



**DESKTOP ANALYSIS OF THE SITUATION  
AND IMPACT OF BARRIERS FOR GIRLS  
TO SEEK, ENROL AND COMPLETE  
DUAL VOCATIONAL EDUCATION  
AND TRAINING**



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Desktop Analysis of the Situation and Impact of Barriers for Girls to Seek, Enroll and Complete Dual Vocational Educational and Training

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# INTRODUCTION

Today, many theorists and social scientists believe it is impossible to achieve sustainable development without the active participation of women in the political, social, and economic fields<sup>1</sup>. Women's empowerment is one of the most important indicators of social change<sup>2</sup> and a priority for achieving sustainable development goals<sup>3</sup>. Women's empowerment is a goal through which individuals can make choices in situations where society rejects them.<sup>4</sup> Empowering women means gaining the power to think and act freely, developing a sense of self-worth, believing in the ability to make the desired changes in oneself, the right to control one's life, the right to choose, the actualisation of all women's potential, and equality in society.

Education is the most effective way to promote equality in society, prevent numerous social problems, and in the long run, build a society of free and equal citizens who live in prosperity and actively contribute to their community. Through education, democracy and human rights can be developed or regressed. The values and ideas promoted through education further influence every social area. **Hence, education has the most significant potential to prevent various social problems, of course, if it continues to have support from other areas such as health, social protection, justice, and the media.** One of the primary and vital components in any educational system is the empowerment of learners during the training process. Researchers have studied several factors' effects on womengirls' empowerment. However, research has less examined the role of different dimensions of vocational education and training (VET) on women's empowerment, and therefore this research seeks to explore this relationship. By empowerment, we understand creating a supportive environment and conditions for young women to make individual, free career choices, starting from an early age girls' first transition in education – primary to secondary school at age 13-14 years old). Although faced with many challenges, VET has provided perspective for the young generation to see the VET as a legitimate career choice (as opposed to the promotion of the Concept of a University degree as a status and success factor). For young women, VET is a practical career choice providing benefits such as: gaining specific skills for early employment, having savings, self-reliance in production, financial independence, a sense of trust, academic assistance in planning, self-esteem, and having a sense of human worth. At the same time, attending VET secondary school in North Macedonia is still considered mainly a choice suitable for boys. The boys gravitate in a dominant way towards electro-technics, machinery, minery and wood-processing/forestry sectors, while the girls predominate in education for professions considered more “nurturing, female” such as professions in the medical and social protection sector and personal services. This division is spread among the future VET students, and parents are influencing their freedom to have a non-biased look into the professions available for young girls and with that the possibilities for decent income and independence available through VET Education.

<sup>1</sup> Bayeh, 2016; Khurshid, 2016, Domesticated gender (in) equality: Women's education & gender relations among rural communities available at: [https://www.researchgate.net/publication/306420304\\_Domesticated\\_gender\\_in\\_equality\\_Women%27s\\_education\\_gender\\_relations\\_among\\_rural\\_communities\\_in\\_Pakistan](https://www.researchgate.net/publication/306420304_Domesticated_gender_in_equality_Women%27s_education_gender_relations_among_rural_communities_in_Pakistan)

<sup>2</sup> Kabeer, N. (2005) Gender Equality and Women's Empowerment: A Critical Analysis of the Third Millennium Development Goal. Gender and Development, available at: <https://doi.org/10.1080/13552070512331332273>

<sup>3</sup> UN development goals <https://www.undp.org/sustainable-development-goals>

<sup>4</sup> Women's empowerment in East Africa: Development of a cross-country comparable measure, <https://doi.org/10.1016/j.worlddev.2018.05.031>



By investigating the potential role of VET, various approaches show which opportunities and freedom could expand women's participation in secondary VET schools, which is especially important for those who come from low-income families. Thus, VET can provide an opportunity for women to secure their overall well-being, as well as the well being of the wider family by becoming economically independent and fulfilled professionally by choosing a career path freely and by their own VET is a priority contributor to human capital development, economic growth, reduction of unemployment, better employment, and social cohesion. Such demands on VET policy show no sign of abating as the economic crisis persists and challenges the world and all our policies. The vocational education and training system should meet the needs of the individual citizens, and the skills demanded of the labour market – now and in the future. When demand for new skills grows, VET should encourage innovation, competitiveness, and new partnerships and prepare citizens for domestic and global employment.

# METHODOLOGY

Gender differences that hinder adolescents and young women from seeking, enrolling in, and completing dual VET programs are analysed using comparative methods applied in the relevant indicators of the studied situation through temporal patterns. Namely, the primary sources are data sets from the State statistical office for a relatively long period, 2018-2022. Additionally, the researchers conducted desk research and extracted the most valuable parts of relevant international and national studies and analyses.

The first phase of the research consisted of collecting and analysing secondary data and literature review, identifying stakeholders and data sources. The aim is to identify existing information and data on adolescent and young women enrolled in and who completed dual VET programs through desk research. The legislative framework analysis examines how the VET is defined and functioning. These include Strategies, laws and bylaws, programs, and international reports. It overviewed the institutions responsible for implementing and functioning the VET.

The researchers used official documents; domestic legal sources; the framework of applied policies in the country; EU regulations and directives; existing literature from the last four years (research studies on similar or related topics, academic writing); policy briefs, and studies. The data is analysed using qualitative analysis of documents and thematic analysis of data to identify common themes, ideas, and patterns.

During the research process, we encountered one main limitation. To ensate for the lack of adolescent perspswell-beinge researchers wanted to conduct a survey. Therefore, we could not reach a representative sample due to time and financial limitations ahe target group's age. In this segment, we relied on our hands-on experience in career counselling of girls choosing seconday school, in interactions with their parents in this process, as well as during training events for career counselling for teachers and professionals (pedagogists, psychologists) in high schools in the country. We urge future research on the topic to include young women and adolescents' opinions in the analysis, as we consider it crucial when analysing obstacles and opportunities.

