 2018.

#### What do Europeans say about gender stereotypes?



Source: Special Eurobarometer 465 on Gender equality 2017. Retrieved from: <a href="https://data.europa.eu/euodp/lt/data/dataset/52154-87-4-465-ENG">https://data.europa.eu/euodp/lt/data/dataset/52154-87-4-465-ENG</a>.



#### ± 30 min. and project work

# Activity 20: Transport is about lowy drivers

#### Subject matter

Citizenship education, social sciences, history, tutorship, career counselling, design and technology.

#### **Expected learning outcomes**

#### Learners will:

- recognise the different modes of transport;
- discuss how the transport sector impacts their daily life and grasp the bigger picture of the transport sector;
- relate the existence and development of some features of urban, modern lifestyles (including, health, globalisation, e-commerce, mass culture, tourism, schooling, etc.) to the development of the transport sector.

#### Key focus and issues

This activity opens up the different dimensions of transport across the five main transport modes: air, road, rail, maritime, inland waterways. It raises their interest in a world they may know very little about. It also encourages learners to understand that mobility and transport matters to us all. From daily commuting to work, visiting family and friends, tourism, to the proper functioning of global supply chains for the goods in our shops and our industrial production, mobility is an enabler of our economic and social life.

#### Preparation and materials

- Prior the activity, consider running a brief internet search for a quick panoramic view of how ample the transport sector is. You can refer to the material listed in <u>Toolset 7</u>: To go one step further.
- · Learners divided into groups of four.
- Access to the internet for learners to research different topics (can be replaced with printed material).
- Other creative tools for learners depending on the choice of their output (video, visual or oral presentation, poster or similar).

#### LESSON DIRECTIONS



Once the learners are sitting in groups of four, ask them first to work in two pairs. Explain that they should brainstorm anything that comes to mind when they think about transport (e.g. transport subsectors, jobs in the transport sector, the future of transport).

For this introduction, consider using the 'round robin' cooperative structure. Sitting in pairs, students alternate generating brief oral responses to a given question. Consider providing students with a large piece of paper so they can write down their ideas.



Ask the groups to compare the ideas from their brainstorming.



1. To do more in-depth research into the category that they have been



Let the groups designate one speaker to share the brainstorming ideas aloud.

2. To analyse how that particular category influences their daily life (i.e. how their life would be different

As a starting point for their research,

Step 4 3 min.

WHAT: HOW:

- People Freight
- Land Rail
- - Inland waterways

the learners can also take the base information on the internet. The can be a short video, a visual or oral presentation, a poster or similar.

Next, ask the learners if all the above categories have been covered in the aloud, or if there are still any other

Step 6 Flexible

Ask the learners to share all their results and give a new title to the activity.

Allocate the above categories — land, — to the different groups and ask the



Debriefing.

#### IDEAS FOR DEBRIEFING

Discuss the following questions:

- What did you feel when you read the title of the activity?
- · Were you conscious that transport was as present in your life as it is?
- · If you had to live in a world without transport, what features in your present life would be most affected?
- · Has this activity changed your perception of transport in any way?

#### VARIATIONS AND EXTENSIONS

Explore a whole diversity of current and future occupations in the transport sector, with the help of the Skillful Project posters on the aviation jobs from 2020 to 2035<sup>62</sup>, road jobs 2020<sup>63</sup> and 2035<sup>64</sup>, the future of rail and rail jobs from 2020 to 2035, maritime jobs 202065 and 203566.

<sup>62 &</sup>lt;a href="http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15223">http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15223</a>.

<sup>63</sup> http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15221.

<sup>64</sup> http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15222.

<sup>65</sup> http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15225.

<sup>66</sup> http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15226.



± 45 min.

# Activity 21: Transport jobs are not for women

#### Subject matter

Tutorship, career counselling, design and technology, ICT, social sciences, citizenship education, science.

#### **Expected learning outcomes**

#### Learners will:

- analyse different transport subsectors and identify the reasons for the existing gender imbalance;
- identify the different skills (specific or general/transferable, hard and soft skills), required to work in the transport sector.

# Key focus and issues

The activity focuses on letting learners reflect on the reasons for gender imbalance in the transport sector, especially in some subsectors.

#### Preparation and materials

- Prior the activity, get inspired by videos and articles making visible stories of women in transport. Some examples include:
  - Inspirational Women in the Bus Industry 100 Years of Women in Transport.<sup>67</sup>
  - Aviadoras Making the Case for Women in Aviation.<sup>68</sup>
  - 100 Years of Women in Transport The Present and Future.<sup>69</sup>
  - Women in transport.<sup>70</sup>
  - Career Advice on Becoming a Train Driver by Eva B.<sup>71</sup>
- · Activity 21: Graphs and Activity 21: Transferable skills to project in class.
- · Learners divided into groups of four (ideally with similar number of boys and girls).

#### LESSON DIRECTIONS



Explain that this activity is called 'Transport jobs are not for women'. Show the learners Activity 21: Graphs and ask them to write, individually, three statements based on the two graphs.



Ask the learners to share all their statements in their groups and choose three statements to share with the whole class

- 67 https://www.youtube.com/watch?v=ZVLSD\_E4pc8&ab\_channel=TransportforLondon.
- 68 https://www.eurocockpit.be/news/making-case-women-aviation.
- 69 https://www.youtube.com/watch?v=WfzfBH\_IVTM.
- 70 https://ec.europa.eu/transport/themes/social/women-in-transport\_en.
- 71 https://icould.com/stories/eva-b/.

Step 3

Ask the learners to share and discuss all the statements in the class. The main findings should be that there are fewer women than men in all subsectors and occupations of the transport sector. In some subsectors and occupations, there are far fewer women.

Step 4

Ask the learners to look at Activity 21: Transferable skills. Apart from formal skills and technical knowledge, these are the different transferable skills needed in the transport sector at high-, medium- or low-skill level. Ask the groups to provide examples of those skills 'in action' to check their understanding.



Ask girls specifically to name those skills that they think women do not have or have to a lesser degree so you can tick them in the right column.

Step 6

Assuming that there will not be any skill that women do not have, ask learners to list in their groups the different reasons why the transport sector does not seem to be so appealing for women.

Step 7 6 min.

Ask groups to share the reasons they have listed with the class and discuss further

Step 8

Ask the learners to change the title of the activity.



Debriefing.

Tips and remarks

3 min.

