

*Sinä
osaat!*


Teacher training model



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Teacher training model is part of transnational collaboration project GirlPower – Girls and Technology. Project aims at encouraging girls to study in the field of technology. The project develops tools and material for teachers, career counsellors and employers on how to recognise and dismantle segregation.

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Teacher training model



Be aware of segregation



Check your own attitude - evaluate the way you talk and behave



Get information about different technology fields and future occupations



Use your knowledge and share the information

Background and rationale

Why is this model needed?

Segregation remains a problem in the labor market and we continue to have strong attitudes and stereotypes about gender and occupations. To make a change, we need to consult professionals who work with children and adolescents. This model can be used to structure gender and equality training programs aimed at teachers, trainers and career counsellors.

The model includes four modules:

1. Be aware of segregation
2. Check your own attitude - evaluate the way you talk and behave
3. Get information about different technology fields and future occupations
4. Use your knowledge and share the information

In the training we consult experts, provide tasks that teachers and career counsellors can use as part of their teaching and give guidance on how the training program can be delivered.

We need to start from acknowledging the problem the level of the individual and the society, seek for information, develop our understanding and take action. The aim of this model is to provide tools for carrying out these actions.

Be aware of segregation

Learning targets:

- Gain an understanding of the current situation regarding gender segregation on the labor market
- Understand the reasons why gender segregation exists
- Understand how gender segregation manifests itself
- Understand why it is important for us to act now to reduce segregation

1. Facts about segregation

Education and working life are strongly segregated by gender.

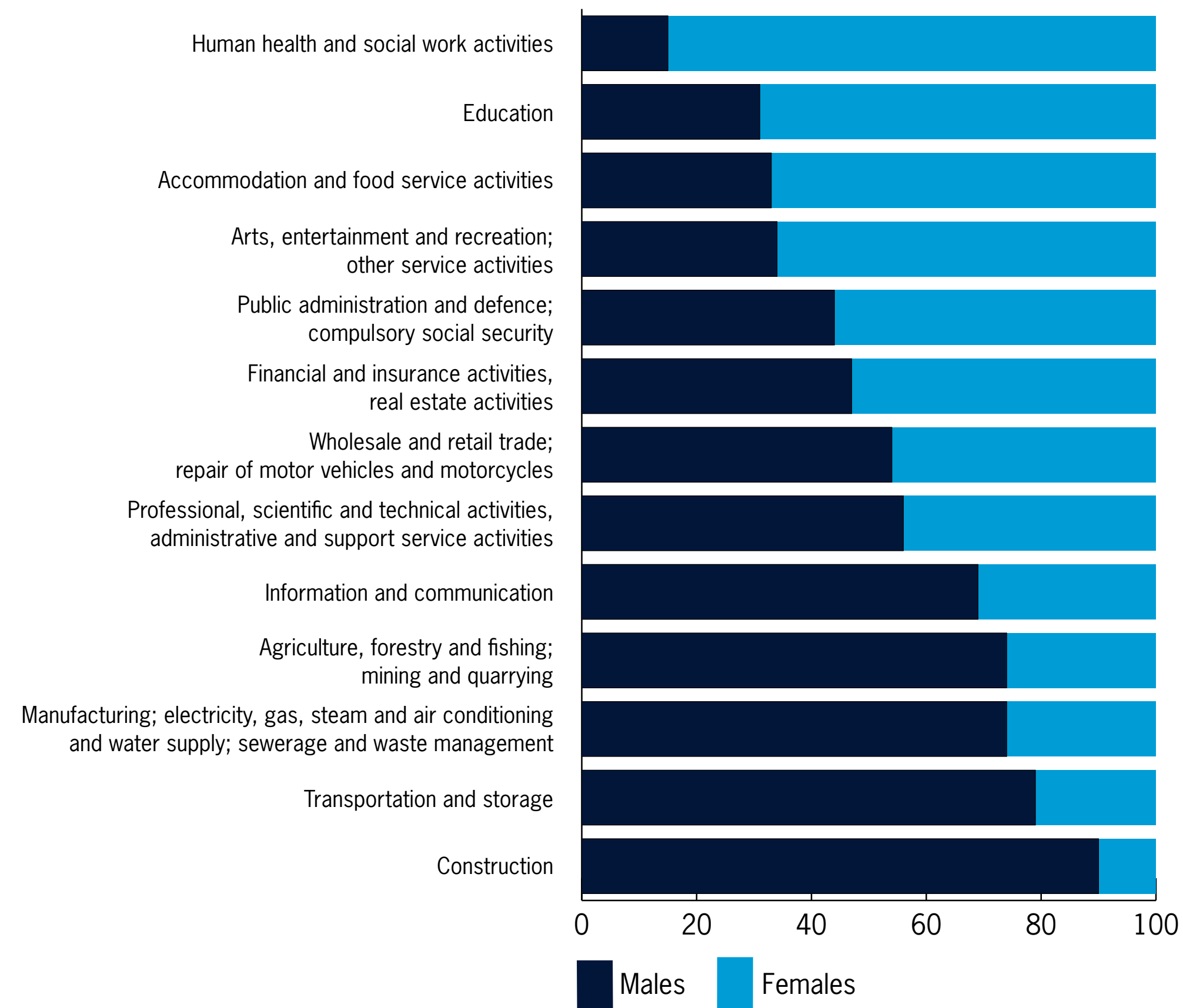
Gender segregation causes the following problems:

There are more men working in some occupations (such as engineering) and more women in others (such as nursing). For example, in 2020 85% of all social services and healthcare workers in Finland were female, whilst in construction only 10% were female.

There are more men in higher-up positions around the world, such as CEO's. For example, in 2020 33% of all FTSE 100 board members were women. In finance, only 15% of FTSE 100 finance directors were women.

FEMALE- AND MALE-MAJORITY INDUSTRIES IN 2020

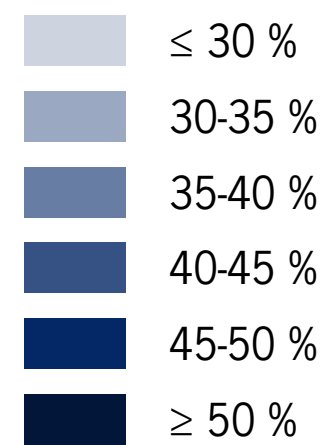
% of employed persons in the industry



Picture: Occupational segregation in Finland.

[Statistics Finland / Labour Force Survey](#)

PROPORTION OF FEMALE SCIENTISTS AND ENGINEERS IN EUROPE (2019)

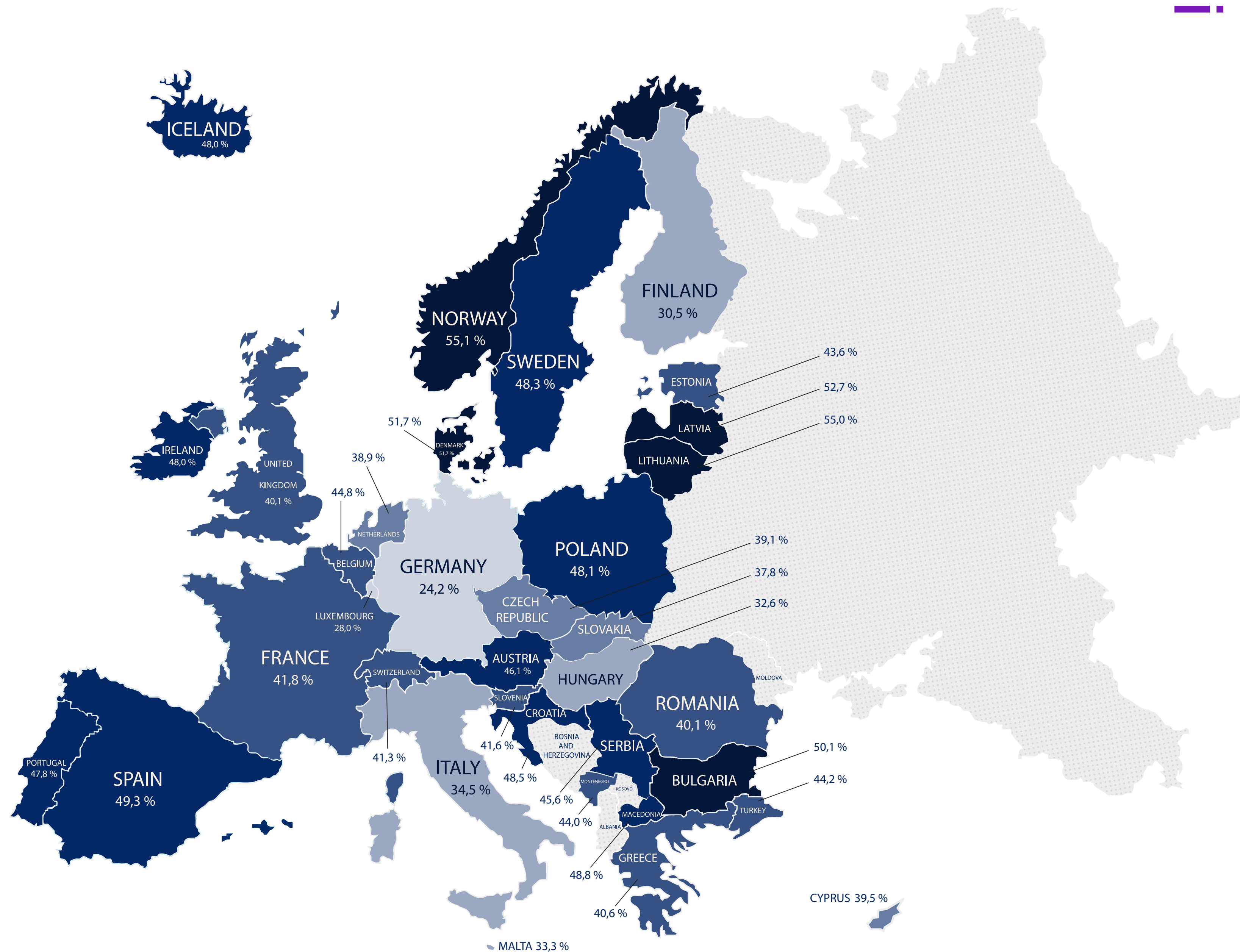


TASK A:

Find out about the labor market segregation in your own country and/or area

You can use, for example:

- Statistics of the EU: ec.europa.eu/info/statistics_en
- Gender statistics of the European Institute for Gender Equality: eige.europa.eu/gender-statistics/dgs
- Your own country's official statistics of ministries etc.



Picture: Proportion of female scientists and engineers in Europe (2019). [EuroStat / Data Browser](https://ec.europa.eu/eurostat/tgm/table.do?code=sdg_8.5.2)



2. Consequences of gender segregation

Gender segregation contributes to the lack of suitable employees in some occupations and too many in others, causing employment mismatch.

According to a research made by the European Commission in 2018, if more women were to enter the digital jobs market, it could create an annual €16 billion GDP income for the European economy. [Women in Digital | Shaping Europe's digital future \(europa.eu\)](#)



TASK B:

This task can be used as an individual or group assignment.

This task is also suitable for the pupils and students of the teachers and career counselor.

Consider and discuss your own career choices:

- What were your main criterion for choosing your career? Why did you choose this career?
- If you had been born as a different gender, would you have chosen your career differently?
- What kind of guidance did you receive to support your career choices? Do you feel that your gender affected the guidance that you received?
- Discuss in groups



Narrows innovation in product and service design and usability.



Restricts economy productivity, profitability and growth.

segregation



Restricts young people's views on which educational and occupational choices are suitable for them.

Increases the pay gap and blocks the development of gender and equality rights.