# ADVANTAGES OF DUAL VET FOR YOUNG WOMEN<sup>5</sup>

## Lower chances of unemployment

Acquiring vocational skills can help girls have better chances at landing a job, becoming self-employed, or having practical education and training during formal education can lead to a better job in the future. Learning and executing these practice makes their future career achievement much more promising, opening up opportunities for a secure, stable, and profitable job where they can continue developing their skills and potential.

## Provide financial security

Vocational skills allow girls to create a source of income by earning money through their skills and knowledge, reducing their chances of poverty and improving their quality of life. Poverty and financial instability are widely detrimental to young girls, affecting their physical and mental health in multiple ways and posing a significant challenge to their development and well-being. Lacking income can lead to early marriage<sup>6</sup> in search of stability, which puts them in a challenging position and, in the worst-case scenario, at the risk of experiencing gender-based violence.

## Learn valuable skills

Soft, transferable and technical skills are also crucial to developing a good professional base, and companies and recruiters highly appreciate them. Investing in different types of skills development can benefit individuals, their families, and region's countries. It can help increase social cohesion and achieve more significant economic development at the national and regional levels. That investment can build more egalitarian societies, promote sustainable economic growth and job placement for adolescents; achieves better academic outcomes; and reduce social risks. While learning vocational skills, girls also develop soft skills that create opportunities, such as communication, interpersonal, managerial, negotiation, and networking skills. These help these girls increase their chances of getting a job or starting a small business, enabling greater employment opportunities even in crisis times, such as Covid and post-Covid period. Being equipped with these transferable skills supports resilience in the fast changing economic environment, providing social and financial stability for the young women.

## Job satisfaction

The young women interested in vocational occupations will be able to learn something they like and enjoy, which is a basis for having a fulfilling career later in life, more job options than before, and higher income. Although there are no official obstacles to girls getting enrolled in the (technical) VET schools, there is a widespread perception that those schools are gendered and "for boys". Initiating a public discussion that "all schools are equally relevant for all"–

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<sup>5</sup> Young women in secondary school age period (ages 14-18). Further in the text "girls" may refer to also young women in pre-secondary school age, who are making a decision for enrollment in secondary education

<sup>6</sup> According to the family law, a person who has reached the age of 18 can get married. In case the person is a minor, the competent court can decide that a person who has reached the age of 16 can enter into marriage, if he meets certain criteria for physical and mental maturity as assessed by the center for social affairs and a health institution to obtain permission to enter into marriage

more girls are expected to freely choose this career path as the best for them, leading to a greater job satisfaction later in life.

## LEGAL AND INSTITUTIONAL FRAMEWORK

In this part, the researchers have overviewed the institutional set-up and primary legal documents that address education in North Macedonia. They have focused more on analysing the legislation that ensures non-discrimination and equal access to educational opportunities, focusing on secondary (vocational) education.

### NORTH MACEDONIA'S INSTITUTIONAL SET-UP IS RESPONSIBLE FOR ENSURING THE FUNCTIONING OF THE DUAL VET

<p><b>Ministry for labour and social policies<sup>7</sup></b></p>	<p>Development of strategies, programs, and measures to reduce unemployment and poverty at the national level; for social inclusion of all vulnerable groups of citizens; laws for the protection and care of children. Development of active measures for employment of young people, women, and long-term unemployed persons, specialised training for retraining. Coordination of internship programs for students in cooperation with social partners.</p>
<p><b>Bureau for development of the education<sup>8</sup></b></p>	<p>The Bureau is an administrative body that performs professional work of importance for developing the upbringing and education. Focusing on components that determine the purpose and content of educational work in preschool, primary, high school, general education in secondary VET and post-secondary education, children with special educational needs, the education of adults, and student dormitories.</p>
<p><b>Centre for education of adults<sup>9</sup></b></p>	<p>The development of an adult education system that will provide high-quality opportunities for learning and acquiring qualifications following the labour market's needs and entrepreneurship development will contribute to the economic, social, and personal development of individuals. It accredits training and coaching programs on various topics. The centre ensures quality, especially by establishing standards and criteria for adult formal and informal education.</p>

7 <https://www.mtsp.gov.mk>

8 <https://www.bro.gov.mk>

9 <http://cov.gov.mk>

<p><b>Centre for vocational education and training<sup>10</sup></b></p>	<p>The centre is a responsible institution for the development of the national framework for professional qualifications. It develops and advances vocational education following modern technological and social development. The centre also develops educational qualifications (occupational standards, qualification standards, curricula, and programs and examination programs in vocational education) and prepares concepts for vocational education. The Center supports vocational education through advising, instructing, and mentoring teachers and trainers in vocational subjects in vocational education and training. It gives an opinion on fulfilling the conditions of institutions that require verification for the realisation of vocational education and training and develops standards for school space and equipment.</p>
<p><b>Schools</b></p>	<p>364 primary schools and 130 public (from which 74 technical) and 21 private high schools.</p>
<p><b>Chambers</b></p>	<p>Economic chambers articulate the needs of the business sector, and they can be even more active promoters of the need for the VET. They should ensure that their messages reach various demographic groups of future employees, specifically women.</p>
<p><b>Association of career facilitators</b></p>	<p>Organisations such as the Association of career facilitators ASK, can also further influence public opinion about the importance of early awareness for making informed choices.</p>
<p><b>Companies</b></p>	<p>They are directly involved in supporting the activities of student organisations (competitions, employment fairs) and provide practice and training for students.</p>

Table 1 Institutions and main competencies, Researchers' analysis

<sup>10</sup> <http://csoo.edu.mk>

# THE LEGAL AND POLICY FRAMEWORK ADDRESSING DUAL VET

The main strategy document related to education is the Strategy for education 2018-2025 with an action plan<sup>11</sup>. The Strategy is based on the existing conditions in the national education system and aims at gradually improving all segments of it following the determined action priorities. National documents that are valid in the area of vocational education and training are the Programme for the work of the Government 2020-2024<sup>12</sup>, the Strategic plan of the Ministry for education and science 2022-2024<sup>13</sup>, the Strategy for the education of adults 2019-2023<sup>14</sup>, Concept for developing a system for distance learning in primary and secondary schools 2020<sup>15</sup>, Concept for extracurricular activities for adults and informal learning<sup>16</sup>; Concept for extracurricular activities in primary education 2020<sup>17</sup>, Concept for learning through work 2020<sup>18</sup>, Annual plan of the Ministry for education and science 2022<sup>19</sup>, Operational plan for gender equality 2020<sup>20</sup>. The fundamental laws that regulate secondary education are available on the Ministry for Education and Science website.<sup>21</sup>: Law for textbooks for primary and secondary education; Law for maths-informatic gymnasium; Law for vocational education and training; Law for teachers and collaborators in primary and secondary education; Law for sports academy; Law for open citizen universities for learning.