#### It might be

It might be necessary to challenge some of the assumptions that learners may express about the capability of women and men to do certain things.

#### Discuss the following questions:

IDEAS FOR DEBRIEFING

- · What did you feel when you read the title of the activity?
- What did you feel when you analysed Activity 21: Graphs (as a girl, as a boy, as you?)
- If there are fewer women in the transport sector, whose voices are being represented in it?
- Based on the <u>'People, Systems, Power, Participation'</u><sup>72</sup> and <u>'Voice and Choice'</u><sup>73</sup> thinking routines, ask: If there were more women in the sector, how do you think those women might change the system? What changes might we see in a system with more participating women (e.g. in one of the videos a woman lorry driver says that women cause fewer accidents because they drive more carefully)? Try to give examples.

#### VARIATIONS AND EXTENSIONS

- · Watch with learners some of the suggested videos.
- There are other activities in <u>Toolset 5: Transport</u> where some specific subsectors of the transport sector are analysed, but if learners are interested in any subsector in particular, they can be asked to research the formal skills and technical knowledge needed in that subsector.
- If you realise that some learners are interested in any transport-related job in particular, help them
  find the relevant information about the career, including skills, training paths and career prospects.<sup>74</sup>

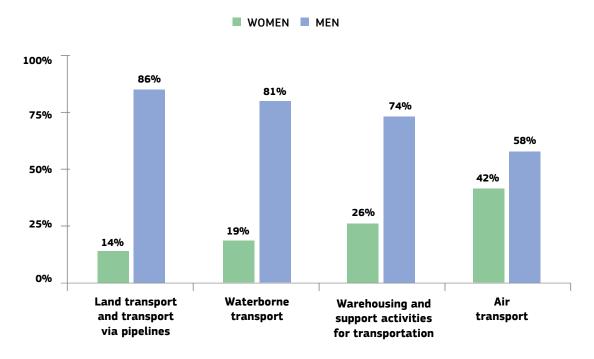
<sup>72</sup> This thinking routine was developed by Sarah Sheya and the Design Justice project. For more information, see <a href="https://www.pz.harvard.edu/sites/default/files/People%2C%20Systems%2C%20Power%2C%20Participation.pdf">www.pz.harvard.edu/sites/default/files/People%2C%20Systems%2C%20Power%2C%20Participation.pdf</a>.

<sup>73</sup> This thinking routine was developed as part of the Agency by Design project at Project Zero, Harvard Graduate School of Education. For more information, see <a href="https://pz.harvard.edu/sites/default/files/Voice%20and%20Choice">https://pz.harvard.edu/sites/default/files/Voice%20and%20Choice</a> 0.pdf.

<sup>74</sup> You can find a general overview in European Commission (2021). *Educational toolkits to help fight gender stereotypes* based on the example of the transport sector: Final study report on the development of the toolkits. DOI: 10.2832/11827.

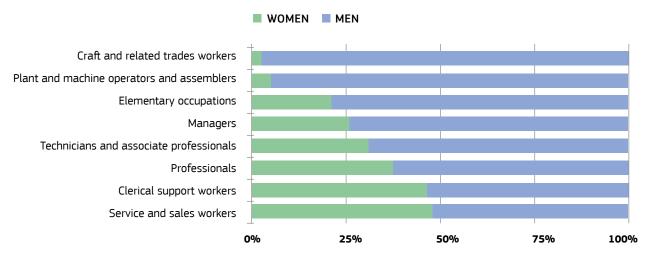
#### **ACTIVITY 21: GRAPHS**

Figure 1. Employment in the transport subsectors in EU-27 (%, aged 15-64, 2020)



Source: Eurostat (lfsa\_egan22d).

Figure 2. Share of women and men employed in transport occupations in EU-27 (%, aged 15 and over, 2018)



Source: Eurostat, LFS (lfsa\_eisn2).

#### **ACTIVITY 21: TRANSFERABLE SKILLS**

Transferable skills (qualities that can be transferred from one job to another), digital and language competences needed in transport jobs		
1	Teamwork and cooperation	
2	Adaptability to change	
3	Computer use	
4	English language	
5	Customer service	
6	Problem solving	
7	Project management	
8	Work independently	
9	Think proactively	
10	Think creatively	



#### 🛓 ± 45 min. and project work

## Activity 22: Transport is sustainable mobility



#### Subject matter

Tutorship, career counselling, design and technology, ICT, social sciences, citizenship education, science.

#### **Expected learning outcomes**

#### Learners will:

- reflect about the relation between transport and sustainability;
- · explore how to improve transport in the future;
- · value green, efficient means of transportation;
- · improve their thinking skills.

#### Preparation and materials

#### Key focus and issues

Although sustainable transport is not represented as one of the stand-alone UN Sustainable Development Goals (SDGs), it is mainstreamed in a direct or indirect manner into many of the SDGs. Indeed, the most serious challenge facing the transport sector today is to significantly reduce its emissions and become more sustainable. This activity aims to relate the core concepts of sustainability to transport. Learners reflect and play an active role in proposing how to make transport more sustainable by designing their own projects.

- Revise information on the <u>SDGs</u><sup>75</sup> in advance and reflect about the relationship between transport and sustainability<sup>76</sup> implied in <u>Activity 22: Transport</u> and the SDGs.
- An image of the 17 SDG icons<sup>77</sup> to project in class. A quick internet search will provide many options, possibly also in your language.
- Learners in groups of four (ideally with similar numbers of girls and boys in the group and learners with a variety of different skills).
- · Activity 22: Transport and the SDGs to distribute to learners.

<sup>75</sup> https://sdgs.un.org/goals.

<sup>76</sup> See, for example, SLoCaT (2019). Sustainable Transport: A Critical Driver to Achieve the Sustainable Development Goals Infographic. Retrieved from: <a href="https://slocat.net/wp-content/uploads/legacy/u13/vnr">https://slocat.net/wp-content/uploads/legacy/u13/vnr</a> 2019 infographic.pdf.

<sup>77</sup> https://www.globalgoals.org/resources.

#### LESSON DIRECTIONS

Step 1

Ask the learners to reflect in groups on what they know about the SDGs. Learners can brainstorm together using the 'round robin' cooperative strategy: Learner 1 writes the first idea about the topic on a sheet of paper and passes it to learner 2, who reads what is written and adds a new idea. The sheet goes round several times in the group until all the learners have finished adding their ideas.