3. Causes of gender segregation

Gender segregation has been explained by 'natural' biological differences between boys and girls. Boys are seen as having better aptitude in mathematics. Girls are thought to have different personality traits to boys.

However, research has proven otherwise.

In Finland, girls have outperformed boys in mathematics and science.

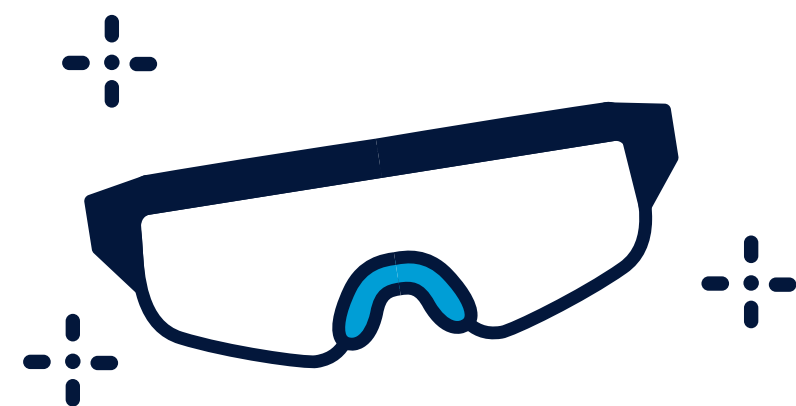
[\(Results from PISA 2018, Finland.\)](#)

There are more differences in personality traits of individuals within genders than between genders (Costa et al, 2001).

We often think that we can't do anything about gender segregation. Boys and girls choose what they want to study, don't they?

However, boys and girls learn to adapt their choices to what is available to them, and to what is considered as appropriate for their gender.

We provide our children and adolescents with messages on what is considered appropriate and desirable for different genders through the role models that



we display in our communications and the toys and games that we teach our children to play with. We often continue to guide the adolescents based on our stereotypes. The occupational choices that boys and girls make are dependent on the career guidance and knowledge made available for them.

At work we continue to uphold gender specific job roles and tasks. Added to this, in many workplaces, attitudes against female or male employees are prejudiced. Research carried out by King's College London (2020) has highlighted the daily experiences of women at board or executive committee levels. For example, women had experienced more angry outbursts directed at them and had been ignored more often than men. Experiencing discrimination and learning about it from other women will have an impact on the choices that women make in their careers. [\(Meager 15% of FTSE 100 finance directors are women, according to UK Govt data.\)](#)

Source: Costa, P. T., Terracciano, A., McCrae, R. R. (2001): Gender Differences in Personality Traits Across Cultures: Robust and Surprising Findings. *Journal of Personality and Social Psychology* 2001, Vol. 81, No. 2,322-331

There are often societal reasons for the development of gender segregation. Due to the gender pay gap, it is usually more profitable for the families to have the woman stay at home with the children as in all EU member countries women earn less than men. (Eurostats, 2018)

Improvements in the educational and occupational gender segregation are slow and there are historical reasons behind this phenomenon. Traditionally women have been considered 'naturally' more suitable for jobs related to healthcare and teaching. Typically, these occupational fields are low income in comparison to male dominated occupations. The development of healthcare services has increased female participation in these sectors.