Business companies, vocational high schools, the Chambers of Commerce, and the Ministry of Education are supporting the development of a curriculum in schools and practical training in private companies/employers.

11 Стратегија за образование, available at: <https://mon.gov.mk/download/?f=strategija-za-obrazovanieto-2018-2025.docx>

12 Програма на Владата 2020-2024, available at: <https://vlada.mk/programa/2020-2024>

13 Стратешки план на МОН 2022-2024, available at: <https://mon.gov.mk/download/?f=Strateshki%20plan%20%202022-2024.pdf>

14 Стратегија за образование на возрасни, available at: <https://mon.gov.mk/download/?f=strategija-za-obrazovanie-na-vozasni-2019-2023-mk.pdf>

15 Концепција за развој на систем за учење од далечина во основни и средни школи 2020 available at: <https://mon.gov.mk/download/?f=Koncept%20za%20dalecinsko%20obrazovanie-design-MK-with%20logos.pdf>

16 Концепција за неформално образование на возрасни и за информално учење, available at: [shorturl.at/cHKW2](http://shorturl.at/cHKW2)

17 Концепција за воннаставни активности во основно образование, available at: <https://www.bro.gov.mk/wp-content/uploads/2020/06/Koncepcija-za-vonnastavni-aktivnosti-2020-1.pdf>

18 Концепт за учење низ работа, available at: <https://mon.gov.mk/download/?f=Koncept-za-ucenje-preku-rabota.pdf>

19 Годишен план на МОН 2022, available at: <https://mon.gov.mk/download/?f=Godisen%20plan%20za%20rabota%20na%20MON%20za%202022.pdf>

20 Оперативен план за родова еднаквост, available at: <https://mon.gov.mk/download/?f=Operativen%20akciski%20plan%20za%20rodova%20ednakvost%202020.pdf>

21 Закони од надлежност на МОН, available at: [https://mon.gov.m k/page/?id=2055](https://mon.gov.mk/page/?id=2055)

## REGULATION AND PRACTICES WHICH PROTECT ADOLESCENTS FROM DISCRIMINATION AND ABUSE IN EDUCATION

Equality is an integral part of the right to education and an independent human right. Equality is a broader concept than the prohibition of discrimination. However, the tendencies in anti-discrimination laws are moving to create and develop appropriate institutions that will respond to the requirements for essential equality instead of being satisfied with formal equality only. The Convention on the Elimination of All Forms of Discrimination Against Women, General Recommendation No. 36, The UN Convention on the Rights of Persons with Disabilities (CRPD)<sup>22</sup> along with the General Comment N. 3<sup>23</sup> and other legal acts on the right to education of women and girls speak of essential equality, and states should take measures in various areas to achieve it.

The Law on prevention and protection against discrimination<sup>24</sup> prohibits discrimination in education on many discriminatory grounds, including sex, gender, sexual orientation, and gender identity. Direct, indirect, intersectional, multiple, and repeated discrimination and harassment are prohibited. The Law represents a significant instrument in dealing with multiple discrimination which women face as a result of the intersection of gender with other identities. Intersectional discrimination is regulated in Article 13 of the Law as one of the “more severe forms of discrimination”. The Law mentions disability as one of the grounds for discrimination (Article 5), including a definition of person with disabilities (Article 4).

The Law on Equal Opportunities for Men and Women<sup>25</sup> aims to promote and advance gender equality in all areas, including education. The goal of the Law is equal opportunities between women and men, which only partially covers essential equality. In the manner of education, the Law contains obligations that should result in amendments and additions to the relevant policies: training for the establishment of the Concept of equal opportunities as an integral part of the educational system, establishing mechanisms for tackling prejudices and stereotypes connected with the establishment of equal opportunities in the preparation, adoption, and implementation of education or professional training programs, the preparation of textbooks and school aids and in the introduction of organisational innovations and modification of pedagogical methods; carrying out regular analysis of the contents of the curricula, programs, and textbooks from the aspect of promoting equal opportunities for women and men.

A Parliament adopted a new Law on the Prevention and Protection of Violence Against Women and Domestic Violence<sup>26</sup> to comply with the Istanbul Convention and overcome shortcomings in the previous legal solution. The law aims to widen the system for the prevention of and protection from all forms of gender-based and domestic violence, in accordance with the recommendations of the IC, namely “the prevention and stopping of gender-based violence against women and domestic violence, effective protection of victims of any form of gender-

22 [http://vlada.mk/sites/default/files/dokumenti/uncrpd\\_mk\\_prevod\\_rcclip-poraka.pdf](http://vlada.mk/sites/default/files/dokumenti/uncrpd_mk_prevod_rcclip-poraka.pdf)

23 General comment No. 3 (2016), Article 6: Women and girls with disabilities, UN Committee on the Rights of Persons with Disabilities, CRPD/C/GC/3, Available at: <https://undocs.org/CRPD/C/GC/3>

24 Закон за спречување и заштита од дискримinacija, „Службен весник на Република Северна Македонија“ бр. 258/2020

25 Закон за еднакви можности на жените и мажите, „Службен весник на Република Македонија“ бр. 6/12, 30/13, 166/14 и 150/15 и „Службен весник на Република Северна Македонија“ бр. 53/21

26 Закон за спречување и заштита од насилство врз жените и семејното насилство, Службен весник на РСМ, бр. 24/21

based violence against women as well as victims of domestic violence with respect to the fundamental human rights and freedoms ensured by the Constitution of the Republic of North Macedonia and international treaties". The law includes the principle of non-discrimination, according to which the measures, activities and services for prevention and protection of women from gender-based violence are enforced without discrimination on the grounds of disability. Women and girls with disabilities are singled out as a vulnerable category of women (Article 7) and Article 8 states that "the measures, activities and services for victims of gender-based violence against women and domestic violence, shall be appropriately adjusted to the specific needs of women with disabilities". Education has a crucial role in preventing and protecting against gender-based violence in terms of prevention, early detection, reporting, and providing a supportive environment for student victims. Students can be victims of gender-based violence at school, outside of school, and in the family. Schools should be prepared for these situations, recognise them and actively take measures according to the student's best interest.