Step 2

Write 'what, who, when and how' on the board and elicit ideas about the SDGs from all the groups, trying to answer the questions.

Step 3

Project the image of the 17 SDG icons on the board and complement the information about the SDGs that has been elicited from the learners.

Step 4

Ask the learners to brainstorm in their groups about how transport could contribute to achieve the goals of the SDGs.

Step 5

Ask the groups to share their ideas.

Step 6

Show the learners the information from Activity 22: Transport and the SDGs to complement the learners' ideas and ask the core question of the whole activity, which they will have to analyse in the next steps: How can we make transport more sustainable?

Step 7
Flexible

In groups, ask the learners to reflect on how to make transport more sustainable. Ask learners to do the following:

- 1. Choose one particular transport system you are familiar with or that you have been researching (it can be anything from the underground to pipeline transport, for example).
- 2. If possible, depending on the transport system chosen, experience the system.
- 3. Document the system: take notes about all the parts, the relations between the parts, the processes, people, etc. involved in it.
- 4. Visualise the whole system try to represent graphically everything and everyone involved in it.
- 5. Think about how to improve it.

  As a general guideline, you could consider how you might make it more effective, efficient, green, intelligent, ethical, sustainable, etc. 78

Step 8
Flexible

Ask the learners to outline a group project about the improvement(s) they would make. The results of this project can be delivered in a poster, a presentation or similar.

Step 9 10 min.

All the results are shared, presented and discussed in the classroom

Step 10 8 min.

Debriefing.

These steps are inspired by several thinking routines that help analyse the complexity of systems. The thinking routines were developed by Project Zero, a research centre at the Harvard Graduate School of Education. More information is available at <a href="http://www.pz.harvard.edu/thinking-routines#0bjectsSystems">http://www.pz.harvard.edu/thinking-routines#0bjectsSystems</a>.

#### IDEAS FOR DEBRIEFING

Discuss the following questions:

- · How did you feel experiencing the design of improved sustainable transport?
- What did you enjoy most about the experience?
- Why is it important to make transport more sustainable? How can this have a positive impact on people and the planet?
- · Has this activity changed in any way your perception about transport?
- Can you imagine yourself working as a future engineer or scientist? Why?
- What is the most valuable knowledge you gained from your experience and by listening to the rest of your classmates talking about their projects?

#### VARIATIONS AND EXTENSIONS

- If the sequence of steps is too long, the activity can be broken into two different parts and done in different sessions — one to explore the concept of sustainable transport and the other to develop a project on sustainable mobility.
- Make a field trip to explore a given system together, such as the underground, followed by an interview with workers or transport representatives.

#### **ACTIVITY 22: TRANSPORT AND THE SDGS**

#### TRANSPORT IN THE SDGS

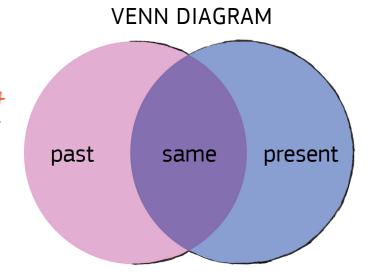
It supports the achievement of at least 8 of the 17 SDGs (see below). In addition, as transport shapes people's access to socio-economic opportunities, it plays an essential role in shaping equitable and inclusive societies and well-being. As such, transport has the potential to contribute to many other SDGs, including alleviation of poverty, gender equality, quality education, healthcare and other critical needs.

- **Goal 2:** End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
- Goal 3: Ensure healthy lives and promote well-being for all at all ages.
- Goal 6: Ensure access to water and sanitation for all.
- Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all.
- **Goal 9:** Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.
- Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12: Ensure sustainable consumption and production patterns.
- Goal 13: Take urgent action to combat climate change and its impact.

Source: SLoCaT (2019). Sustainable Transport: A Critical Driver to Achieve the Sustainable Development Goals. Retrieved from: <a href="http://sdghelpdesk.unescap.org/sites/default/files/2019-11/transport">http://sdghelpdesk.unescap.org/sites/default/files/2019-11/transport</a> and <a href="http://sdghelpdesk.unescap.org/sites/default/files/2019-11/transport">http://sdghelpdesk.unescap.org/sites/default/files/2019-11/transport</a> and <a href="https://sdghelpdesk.unescap.org/sites/default/files/2019-11/transport">https://sdghelpdesk.unescap.org/sites/default/files/2019-11/transport</a> and <a href="https://sdghelpdesk.unescap.org/sites/default/files/2019-11/transport</a> and <a href="https://sdghelpdesk.unescap.org/sites/default/files/2019-11/transport</a> and <a href="htt



# Activity 23: Future transport jobs will be green and technological



#### Key focus and issues

The transport sector has always been shaped by technological developments, and technological innovations have been making the transportation of people and freight more accessible, safer and more efficient. By far, the most serious challenge facing the transport sector is to significantly reduce its emissions and become more sustainable. Changes in the sector, in particular those relating to automation and digitalisation, are creating many new challenges. Jobs in the transport sector, especially low- and medium-skilled jobs, may be at risk due to automation and moves towards greater sustainability. At the same time, the ongoing digital transformation presents new opportunities, such as an improved working environment and quality jobs that could become more attractive for women and young people. This activity takes a closer look at the new occupations that are already emerging in the transport sector, the responsibilities they entail and how they could attract more women.

#### Subject matter

Tutorship, career counselling, design and technology, ICT, social sciences, citizenship education, science and physics.

#### **Expected learning outcomes**

#### Learners will:

- explore how the transport sector uses new technologies;
- acknowledge the importance of technical and digital skills for the transport sector.

<sup>79</sup> World Maritime University (2019). *Transport 2040: Automation, Technology, Employment — The Future of Work.* Reports. 58. Retrieved from: <a href="https://commons.wmu.se/lib\_reports/58">https://commons.wmu.se/lib\_reports/58</a>.

<sup>80</sup> European Commission (2020), Sustainable and Smart Mobility Strategy: Putting European Transport on Track for the Future. Retrieved from: <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2020:789:FIN">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2020:789:FIN</a>.

#### Preparation and materials

- · Prior to the activity, consider revising relevant background information on the emerging occupations in the Activity 23: Background information for teachers as well as on the website of the Skillful Project.81
- Activity 23: Emerging occupations in the transport sector to print, cut out and distribute to every group.
- Activity 23: Data on emerging occupations in the transport sector to project in class.
- · Sheet of paper to draw Venn diagram for every group.
- · Learners divided into small groups of three or four.