TASK C

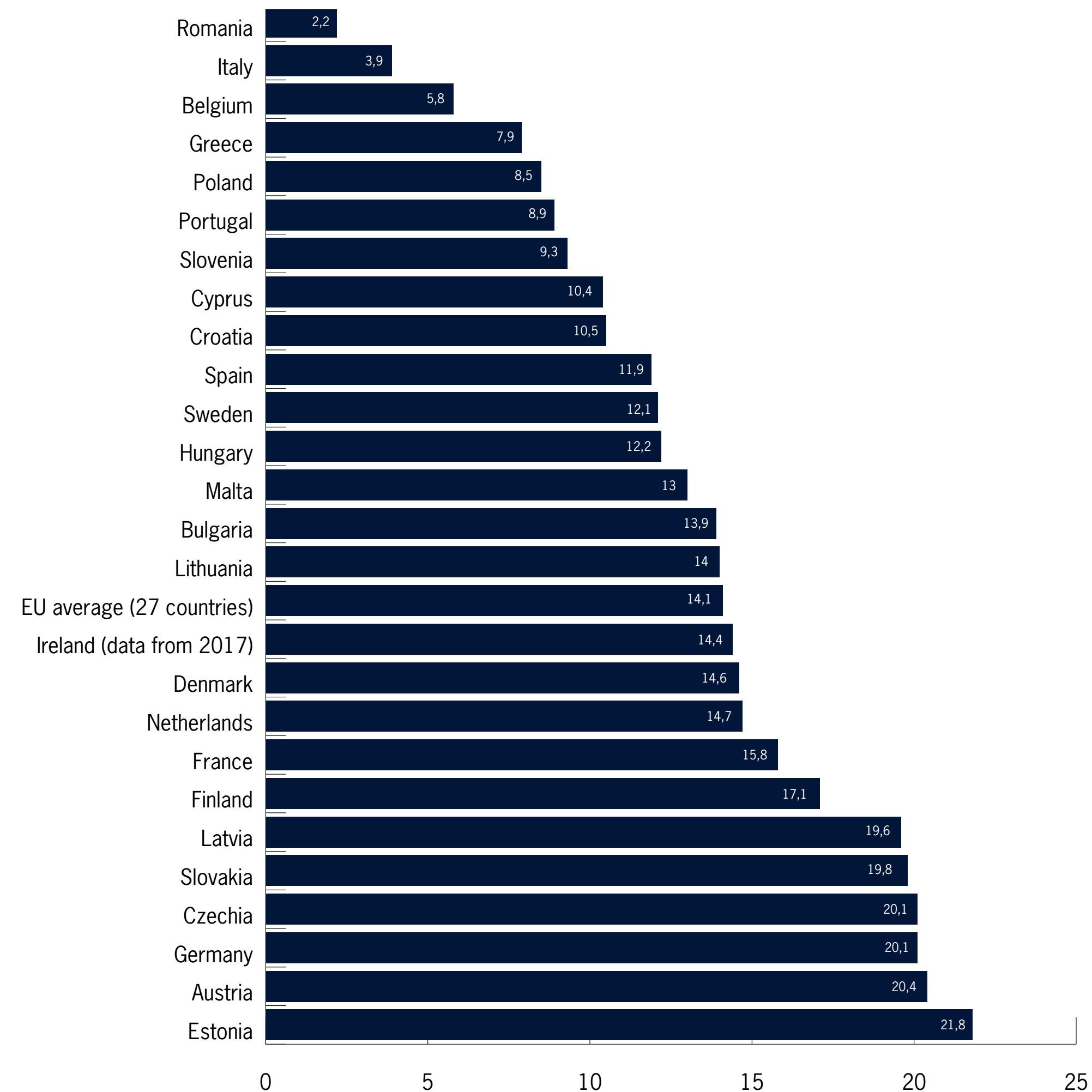
This task can be used as an individual or group assignment.

This task is also suitable for the pupils and students of the teachers and career counselor.

Consider and discuss:

- In which ways do we raise boys and girls differently?
- Have you noticed any stereotypes in your own ways of thinking?

GENDER PAY GAP IN EU



Source: [The Gender pay gap 2020](#)

Evaluate the way you talk and behave

Learning target:

- Become more aware of your own attitudes and ways of thinking and the effect of these on your behavior.

How can we make a change?

We hold strong stereotypes about different genders and how girls and boys or women and men should behave and what they should be interested in. Often these stereotypes are unconscious and to change them, we need to first become aware of them. These stereotypes and attitudes influence our work as teachers and career counselors.

We can evaluate our own thoughts and attitudes by addressing the following questions:

- What kind of characteristics do I connect with boys and girls?
- What is my attitude towards girls, boys, men and women?
- Do I act differently with girls, boys, women and men? If so, why?
- Do I talk differently to different genders? If I do, why so?