The Law on Basic Education significantly improved<sup>27</sup> with amendments in 2019 regarding anti-discrimination, prevention, and protection from violence. Based on this Law, it adopted the bylaw Act Guidelines for the procedure for reporting and protecting a student victim of any form of violence, abuse, and neglect<sup>28</sup>, which comprehensively and in detail regulates the area following international standards.

The Law on the Protection of Children<sup>29</sup> regulates the work of kindergartens and children's rights in social protection. It prohibits violence and discrimination by explicitly mentioning sex, gender, sexual orientation, and gender identity. The Law prohibits "any" discrimination and defines direct and indirect discrimination.

The Law on Secondary Education<sup>30</sup> inadequately elaborates on preventing and protecting against discrimination and violence and does not recognise gender equality and gender-based violence. The Law contains a general anti-discrimination clause, which does not include gender, sexual orientation, gender identity, or disability as grounds for discrimination. Only gender is covered, which could be enough ground for protecting girls and women from discrimination. However, this general clause is a declaratory provision without further elaborations and no specific measures for how the protection against discrimination in secondary education should occur.

The Strategy for gender equality 2021-2026<sup>31</sup> foresees several measures to promote gender equality in education, the implementation of which requires changes in the legal framework. Gender-sensitive education and training is a particular specific goal in the Strategy. Inclusion and prevention of dropping out of the educational process of girls from marginalised groups; (re)shaping the education of adult Roma women through the inclusion of verified programs for acquiring qualifications; promoting the principle of gender equality in scientific research activity; reduced gender segregation in areas considered "female or male"; fully established

27 Закон за основно образование, „Службен весник на Република Северна Македонија“ бр. 161/19 и 229/20

28 Упатство за постапката за пријавување и заштита на ученик жртва на која било од формите на насилство, злоупотреба и занемарување, available at: <https://mon.gov.mk/category/?id=2070>

29 Закон за заштита на децата, „Службен весник на Република Македонија“ бр. 23/13, 12/14, 44/14, 144/14, 10/15, 25/15, 150/15, 192/15, 27/16, 163/17, 21/18, 198/18 и „Службен весник на Република Северна Македонија“ бр. 104/19, 146/19, 275/19 и 311/20.

30 Закон за средно образование, „Службен весник на Република Македонија“ бр. 44/95, 24/96, 34/96, 35/97, 82/99, 29/02, 40/03, 42/03, 67/04, 55/05, 113/05, 35/06, 30/07, 49/07, 81/08, 92/08, 33/10, 116/10, 156/10, 18/11, 51/11, 06/12, 100/12, 24/13, 41/14, 116/14, 135/14, 10/15, 98/15, 145/15, 30/16, 127/16, 67/17 и 64/18 и „Службен весник на Република Северна Македонија“ бр. 229/20.

31 Национална стратегија за родова еднаквост, available at: <https://api.klimatskipromeni.mk/data/rest/file/download/94db77cf7037ed0de3210c9a3ae1efe723f6ec9a79142791b87cd946eb2a5376.pdf>

comprehensive sexuality education; and gender-sensitive infrastructure in schools to maintain menstrual hygiene are key results of this goal. While with the specific objective “suppression of gender stereotypes and sexism and promotion of equality,” it will be achieved: education and teaching materials that promote equality, tolerance, and non-discrimination by establishing a mechanism for revising old and creating new contents in curricula, textbooks and didactic materials that are gender sensitive and promote positive views towards gender and gender identities, with an intersectional approach; increased awareness and knowledge of gender equality with an inclusive, intersectional approach among academic staff in schools and kindergartens through the implementation of appropriate training; children will start learning about gender equality, tolerance and non-discrimination from an early age through the introduction of gender equality content in schools and kindergartens.

The National Strategy for the Prevention and Protection of Children from Violence (2020-2025)<sup>32</sup> is a comprehensive document that governs policies for the prevention and protection of violence against children, the advancement of the legal framework and mechanisms for protection, the collection of data, and the strengthening of the institutions’ capacities. Violence in education is not dealt with separately but with other vital sectors, social protection, justice, and health. Some of the activities concerning education are introducing content and activities for non-violence and measures to strengthen capacities and promote intersectional cooperation.

The Action Plan for the Implementation of the Convention on Preventing and Combating Violence Against Women and Domestic Violence of the Republic of Macedonia 2018-2023<sup>33</sup> in the field of education envisages the revision of curricula and programs that have information that supports gender roles and reinforces harmful practices that result in violence against women. Because of this, introducing information about non-violent behaviour, understanding gender equality, developing the ability to resolve conflicts peacefully, and understanding and valuing equality in primary, secondary, and higher education is planned. The action plan explicitly foresees amendments and additions to the laws on primary, secondary, and higher education and the Law on textbooks in primary and secondary education. Legal amendments to these laws should contain provisions promoting equality, prohibiting discrimination according to the principles of the Civil Code and prohibiting gender-based violence in schools and universities. Additionally, the provisions should prohibit teaching materials and aids that perpetuate negative stereotypes and prejudices regarding gender roles and sexuality that promote and support gender-based violence.