### LESSON DIRECTIONS

Step 1 3 min.

Ask the learners to close their eyes and imagine themselves using some kind of transport. Invite them to changed over the past 50 or 100

Step 5 10 min.

Hand out to every group the nine expected emerging occupations and and ask the learners to pair and rank them in order of expected demand in

Step 2 5 min.

In groups, ask the learners to compare transport in the future. Using the Venn diagrams, which they should draw, ask (e.g. jobs, characteristics) that existed in the past and no longer exist or have changed enormously, and 10 things in transport (e.g. jobs, characteristics) that are emerging because they will need to exist in the future. The intersection in the middle is for things that have not changed over time and presumably will not change (e.g. buses

Step 6 3 min.

the transport sector on the board and ask learners to compare their answers and the table.

Step 7 3 min.

Explain the concept of 'risk of gender imbalance' and elicit the reasons for that gender imbalance from the

Step 3 7 min.

Draw a big Venn diagram on the board and elicit ideas from all the groups to fill it in.

Step 8 3 min.

Mention or show the title of the activity and ask them if they agree.

Step 4 5 min.

Ask the learners whether they can see any common characteristics in the ideas that have been elicited.

Step 9

8 min.

#### Tips and remarks

Do not show the title of the activity to the learners until the end to avoid leading their answers.

#### IDEAS FOR DEBRIEFING

Discuss the following questions:

- Is it easy/difficult/fun to imagine the future of transport? Why?
- Why do you think there are still so many differences between 'jobs for men' and 'jobs for women'?
- Do you think men and women have different professional interests?
- Do you think this might change in the future? Why?
- Can you imagine yourself doing any of these jobs in the future? Which one(s)?

#### VARIATIONS AND EXTENSIONS

It would have an enormous impact on the learners to have one or some of these professionals visiting the classroom and talking about their job, and the impact on the girls would likely be even greater if it was a woman. The meeting could also take place online if the professionals cannot visit the classroom.

#### **ACTIVITY 23: BACKGROUND INFORMATION FOR TEACHERS**

The greatest demand for a highly skilled transport labour force is in the area of software development and maintenance of digital and automated systems. If they are not addressed properly these occupations will also have the most significant gender imbalance in the future, as across not only transport but also other economic sectors these are occupations traditionally dominated by men.

There are several other occupations that in the future will be in increasing demand. The sector uses a traditional approach to marketing and customer service, and expects greater use of digital technologies in sales, marketing and customer care. Furthermore, as the labour force in transport is becoming more diverse, a need for diversity managers will also emerge. With regard to occupations at risk of gender imbalance in the future, engineering positions, as well as maintenance and driving roles are both currently and in the future at risk of not attracting enough women and girls to the transport sector. To sum up, the ongoing changes in the transport sector are as follows:

- Different processes are becoming automated, digital or computer technology is being introduced or expanded and the use of alternative energy is becoming recognised.
- A transition to greener and more sustainable transportation.
- In some sectors all these things are leading to better working conditions due to a reduction of dirty, dangerous and difficult tasks.
- Fewer jobs that require physical strength and more jobs that require higher technical competence.
- The trend is also moving towards the growth of high-skill occupations and the loss of low- and medium-skill occupations.
- Some medium-skill subsectors that typically employ mostly women are already disappearing due to increasing automation and mechanisation.
- The occupations that are expected to emerge as the result of technological advancements and the shift towards greener transport can be broadly grouped into occupations in software development and maintenance of digital and automated systems, remote operation and alternative fuel distribution.
- The greatest demand will be in the area of software development and maintenance of digital and automated systems. These areas risk significant gender imbalance if they are not addressed properly.
- Engineering positions and maintenance and driving roles are also at risk of not attracting enough girls to the transport sector.

Source: European Commission (2021). *Educational toolkits to help fight gender stereotypes based on the example of the transport sector: Final study report on the development of the toolkits.*DOI: 10.2832/11827.

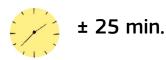
## ACTIVITY 23: EMERGING OCCUPATIONS IN THE TRANSPORT SECTOR

Emerging occupation	Description of responsibilities
Experts on artificial intelligence (AI), digital technology, Big Data	New transport/travel software development to customise travel and transport. Experts will apply machine-learning algorithms to improve efficiency by implementing autonomous data interpretation and control
Software engineers and developers	Development of client-specific customised solutions
Automation and robotics experts and maintenance of automated systems	Development and maintenance of automated systems
Security (and cybersecurity) experts, legal services personnel and privacy protection specialists	Responsible for safety policies
Infomobility experts	Responsible for connecting the transport services to the online network
Transport and mobility integrators	Integrating mobility expertise with ICT capabilities and provision of new transportation solutions developed from forecast based on real data
Transport planners and tool developers for smart delivery	Operation of distribution vehicles for delivery to customers
Automated vehicle, drones and remote flying-object operators	Operation of highly automated vehicles, monitoring and control of automated fleets remotely, operation of semi-autonomous ships, vehicles, airplanes, drones, etc.
Alternative fuel distributors and charging station operators and managers	Operators and managers of alternative fuel distribution

## ACTIVITY 23: DATA ON EMERGING OCCUPATIONS IN THE TRANSPORT SECTOR

Emerging occupation	Description of responsibilities	Greatest demand in the future	Greatest risk of gender imbalance in the future
Experts on artificial intelligence (AI), digital technology, Big Data	New transport/travel software development to customise travel and transport. Experts will apply machine-learning algorithms to improve efficiency by implementing autonomous data interpretation and control	65.4 %	46.8 %
Software engineers and developer	Development of client-specific customised solutions	44.2 %	46.8 %
Automation and robotics experts and maintenance of automated systems	Development and maintenance of automated systems	44.2 %	31.9 %
Security (and cybersecurity) experts, legal services personnel and privacy protection specialists	Responsible for safety policies	30.8 %	23.4 %
Infomobility experts	Responsible for connecting the transport services to the online network	23.1 %	6.4 %
Transport and mobility integrators	Integrating mobility expertise with ICT capabilities and provision of new transportation solutions developed from forecast based on real data	25.0 %	21.3 %
Transport planners and tool developers for smart delivery	Operation of distribution vehicles for delivery to customers	26.9 %	10.6 %
Automated vehicle, drones and remote flying-object operators	Operation of highly automated vehicles, monitoring and control of automated fleets remotely, operation of semi-autonomous ships, vehicles, airplanes, drones, etc.	19.2 %	40.4 %
Alternative fuel distributors and charging station operators and managers	Operators and managers of alternative fuel distribution	11.5 %	27.7 %

Source: European Commission (2021). Educational toolkits to help fight gender stereotypes based on the example of the transport sector: Final study report on the development of the toolkits. DOI: 10.2832/11827.