Teachers and career counsellors should examine the impact of their thoughts and attitudes to their teaching and counselling practices and evaluate e.g. the following issues:



What kind of methods do I use with different groups? Does gender have an impact in my choice of methods? If so, is it justified? It is recommendable to question and examine your choice of methods to ensure that they are not influenced by gender stereotypes.



How do I form participants into groups? Does gender have an impact on how I form students in groups? If so, is it justified?

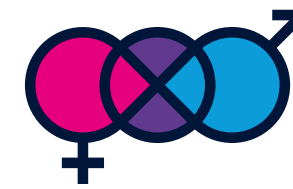
According to research, it may be beneficial to divide participants into groups based on their gender when there are less participants of one gender or when representatives of one gender have less information on the topic being taught.



How do I talk about and maintain my views on different genders in relation to hobbies, occupations, work places and other interests?



What kind of materials do I use with different groups? Does participant gender have an impact on this? If so, is it justified? It is recommended to critically examine the content of the textbooks from gender and equality perspective and to discuss these with your students. What kind of examples are there? What type of pictures are they using? Are the textbooks bringing up diversity sufficiently?



Do you acknowledge gender diversity in your discussions? Do you ensure that you don't assume student's gender based on their appearance or call your students based on their gender e.g. calling one group 'the boys'.



Aim for actively breaking presumptions and stereotypes by discussing them with your students and by paying attention to how these issues are discussed in the group.

Get information about different technology fields

Learning targets:

- Understand the breadth and depth of a technology field and what is included in it
- Become aware of the constantly evolving nature of working life and its occupations as well as the expanding need for technology

Technology fields

It is very important to understand how wide-ranging technology fields are.

The field of technology is very wide, and it is easily compressed to the single term of "technology". It includes, for example, electronic and electricity technology, mechanic and metal technology, metal industry, construction industry, energy industry, information technology, game industry, medical engineering etc. All these fields of technology and relating industries are changing constantly.