A general conclusion from the thematic analysis is that the legal framework at the national level for prevention and protection against discrimination and gender-based violence aligns with European standards in the area. The picture improved with the adoption and amending of relevant laws following EU directives on equality, the Istanbul Convention, and the conventions of the UN. Still, the current practice of introducing a provision for protection against discrimination in the introductory part or the principles of the laws, without working out what it means to prevent and protect against discrimination in the area and without foreseeing corresponding criminal provisions, does not give the desired effect. **The critical shortcoming of the laws is that they generally do not contain adequate mechanisms for ensuring their implementation, which proved to be an inadequate instrument for promoting gender equality.**

32 Национална стратегија за превенција и заштита на децата од насилство 2020 – 2025, available at: <https://www.mtsp.gov.mk/dokumenti.nspix>

33 Акциски план за спроведување на Конвенцијата за спречување и борба против насилството врз жените и домашното насилство на Република Македонија 2018 – 2023, available at: [https://mtsp.gov.mk/pocetna-ns\\_article-nacionalniot-plan-za-sproveduvanje-na-konvencijata-za-sprecurvanje-i-borba-protiv-nasilstvoto-vrz-zen.nspix](https://mtsp.gov.mk/pocetna-ns_article-nacionalniot-plan-za-sproveduvanje-na-konvencijata-za-sprecurvanje-i-borba-protiv-nasilstvoto-vrz-zen.nspix)

# FINANCIAL RESOURCES FOR IMPROVING THE EDUCATIONAL SYSTEM

The State is main source of finance through the Ministries and Municipalities.. The budget for science foreseen for the year 2023<sup>34</sup>, which the Government approves, amounts to only 268 million MKD denars and is the lowest in the last ten years. In addition, although the State Budget increases every year, this year, even 42% less money was planned for science compared to 2014, and for the next year, even 66% less is proposed compared to then. However, with the proposed budget are increased funds for primary and secondary education, and in that line are foreseen 111 million MKD more i.e in total 460 millions MKD for regional centres for VET.<sup>35</sup> Additionally, 390 million mkd are foreseen for more inclusive primary education, 127 millions mkd for projects in secondary education and only 10 millions mkd for projects for supporting education of Roma. The Ministry for Education started with publishing calls for scholarship for students in secondary education, including scholarship for talented students with focus on technical sciences<sup>36</sup>, sports<sup>37</sup>, art<sup>38</sup>, vocational 3 years programme<sup>39</sup>. Direct support through scholarship is also foreseen for students who will enroll in dual VET<sup>40</sup> and for students in hospitality-tourism profession, electro-technical profession, construction-geodetic profession, agricultural-veterinary profession, mechanical profession and textile-leather profession<sup>41</sup>. Additionally with scholarship will be supported students without parents<sup>42</sup>, students with disabilities<sup>43</sup>, Roma<sup>44</sup>, students that are socially and financially vulnerable.<sup>45</sup> In this respect, there are no specific gender related scholarships.

Schools are allowed by law to mobilise their own resources. In practice, an extremely small

34 Предлог буџет за 2023, available at: <https://finance.gov.mk/wp-content/uploads/2022/11/Предлог-Буџет-на-PCM-за-2023-година.pdf>

35 Помалку пари за учениците, студентите и наука, а повеќе за плати <https://www.radiomof.mk/pomalku-pari-za-uchenicite-studentite-i-nauka-a-povekje-za-plati-shto-predviduva-predlog-budzhetot-za-2023-infografik/>

36 Конкурс за доделување 100 (сто) стипендии за талентирани ученици од средното образование од областите на природните и техничките науки од јавните и приватните средни училишта во Република Северна Македонија за учебната 2022/2023 година <https://mon.gov.mk/content/?id=4825>

37 Конкурс за доделување 150 (сто и педесет) стипендии за талентирани ученици - спортисти од јавните и приватните средни училишта во Република Северна Македонија за учебната 2022/2023 година <https://mon.gov.mk/content/?id=4824>

38 Конкурс за доделување 50 (педесет) стипендии за талентирани ученици од средното образование од областа на уметностите од јавните и приватните средни училишта во Република Северна Македонија за учебната 2022/2023 година <https://mon.gov.mk/content/?id=4822>

39 Конкурс за доделување 500 (петстотини) стипендии за ученици кои реализираат наставни планови и програми за стручно оспособување и стручно образование од тригодишно траење во јавните и средните училишта во Република Северна Македонија за учебната 2022/2023 година <https://mon.gov.mk/content/?id=4819>

40 Конкурс за доделување 1500 (илјада и петстотини) стипендии за ученици кои ќе се запишат во паралелки во стручно образование во кои ќе се реализира практично образование со зголемен број на часови согласно програмите за стручно образование од јавните средни училишта во Република Северна Македонија за учебната 2022/2023 година <https://mon.gov.mk/content/?id=4820>

41 Конкурс за доделување 240 (двесте и четириесет) стипендии за ученици од средно образование кои реализираат наставни програми од угостителско-туристичката струка, електро-техничка струка, градежно-геодетска струка, земјоделско-ветеринарна струка, машинска струка и текстилно-кожарска струка од јавните и приватните средни училишта во Република Северна Македонија за учебната 2022/2023 година <https://mon.gov.mk/content/?id=4816>

42 Конкурс за доделување 50 (педесет) стипендии за ученици - деца без родители од јавните и приватните средни училишта во Република Северна Македонија за учебната 2022/2023 година <https://mon.gov.mk/content/?id=4821>

43 Конкурс за доделување 120 (сто и дваесет) стипендии за ученици со посебни потреби од јавните и приватните средни училишта во Република Северна Македонија за учебната 2022/23 година <https://mon.gov.mk/content/?id=4818>

44 Конкурс за доделување на стипендии во четири категории за ученици Роми запишани во прва, втора, трета и четврта година од јавните и приватните средни училишта во Република Северна Македонија за учебната 2022/2023 година <https://mon.gov.mk/content/?id=4826>

45 Конкурс за доделување 900 (деветстотини) стипендии за социјална поддршка на ученици од јавните средни училишта во Република Северна Македонија за учебната 2022/2023 година <https://mon.gov.mk/content/?id=4817>

number of them do so<sup>46</sup>. Following the lack of competent workers, private sector is motivated to invest in the dual VET education but there is still no significant amount donated. For now, they support the education through offering mentorship<sup>47</sup>, practice at their own premisses, gaining direct access to potential future employees thained according to their business needs. Additionally some companies and fondations<sup>48</sup> offering scholarship for secondary school students, that can be focused on for example only for STEM<sup>49</sup>. Apart from this, there are donor funded project implemented by the state<sup>50</sup> and/or few CSOs that works on promoting and improving (dual) VET<sup>51</sup>.