# Activity 24: Transport is my choice

#### Subject matter

Tutorship, career counselling, design and technology, ICT, social sciences, citizenship education.

#### **Expected learning outcomes**

#### Learners will:

- discover the potential of the transport sector in offering diverse employment opportunities;
- acknowledge the potential attractiveness of the transport sector.

#### Preparation and materials

- · Activity 24: Questionnaire for all learners.
- The questionnaire is answered individually, but it is better if students are sitting in groups of four for the follow-up (and even better if there can be a mixture of boys and girls in each group for the debriefing).

# Key focus and

After the learners have been guided through several activities from Toolset 5: Transport and have gained knowledge about the transport sector (on the importance, diversity of the sector, the future prospects, etc.), they reflect on the adequacy of this sector to provide them with future job opportunities.

#### LESSON DIRECTIONS



Hand out the Activity 24:

Questionnaire and ask the learners to fill it in individually. Help them to clarify any doubts that may come up



Ask the learners to share the answers to question 14 in their group.



Debriefina

#### IDEAS FOR DEBRIEFING

Discuss the following questions:

- Do you feel that transport could be your passion? Why?
- If the answer is 'no', what should be different in the sector for you to answer 'yes'?
- Were the girls' answers and the boys' answers significantly different? Analyse the differences.
- The previous two questions may help debunk some stereotypes about the transport sector:
  - · The transport sector is dirty.
  - · The working conditions are poor.
  - · It requires physical strength.
  - · You have to be separated from your family.

#### Tips and remarks

This activity presupposes that you have gone through some of the previous activities in Toolset 5: Transport. Alternatively, you can integrate in the activity exploration of a whole diversity of current and future occupations in the transport sector, with the help of the Skillful Project posters <u>aviation jobs from</u> 2020 to 203582, road jobs 202083 and 2035<sup>84</sup>, the future of rail and rail jobs from 2020 to 2035, maritime jobs 2020<sup>85</sup> and 2035<sup>86</sup>. If this topic has raised interest among some of the learners, they should be given the opportunity to explore it further with the help of other teachers, follow-up activities, references, etc.

#### VARIATIONS AND EXTENSIONS

- In pairs, learners can role play a work interview in the transport sector. Each could learn all about the favourite job that they have chosen and be interviewed as a professional visiting the class.
- In small groups learners can create a short advertising video about a transport company or design a job advertisement in the transport sector for young people.
- If you realise that some learners are interested in any transport-related job in particular, help them find the relevant information about the career, including skills, training paths and career prospects.<sup>87</sup>

<sup>82 &</sup>lt;a href="http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15223.">http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15223.</a>

<sup>83 &</sup>lt;a href="http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15221.">http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15221.</a>

<sup>84</sup> http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15222.

<sup>85 &</sup>lt;a href="http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15225">http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15225</a>.

<sup>86</sup> http://skillfulproject.eu/ajax/DownloadHandlerFM.php/downloadFile?id=15226.

<sup>87</sup> You can find a general overview in European Commission (2021). *Educational toolkits to help fight gender stereotypes based on the example of the transport sector: Final study report on the development of the toolkits.* DOI: 10.2832/11827.

#### **ACTIVITY 24: QUESTIONNAIRE**

Write three things under each category:

1. What comes to mind when you think about transport?	
a	
b	
С	
2. \	What comes to mind when you think about road transport?
a	
b	
С	
3. 1	Name three jobs in road transport:
a	
b	
С	
4. \	What comes to mind when you think about rail transport?
a	
b	
С	
5. 1	Name three jobs in rail transport:
a	
b	
С	
6. \	What comes to mind when you think about air transport?
a	
b	
С	
7. Name three jobs in air transport:	
a	
b	
С	

8. What comes to mind when you think about urban transport?	
a	
b	
С	
9. I	Name three jobs in urban transport:
a	
b	
С	
10.	What comes to mind when you think about waterborne transport?
a	
b	
С	
11.	Name three jobs in waterborne transport:
a	
b	
С	
12.	What comes to mind when you think about transport logistics?
a	
ь	
С	
13.	Name three jobs in transport logistics:
a	
b	
С	
14.	What is important for you when you think about your future job?
a	
b	
С	



## Activity 25: Three plus three

## Subject matter

Tutorship, career counselling, design and technology, ICT, social sciences, citizenship education, science.

## **Expected learning outcomes**

#### Learners will:

- analyse the work done in the toolkit and reflect about their ideas and thoughts;
- improve their metacognitive skills as they explore what they think and communicate it in the classroom.

## Preparation and materials

- If the work done with the toolkit has been discontinuous, consider revising briefly the activities selected for <u>Toolset</u>
   <u>5: Transport</u> and the work done with them prior to the activity.
- · Learners divided into groups of four.
- A sheet of paper for every learner and post-it notes.
- The Activity 25: Three plus three worksheet to distribute to all learners.

## Key focus and issues

By means of this thinking routine, which is an adaptation of the +1 Routine, 88 the learners will have a chance to reflect on the previously discussed issues and share and contrast their views with their classmates. This activity also provides an opportunity to further explore any other issues of interest to them.

## LESSON DIRECTIONS



Briefly revise the activities done in <u>Toolset</u>
<u>5: Transport</u> with the learners.



Ask the learners to individually think about and write down the three most important ideas related to transport they recall, or feel are relevant in their lives.



As they are sitting in groups of four, ask all the learners to pass their piece of paper to the learner sitting to their right, who will read what is written and add one important idea from their own list to that of their teammate. This will be repeated twice more until all of them have been able to read all the lists in the group and add one item to each of them.

shared by the others in their new 'top three' and explain why. The learners can mark their final top three ideas in the <u>Activity 25: Three plus three</u> worksheet.



Ask the learners to write down concepts or ideas that need clarification on a piece of paper or post-it notes.