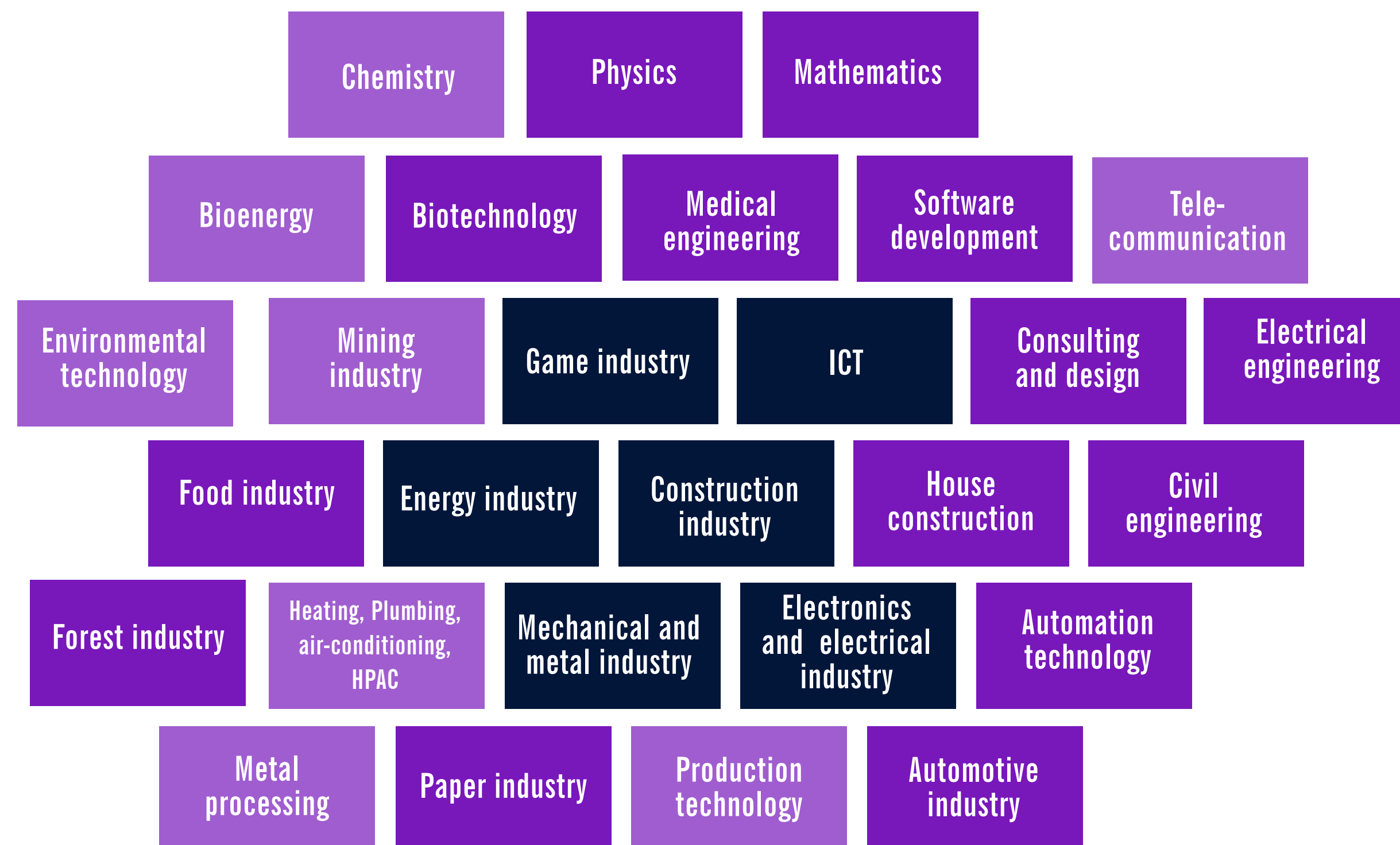
To be able to give accurate information to the students, you should know different technology fields. Technology fields can be very different from each other and they require different kinds of professionals. Technology is needed widely in all fields of science.



TASK D:

Take one technology field from the picture and search more information about it. Make a mind map.

- What are the opportunities to study on this field in your country or area?
- What are the job opportunities?
- Where can you work?
- What kind of skills do you need?





TIP

- Make visits to technical schools, institutions and universities.
- Make visits to technology companies.
- Have guest speakers who tell about the requirements of technology fields.
- Search information about different technical fields and their opportunities in the future.
- Learning by doing: teachers own technical workshops.



Future occupations and work life

Become aware of the constantly changing nature of different occupations and the working life. Follow publications about megatrends. Climate change, ageing population and economy trends changes the needs of professionals.

Stereotypes

Be aware of the stereotypes that are attached to those people who work on technology fields. Understand how these stereotypes can affect student's career choices when choosing the future occupation or school. Recognize your responsibility as an information source to the students.

Seek information on different technology fields so that you can provide students with information that is based on facts rather than ideas and opinions. Students gain their information about different fields of technology from study and career counselors, teachers and parents.

Use your knowledge and share the information – tips!

Study and discuss these subjects with your students.

Talk to your students about their perceptions on gender segregation and how they would like to talk about this subject.

Have technology workshops.

Succeeding in technology related tasks will improve student's confidence to consider technology related occupations.

If you use mixed groups, pay attention to gender roles and make sure that no one is left out.

Share ideas and discuss them with your colleagues.