46 [FINANCING-of-VET-schools-in-North-Macedonia ETF-E4E-Issue-Paper.pdf](#)

47 [E4E@mk-Cost-benefit-Policy-Breif.pdf](#)

48 <https://albiz.org.mk>

49 <https://nezavisen.mk/limak-pochnuva-inicijativa-za-poddrshka-na-studentkite-na-inzhenerskite-fakulteti/>; <https://www.macedonia2025.com/mk/archives/mk-македонија2025-со-поддршка-за-талентира/>

50 ИПА II Годишна акциска програма за Република Северна Македонија за 2019 година: ЕУ ЗА МЛАДИТЕ; <https://kapital.mk/ey-со-директна-буџетска-поддршка-за-ре/>

51 <https://www.e4e.mk/en/home/>; <https://opserver.mk/politika/vlast/bitikji-srednite-struchni-uchilishta-stolbovi-za-razvoj-na-obrazovanieto/>

# ANALYSIS OF THE SITUATION: ATTRACTIVENESS OF THE VET

This section aims to overview the available information and data on dual VET and adolescent women who seek and enrol in VET; however, we stress that it represents only the researchers' perspective. Therefore, the primary source of information upon which we build the picture is the available data reports of the State Statistical Office (SSO). Although we can have a breakdown of the structure of students, there is a need more in-depth insight into the perceptions and perspectives of young women on the reasons behind not choosing some VET programs, which limits the scope of this study.

Secondary education is compulsory and accessible for all children and divides into four types: gymnasium, vocational education, art, and education for students with special educational needs. Secondary education may last three or four years. The students enrolled in three years of secondary education do not have the right to directly continue in university. Students who finish four years of secondary education may choose to continue to university. Among the existing 124 high schools, 108 are public, and 16 are private.<sup>52</sup>

The decision to make secondary education compulsory for all children, starting in 2008, has positively affected progression rates from primary to secondary education and significantly improved the number of girls enrolled in secondary education.

Compared to males, females in lower numbers continue their education through the years. Namely, in 2021/2022, 71,018 children were included in public education, of which 49% were girls.

	2018/2019	2019/2020	2020/2021	2021/2022
Total	71650	69980	71811	71018
Females	34218	33683	35200	34801
Males	37432	36297	36611	36217

Table 2. Number of students that enrolled in secondary education segregated by gender and school

The statistics show that vocational education continues to be the primary choice for students (around 44.3141 or 56% of children choose it) boys while around 48% of girls enrolled in vocational schools.

		2018/2019		2019/2020		2020/2021		2021/2022		2022/2023	
		Total	y1								
Gymnasium	F	53%	53%	53%	53%	54%	54%	54%	53%	52%	52%
	M	47%	47%	47%	47%	46%	46%	46%	47%	48%	48%
Vocational	F	45%	44%	45%	44%	46%	46%	47%	45%	48%	48%
	M	55%	56%	55%	56%	54%	54%	53%	55%	52%	52%

Table 3. Percentage of students who enrolled in the first year of secondary education

<sup>52</sup> Of the public schools, 22 are gymnasiums, 46 are vocational, 29 offer both education, four are for students with special educational needs, 5 are art schools, one is a sports academy, one is a sports gymnasium, and one is a math-informatics gymnasium.

Data indicate that occupational areas catering to the highest numbers of students are the electro-technical, machine engineering, medical, economy-law, and trade (Table 4). However, this does not necessarily mean that these are more attractive than other occupational areas. The reasons behind this numbers may be due to the available capacities for education and training in a respective occupational area.

Through the years, student interest in agriculture-veterinary, geology-mining and metallurgy, graphic, chemistry, technology, construction-geodetics, and partly electro-technical occupational areas is declining. In contrast, there is a slight increase in personal services, traffic, and forestry-wood processing. Young girls are most attracted by chemistry, personal services, health, economic Law, and trade, while they have the lowest interest in electro-technical and machine engineering areas.

	2018/2019		2019/2020		2020/2021		2021/2022		2022/2023	
	Women	Men								
Agriculture-veterinary	31%	69%	34%	66%	37%	63%	35%	65%	43%	57%
Forestry-wood	26%	74%	36%	64%	26%	74%	30%	70%	30%	70%
Geology-mining	0%	0%	14%	86%	32%	68%	29%	71%	27%	73%
Machine engineering	6%	94%	5%	95%	9%	91%	5%	95%	5%	95%
Electro-technical	11%	89%	14%	86%	13%	87%	14%	86%	11%	89%
Chemistry	52%	48%	53%	47%	52%	48%	55%	45%	56%	44%
Textile	58%	42%	54%	46%	64%	36%	58%	42%	59%	41%
Graphic	34%	66%	33%	67%	45%	55%	41%	59%	51%	49%
Personal services	71%	29%	72%	28%	71%	29%	70%	30%	67%	33%
Construction-geology	38%	62%	36%	64%	37%	63%	40%	60%	41%	59%
Traffic	47%	53%	39%	61%	45%	55%	50%	50%	35%	65%
Tourism and hospitality	27%	73%	28%	72%	34%	66%	32%	68%	28%	72%
Economic-Law and Trade	55%	45%	53%	47%	55%	45%	56%	44%	55%	45%
Health care	71%	29%	75%	25%	75%	25%	76%	24%	73%	27%

Table 4. Percentage of students enrolled in separate vocational programs, in 1st year

The number shows that separate professions are still considered typically male or female; accordingly, boys and girls choose their future professions. The students who will be a minority (from a gender perspective) in their class generally avoid it because it causes them a feeling of insecurity, a feeling that they do not belong there. Avoiding certain professions does not mean a lack of competencies and abilities but a lack of courage to oppose stereotypes. The information/recruitment/communication campaigns, the facilities, the training content and pedagogy are often not very gender sensitive nor socially inclusive. Add to that family pressure and burdens, perseverance and retention become challenged.