Ask learners to compare and discuss their lists, which now have six items. They should explain to the other members of the group why their three initial ideas were the most relevant for them, and will have to decide if they would like to include any of the ideas

Step 6

Collect the notes and read one of the questions aloud. Help the learners find possible answers. Ask if any other learner would like to answer it. If no one can answer, then answer the questions.



Debriefing.

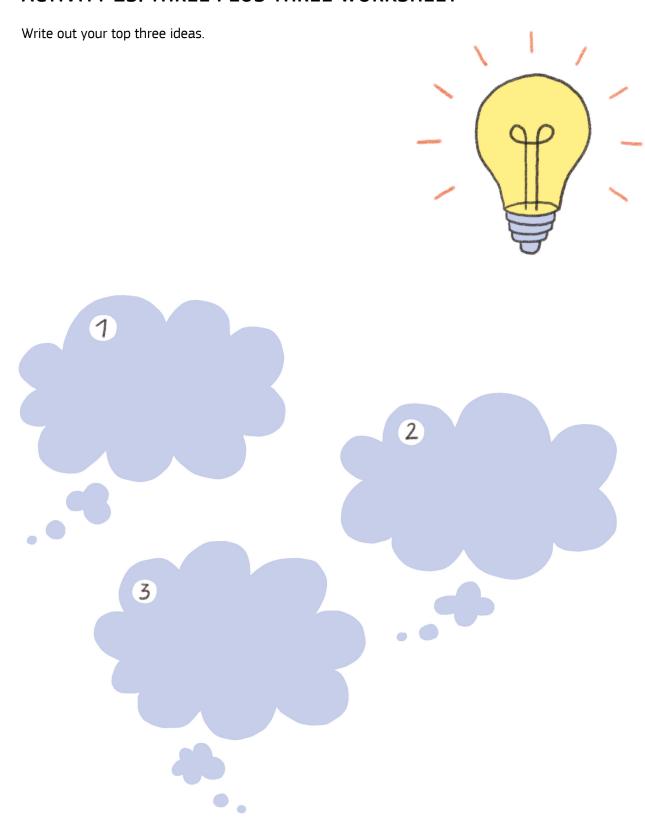
### IDEAS FOR DEBRIEFING

- · Develop questions for debriefing stemming from the learners' notes.
- In general terms, if this is used as the closing activity of the toolset, it would be interesting to ask girls and boys whether and how their perception of transport has changed.

### VARIATIONS AND EXTENSIONS

- · Apply this thinking routine to any other issue.
- Consider bringing in more integration, for example, have learners share their top three concepts about transport in an online poll and project the word cloud on the screen.
- The activity can also be used as a closing activity of the whole toolkit with the necessary modifications.

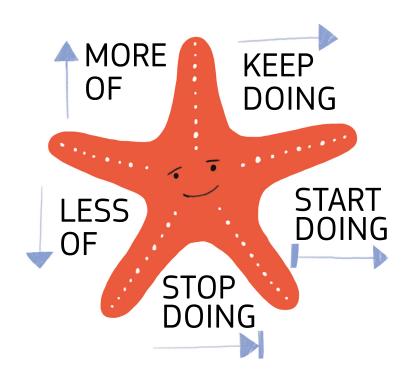
## **ACTIVITY 25: THREE PLUS THREE WORKSHEET**



# TOOLSET 6: CONTINUING TEACHERS' SELF-ASSESSMENT

In this toolset, we invite you to reflect on the experience of having worked with the toolkit in class, and in what ways this experience has changed your perceptions about gender-sensitive pedagogy and all the other issues raised in the toolkit. You are encouraged to explore any of the three self-assessment tools, or all, provided below, following the use of the learning activities in class.

# Continuing self-assessment tool 1: The retrospective starfish



#### Focus of the tool

- This is an intuitive, simple and yet powerful tool borrowed from the business world, which invites retrospective reflection and change.
- There are five categories you can think about in relation to your teaching practice and the work done in the toolset.

#### To take into account

You do not have to answer the questions in writing if you do not feel like it. The self-reflection can be done mentally. However, use of a printed sheet and pen invite for a deeper reflection.

1. Keep doing the things with which you are fully satisfied:
a.
b.
C.
2. Less of the practices that need improvement:
a.
b.
C.
<b>3. More of</b> the practices that you like and that maybe you are not taking full advantage of:
a.
b.
C.

4. Stop doing those practices that you find unsatisfactory:
a.
b.
C.
<b>5. Start doing</b> the new things you have learned, and you think might give your teaching practice added value:
a.
b.
b. c.

# Continuing self-assessment tool 2: How 'smiley' are you?

#### Focus of the tool

This rubric aims to make you reflect on some of the aspects that have been dealt with in the toolkit. Four aspects and four 'performance levels' will help you to find your place in this map.

#### To take into account

In each one of the different aspects analysed, you should try to challenge yourself to reach the next 'performance level' (i.e. you should ask yourself what you could do to move towards the left side of the rubric).

#### Possible variations

Below there is a self-assessment scale. It may be easier for you to tick the appropriate box in the chart than to find your place in the rubric.

	7	مَن	J. T.	الم الم
I recognise gender stereotypes at school.	I can clearly recognise gender stereotypes in the school context and I always try to neutralise them.	I think I can recog- nise most gender stereotypes, but I have realised that there is still some room for improve- ment.	I am not sure I could recognise some of the gender stereotypes mentioned in the activities and how they affect girls' and boys' development.	I do not think I could recognise gender stereotypes at school. I was surprised with some of the activities.
There is no hidden or null curriculum in my teaching practice.	I always make a conscious stand against the hidden or null curriculum in my teaching practice.	Most of the time I consciously revise my language, the way I address boys and girls or my expectations about them, but it is difficult to watch these things all the time.	These things may be important, and I sometimes think about them, but it is not always easy to do it.	With all the requirements asked from teachers, I do not really have the time to think about these things.
Stereotype- free education would largely contribute to stereotype-free career choices.	I think that if schools, curricula, teaching practices, etc. were not so influenced by gender stereotypes, there would be more women engineers and more men nurses in our society.	I think that even if we had gen- der-stereotype-free schools, there are still many other factors that affect people's career choices.	School, families or society at large may influence boys' and girls' career choices and paths, but the ultimate reason is that girls and boys have different interests in life.	Boys and girls have different curricular interests simply because they are different.
A career path in the transport sector sounds as appealing for girls as it does for boys.	The transport sector provides excellent job opportunities for girls as much as for boys. The skills, attitudes and knowledge that the sector will require in the future can be developed in girls and boys alike.	The transport sector may provide good job opportunities for boys and girls, but there are many stereotypes to deal with there too.	I think that the school system can educate girls and boys in the same way, but girls will naturally be less inclined to this kind of work.	There may be women working in the transport sector, but the kind of attitudes, skills and knowledge required are more proper of men.