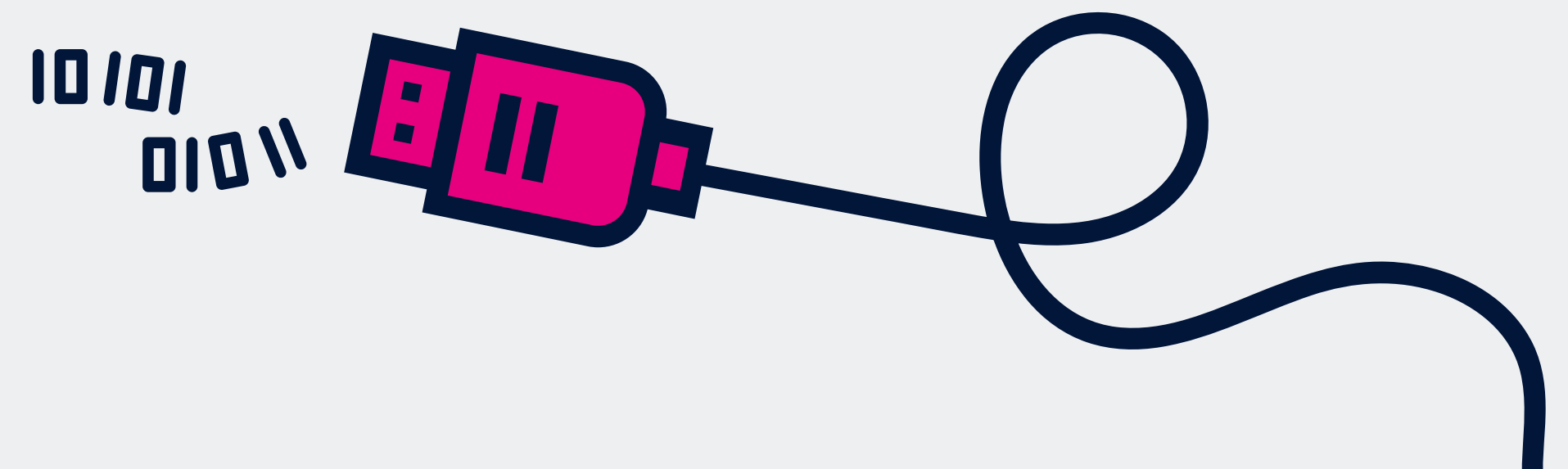
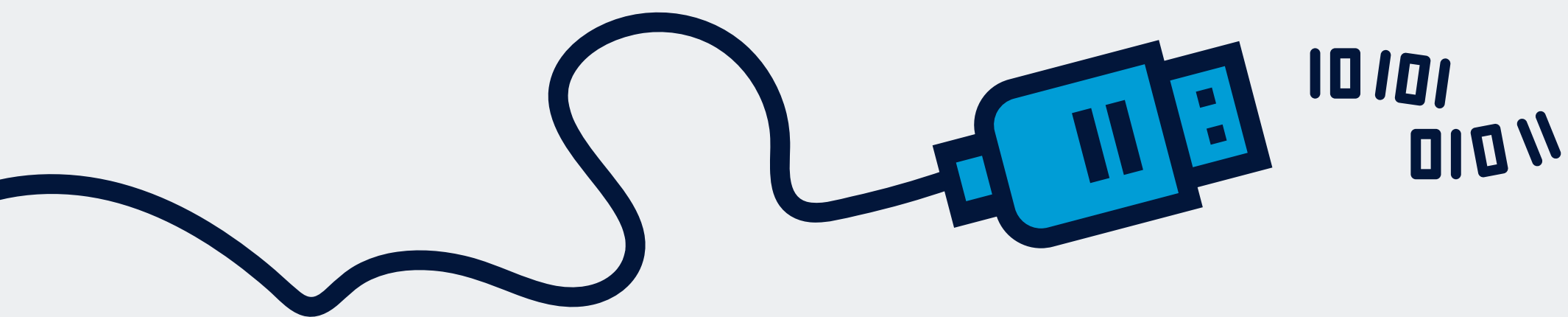
Acknowledge that these subjects and themes are related to and can be used in other fields of science than STEM.

Gender equality should not be taken for granted.

Use examples.

Be brave and discuss the effects of gender segregation.

Take action if you notice discrimination.



Sinä osaat!

You can make a difference! As a teacher or a counsellor you have an important impact on how young people think of different professions and educational options.

We offer education and produce materials supporting teachers and counsellors.

www.sinaosaat.fi