## HOW STUDENTS CHOOSE THEIR CAREERS

When we look at the choices that students make, we have to consider that the career choice will take effect much later than the choice. Moreover, this is especially true for young people who are still in primary school. Therefore, one of the best ways to predict future career choices is to consider their intentions. Intentions have particular value in predicting future behaviour because they are longer-lasting and better predictors of behaviour than attitudes, opinions, or personal characteristics.<sup>53</sup> One theory that explains intentions and the associated factors is the Theory of Planned Behavior.<sup>54</sup> According to this theory, behaviour is based on intentions, resulting in three determinants: attitude towards behaviour, social norm, and perceived control of behaviour related to the degree to which people think they will be successful in performing a particular role/career. The Concept includes self-efficacy and the perceived ability to control behaviour<sup>55</sup>. The social norm is related to how individuals perceive environmental support for the chosen activity, especially from their immediate environments, such as family and friends<sup>56</sup>. Speaking of choosing the career path, specifically in the adolescent age, despite of sporadic efforts from various donor-funded projects, there is still no present system of career guidance in the primary school system. There is a low level of professional orientation activities in the program, so the students can learn more about the possible career paths and what education is needed to pursue them. This lack of career counselling provided by the schools, leaves the parents as key career influencers of their children's decisions. At this level, the parents are crucial for opening the VET education as a valid career path (including the technical schools) especially to the girls that seem to disregard these options as valid and aspiring.

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53 Veciana et al., 2005; Mohr & Burruss, 2019

54 Ajzen, I. and Fishbein, M. (1980), *Understanding attitudes and predicting social behavior*. Englewood Cliffs: Prentice-Hall.

55 Fishbein, M. and Ajzen, I. (2010), *Predicting and changing behavior. The reasoned action approach*. New York: Psychology Press.

56 Ibid.

# REASONS BEHIND LOWER RATES OF GIRLS WHO ENROLLED IN VOCATIONAL EDUCATION AND TRAINING

Young girls are sometimes under different influences than young boys for enrolling in secondary education. Certain social-cultural and economic aspects differently affect young girls.

## SOCIO-CULTURAL BARRIERS

### SOCIAL INFLUENCE AND GENDER NORMS

The HBSC study - (11, 13, and 15 years), published by the Margini Coalition<sup>57</sup>, is the only study that deals with gender inequalities in detail and covers LGBT youth. The results of the study both in 2016 and 2018 showed significant gender inequalities and showed the various influences of gender norms on boys, girls, and LGBT youth. The results are also segregated based on ethnicity (Macedonians and Albanians), which reveals a more significant influence on gender norms in Albanian students. A total of 28 % of boys and 14 % of girls from Macedonian classes and 64 % of boys and 54 % of Albanian girls agree with the claim that the father should have greater authority than the mother in the family. The results are similar to the claim that girls should be good mothers and wives instead of dedicating themselves to their careers. The results also show that **girls love school more but have less support at home**. School is a crucial place for support, while the home is a less pleasant environment, affecting patriarchal upbringing and double gender standards by which parents impose more responsibilities, behave stricter, and have higher expectations on girls. Girls also report more psychosomatic problems, and the percentage increases over the years, so gender disproportionate reach 29 % versus 53 % among 15-year-olds. The data shows that the environment is less supportive of girls as they grow and they increasingly feel the pressure from gender norms associated with gender roles and heteronormative sexuality. In the experiences of physical violence, there are no significant gender disproportions, except for 11-year-old boys, who report almost twice as many experiences of physical violence as their peers. Behaviour that is expected result, given that boys still apply physical violence to confirm their gender identity while the environment encourages and sanctions them. Gender differences in physical violence, are significant among students of both ethnic communities. Boys tend to be more violent than girls not only because they are stronger, but because of the patriarchy and societal support of such behavior, which is perceived as a way of “masculine” growth. Violence during adolescence is also demonstrated towards other boys, in order to choose their own place and role in the “macho” world, in which the best place is for the bravest and the most durable, even at the cost of hurting the other or self-harm. Communities don’t prevent it, and even do not sanction violence, in fact justifies and supports its development. Findings from the HBSC study of homosexual youth in schools from

57 Имаме ли победник? Родови нееднаквости во здравјето и животните перспективи на адолесцентите од Северна Македонија, available at: [http://coalition.org.mk/wp-content/uploads/2020/10/margini\\_rodovi-neednakvosti\\_2020\\_final.pdf](http://coalition.org.mk/wp-content/uploads/2020/10/margini_rodovi-neednakvosti_2020_final.pdf)

North Macedonia confirm the assumptions about the extremely difficult and unequal position of this group of young people in terms of their mental, social and physical health. Young people aged 11 to 13, with homosexual orientation and atypical gender identities, in Macedonia are less supported by family and peers, more exposed to violence and bullying, suffer more from mental problems and think about suicide more often, compared to heterosexual youth, show the findings. At the end, the study shows devastated results that 39% of the boys and 30% of the girls had experience with at least one or more types of domestic violence during their lifetime.

## FROM WIDER TO TIGHTER FACTORS – SOCIETY, COMMUNITY, AND DIRECT FAMILIES

Society needs to pay more focused attention to Girls' education. According to the World Bank<sup>58</sup>, it goes beyond getting girls into school. It is also about ensuring that girls learn and feel safe in school, have the opportunity to complete all levels of education and acquire the knowledge and skills to compete in the labour market. Moreover, to gain socio-emotional and life skills necessary to navigate and adapt to a changing world, make decisions about their own lives, and contribute to their communities and the world. Both individuals and countries benefit from girls' education. Better educated women tend to be more informed about nutrition and healthcare, have fewer children, marry later, and their children are usually healthier, should they choose to become mothers. They are more likely to participate in the formal labour market and earn higher incomes. A recent World Bank study estimates that the "limited educational opportunities for girls, and barriers to completing 12 years of education, cost countries between US\$15 trillion<sup>1</sup> and \$30 trillion in lost lifetime productivity and earnings."<sup>59</sup> These combined factors can help lift households, communities, and countries out of poverty. In this respect, supporting girls to have more accessible entry into and completion of VET opportunities on the highest – country/state level is crucial for the advancement of society as a whole. The first essential step toward progress is legislation and policies that ensure that girls are equally supported to choose and complete VET.