	700	مرن	J. T.	٦٠٠
I recognise gender stereotypes at school.				
There is no hidden or null curriculum in my teaching practice.				
Stereotype- free education would largely contribute to stereotype-free career choices.				
A career path in the transport sector sounds as appealing for girls as it does for boys.				

## Continuing self-assessment tool 3: A series of statements

#### Focus of the tool

The most successful teacher professional development activities are those that are extended over time; self-assessment is a meaningful source of information for evaluating teaching. Teachers who periodically repeat and record the results of self-assessment recognise both the effectiveness and the improvement of their practice.

#### To take into account

A core element underlying the pedagogical approach of the toolkit is the notion that teachers' professional development is linked to learning through their own experience and reflecting on this experience, which supports teachers critically improving their further teaching experiences.

	A series of statements to reflect on my practice	Yes	Not sure
1.	I respect the dignity of each learner.		
2.	I encourage all learners to feel safe in the school and voice their own opinions, ideas and values.		
3.	I make sure I give all learners constructive feedback.		
4.	I respect each learner's point of view even though I may disagree with it.		
5.	I stimulate learners to develop empathy towards others.		
6.	I do not approve of ridicule and sarcasm in class.		
7.	I try to discreetly correct improper behaviour.		
8.	I try to build self-confidence in each learner.		
9.	I try to be accessible and sympathetic to learners' needs.		
10.	I try to involve every learner in the activities of the class.		
11.	I avoid too much 'teacher talk' and am aware that I communicate both verbally and non-verbally.		
12.	I am conscious that the tonality of my voice and the way I move affect learners' motivation.		
13.	I am conscious of and attentive to gender stereotypes and sexisms.		

	A series of statements to reflect on my practice	Yes	Not sure
14.	My teaching aims to promote learners' personal development.		
15.	I come into the class with enthusiasm.		
16.	I advocate that a job worth doing is worth doing well.		
17.	I accommodate learners' interests in discussing unplanned topics and/or current events.		
18.	I prepare my activities, and make sure learners understand the purpose and content of each activity.		
19.	My materials are organised and used efficiently (i.e. the board is organised, worksheets are easy to read, etc.).		
20.	I clearly highlight the important points of an activity.		
21.	I encourage learners to take action to counter gender stereotypes and improve the school environment.		
22.	In all contacts with learners, inside and outside the classroom, I encourage attitudes and behaviours that foster gender equality.		
23.	I use learners' efforts and achievements in countering gender stereotypes and improving the school environment to assess my effectiveness.		
24.	I am receptive to learners' suggestions regarding the promotion of specific attitudes and behaviours to foster gender equality.		
25.	I recognise the interdependent relation of the school and the parents and I notify parents in advance of learners' out-of-school activities.		
26.	I have invited members of the community with professional expertise or experience in occupations related to the transport sector to talk with the learners and motivate them to consider lesser-known occupations, irrespective of their gender.		
	Total		

## FINAL REFLECTION

Am I doing what I should do?
What am I doing well?
What could I do to improve my practice?
Should I involve learners in assessment of my practice? Why?

## TOOLSET 7: TO GO ONE STEP FURTHER

This toolset provides you with the opportunity to personally explore further, if you wish, all the matters that have been tackled in the whole toolkit. It offers a range of supporting resources, including glossaries, gender-sensitive language guides, additional teaching materials and further information and reading.

### SUPPORTING RESOURCES

## 1. Glossaries on gender equality

<u>Gender Equality Glossary</u> (Council of Europe) — Definitions of concepts based on the definitions and terms of Council of Europe instruments and standards.

<u>Gender Equality Glossary</u> (UN Women) — Online tool that provides concepts and definitions with gender perspective.

<u>Gender Equality Glossary and Thesaurus</u> (European Institute for Gender Equality) — Specialised terminology tool fostering a common understanding of gender equality terms across the EU.

#### 2. Gender-sensitive language guides

<u>Gender-Inclusive Language Guidelines</u> (UN Women) — Promoting gender equality through the use of language.

<u>Gender-Sensitive Communication Online Toolkit</u> (European Institute for Gender Equality) — Easy-to-use guide on how to use more gender-sensitive language.

## 3. Information on gender equality in education and training

<u>Gender Statistics Database</u> (European Institute for Gender Equality) — Comprehensive knowledge centre for gender statistics and information on various aspects of (in)equality between women and men in the EU.

A Guide for Gender Equality in Teacher Education Policy and Practices (UNESCO) — Tool to introduce the gender perspective to all aspects of teacher education and training, notably policy and planning, budgeting, curriculum development, pedagogy and instructional materials, support services, and monitoring and evaluation.

Relevance of Gender in Education and Training (European Institute for Gender Equality) — Discussion of the key gender issues in education and possibilities for change.

## 4. Information on the transport sector and occupational choices

<u>Drawing the Future</u> (Education and Employment) — Report providing an overview of how various social, cultural and economic factors impact children's career aspirations, based on a survey of children from all over the world.

EU Transport in Figures (European Commission) — Annually updated statistical pocketbooks.

<u>Jobs Split Along Gender Lines</u> (Eurostat) — Compilation of statistics for all EU countries about gender segregation in the labour market.

<u>The LEARN! Project</u> (European Transport Safety Council) — Useful resources and information on traffic safety education.

<u>Skillful Project</u> (Forum of European National Highway Research Laboratories Knowledge Centre) — EUfunded project offering a variety of resources to explore the development of skills and competences of future transportation professionals at all levels.

<u>Transport EU Statistics</u> (Eurostat) — Compilation of transport statistics for all EU countries and related resources.

<u>Transport Infographics and Maps</u> (European Commission) — Fascinating facts on various themes and issues related to transport and mobility.

## 5. Online teaching resources on gender, education and/or career aspirations

<u>Apprenticeship Toolkit #STEMappkit</u> (WISE, Semta and the Institution of Civil Engineers) — Collection of best practice, expertise and case studies to attract, engage, support and retain women in STEM apprenticeships.

<u>Babble Dabble Do: Connecting Through Creativity</u> (Make My Day: Visions LLC) — Collection of creative and STEM projects for children.

<u>Boys in Care Work</u> (Dissens - Institute for Education and Research) — Tool that aims to assist teachers and youth workers in career counselling, enabling them to provide stereotype-free career advice and support boys in atypical vocational pathways.

<u>BREAK!</u> (Estonian Gender Equality and Equal Treatment Commissioner's Office) — Cross-media EU-funded project, including learning materials for teachers on how to talk about (gender) stereotypes to learners in different classes and age groups.

<u>Breaking the Mould</u> (National Education Union of the United Kingdom) — Series of resources that support nursery and primary phase teachers to think about what books they are using in their classrooms.

<u>Compass: Manual for Human Rights Education with Young People — Focus on Gender</u> (Council of Europe) — Explanations of key gender-equality concepts.

<u>Education Guide for Gender Equality and Citizenship</u> (The Commission for Citizenship and Gender Equality, Portugal) — Aims to support teachers in mainstreaming gender-equality perspectives across their school curriculum and challenging gender stereotypes.

Gender in Education Network in Asia-Pacific (GENIA) Toolkit: Promoting Gender Equality in Education (UNESCO) — Introduces key concepts and theoretical debates and outlines practical approaches for mainstreaming gender equality throughout the education system and within education policy.

<u>Gender Loops: Tools, Resources and Strategies for Gender-Sensitive Early Childhood Education</u> (Dissens - Institut für Bildung und Forschung e.V.) — Set of practical material to deal with gender issues for teachers in early childhood education and teacher trainers.

<u>Gender-Responsive Pedagogy: A Toolkit for Teachers and Schools</u> (Forum for African Women Educationalists) — Equips teachers with knowledge, skills and attitudes to empower them to respond adequately to the learning needs of girls and boys by using gender-aware classroom processes and practices.

<u>Guidelines for Teacher Unions for Tackling Gender Stereotypes in Education</u> (European Trade Union Committee for Education) — Provides a set of recommendations for teacher unions (national and EU level) on possible social dialogue and collective bargaining actions to challenge gender stereotypes in the education sector with the wider objective of having a significant impact on gender segregation in the labour market.

<u>Hypatia's Toolkit</u> (Hypatia project partners) — Digital collection of innovative activities aimed at teenagers with a central focus on gender-inclusive ways of communicating STEM, empowering teenagers and exploring the range of skills that are needed for a great variety of STEM studies and careers open to young people.

<u>Let Toys Be Toys</u> — Campaign challenging gender stereotypes, including resources for teachers and practical tips to use in the classroom.

<u>Peers for Equality T-Kit on Tackling Gender-Based Discrimination</u> (Ofensiva Tinerilor et al.)— Provides practical information to facilitate group work, discussions and peer education on gender inequality and stereotypes.

A Resource Pack for Gender-Responsive STEM Education: Training Tools for Curriculum Development (BE-UNESCO)— Guidance for broader understanding of the theory and practice of gender-responsive STEM education, in order to support its effective development at the policy, school, classroom and community levels.

<u>Resources from Welcoming Schools</u> (Human Rights Campaign Foundation) — Project offering lessons to understand gender to support inclusive school climates around gender identity, gender expression and preventing gender stereotyping.

<u>STING Project: STEM Teacher Training Innovation for Gender Balance</u> (Elhuyar Foundation) — Toolkit and online resources promoting the integration of gender into STEM education.

TWIST: Towards Women in Science and Technology (Science Learning Center of Science Center NEMO) — Guide to help teachers develop the professional skills necessary to promote gender awareness in the classroom by providing information, best-practice examples and practical tips.

From Where I Stand: A Gender Equality Project for the Global Goals (World's Largest Lesson)— Creative project for educators and action-focused learning experiences for children and young people that build skills and motivation to take action for gender equality as one of the sustainable development goals (SDGs).

## 6. Visual materials on gender stereotypes, transport and/or career aspirations

<u>100 Years of Women in Transport</u> (Transport for London)— Online video celebrating the work of women transport workers and the even bigger contribution they can make to transport in the future.

<u>Gender Stereotypes</u> (Fawcett Society)— Video and literature review providing an overview of the ways to fight gender stereotypes in early childhood.

<u>Making the Case for Women in Aviation</u> (European Cockpit Association) — Article and video that shows women pilots in this traditionally male-dominated field. The material raises awareness about gender stereotypes and showcases women role models in aviation.

<u>Meet the 22%: Women Talk about Careers</u> (Diversity@Eurocontrol)— Video showing women working in the aviation sector. It aims to promote visibility and representation of women, as well as provide insights into careers and motivations.

<u>Mujeres Operarias del Transporte Público de la Ciudad de México</u> [Women Workers in Public Transport of Mexico City] (CENFES)— Online video about the everyday life of women taxi drivers in Mexico City.

No More Boys and Girls: Can Our Kids Go Gender Free? (Episodes 1 and 2) (BBC2) — Two-part documentary on setting primary school free from gender stereotypes. It provides a useful example of challenging gender stereotypes in practice.

<u>Pilots Answer 50 Most-Googled Passenger Questions</u> (Captain Joe) — Engaging video of pilots answering the most commonly asked questions about being a pilot and the aviation industry.

<u>#RedrawTheBalance</u> (Education and Employers) — Online video challenging occupational gender stereotypes with primary school children, who are asked to draw a firefighter, fighter pilot and surgeon; then they meet the real women.

<u>Yes, She Pilots!</u> (Yes, She Pilots!) — Blog of a woman pilot who shares her personal story of becoming a pilot and discusses various issues related to the aviation industry, including how the industry has become increasingly more women-friendly.

<u>Sunny Swift: Flight Instructor</u> (European Union Aviation Safety Agency) — Various materials, such as flyers, posters and comics, providing information about general aviation and flight safety delivered by a woman instructor.

<u>Women in Maritime</u> (International Maritime Organization) — Project offering various materials, providing information about gender diversity in the maritime sector.

<u>Women in Motion</u> (Ferrovie dello Stato) — Project promoting women's careers in technical areas (e.g. maintenance, infrastructure, etc.). It offers a collection of resources for students about work in the rail sector.

<u>Women in Transport: Meet ...</u> (European Commission) — Videos provide insights into motives for working in different transport sectors. They feature women that are logistic consultants, air pilots, truck drivers and marine pilots.

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