More recently, there has been a strong tendency to believe in the technological paradox of gender equality because the more egalitarian a country is, the fewer women study technology and science. Thus, the research<sup>60</sup> looked at almost half a million teenagers in 67 countries, and in more than 60 countries, far fewer females study science or technology than males. The research suggests that socio-economic status plays an important role, with less egalitarian countries adding pressure to enter higher-paying professions, often related to STEM sectors. Thus, women are more likely to enter these fields in countries with less social welfare. Furthermore, other research studies support the positive impact of science and technology outreach activities to improve the perception of STEM<sup>61</sup>. Finally, the study claims that girls

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58 <https://www.worldbank.org/en/topic/girlseducation#1>

59 Missed Opportunities : The High Cost of Not Educating Girls, available at: <http://hdl.handle.net/10986/29956>

60 The Gender-Equality Paradox in Science, Technology, Engineering, and Mathematics Education, Stoet, G., Bailey, D. H., Moore, A. M., & Geary, D. C. (2016), February 2018, Psychological Science 29(4):095679761774171

61 Analysis of barriers, supports and gender gap in the choice of STEM studies in secondary education, available at: <https://link.springer.com/article/10.1007/s10798-022-09776-9>

consider social stereotypes and the immediate environment as the main reasons for low female STEM enrollment<sup>62</sup>.

A vital factor in the decision-making process at 13-14 is still the parent(s) as the primary caregiver and source of power and authority. Students with disabilities make the choice of where to continue their secondary education with the assistance of their parents, or they are simply put in a situation of choosing the single option being available to them<sup>63</sup>. Often, students with disabilities are left with no choice when it comes to choosing which secondary school to enroll to. This is especially true for students living in smaller towns, as well as for students having attended special primary schools. The choice available is not always in their best interest, or their possibilities and capacities. In this way, students with disabilities are denied the opportunity of getting appropriate training and exercising a profession of their choice after the completion of their education, and finally, they see their employment opportunities being seriously compromised.

As career counselling is only present in some schools, the critical career advisors are the parents. We use the word “advisors” as they mostly print out specific careers they believe are suitable for the child and its future. Students need more information about their career choices, advice, and support regarding the choice, which would encourage them to cross the norms, thus contributing to their own and social development. The closest families have the most significant impact on the early career choices – the direct family members – parents/grandparents that take care of the children influence the decisions and, in many cases, make the decisions instead of supporting the individual decisions of their children. In many cases, a girl’s life path is considered under the family members’ decision – what to study, when, and to whom to marry. Choosing VET as a option needs to “get on the table” for the parents to support this option for their daughters.

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62 Ibid.

63 [https://www.unicef.org/northmacedonia/media/4271/file/MK\\_CWDinSecondaryEducation\\_Report\\_ENG.pdf](https://www.unicef.org/northmacedonia/media/4271/file/MK_CWDinSecondaryEducation_Report_ENG.pdf)

## TRADITIONAL BARRIERS RELATED TO ETHNIC BACKGROUND

Many studies show that in some social groups (most likely in minority groups), the possibility of allowing daughters to go to school is lower than allowing sons to enrol in secondary schools. Namely this is the case especially with Roma girls.

	2017/2018		2018/2019		2019/2020		2020/2021	
	Females	Males	Females	Males	Females	Males	Females	Males
Macedonians	49.55%	50.45%	48.83%	51.17%	50.16%	49.84%	49.60%	50.40%
Albanians	46.70%	53.30%	47.71%	52.29%	48.88%	51.12%	48.11%	51.89%
Turkish	45.47%	54.53%	46.62%	53.38%	45.65%	54.35%	47.04%	52.96%
Roma	45.09%	54.91%	47.17%	52.83%	45.11%	54.89%	45.89%	54.11%
Vlah	46.46%	53.54%	45.74%	54.26%	52.38%	47.62%	50.35%	49.65%
Serbians	41.80%	58.20%	46.89%	53.11%	52.98%	47.02%	51.62%	48.38%
Bosnians	47.35%	52.65%	49.26%	50.74%	46.69%	53.31%	43.48%	56.52%
Others	46.85%	53.15%	47.17%	52.83%	42.91%	57.09%	45.79%	54.21%

Table 5 Students in high schools segregated by ethnic background and gender yearly, in percentage

## CHILD MARRIAGES

Child marriage is also a critical challenge. Girls who marry young are much more likely to drop out of school and complete fewer years of education than their peers who marry later. They are also more likely to have children at a young age and are exposed to higher violence perpetrated by their partners. Indeed, girls with secondary schooling are up to six times more likely to marry than those children with little or no education. According to a recent report, more than 41,000 girls under the age of 18 marry every day. Putting an end to this practice would increase women's expected educational attainment and potential earnings. According to the report's estimates, ending child marriage could generate more than US\$500 billion in benefits annually each year. In North Macedonia, this phenomenon is also existing. Namely, citizens<sup>64</sup>, regardless of their ethnicity and level of education, indicated that they were familiar with cases of child marriages in certain environments. The most vulnerable were the girls from Roma and Albanian ethnic community. The representative from Roma and Albanian ethnic communities confirmed that they are familiar with cases, mainly in smaller and more

64 Ibid.

remote rural areas, and above all, due to bad family and economic conditions. According to these respondents, there are three categories of juvenile brides: in the first one, there are underage brides aged 14-15 who live in unregistered, extramarital unions; the second one is those who marry after obtaining consent from a parent at the age of 16, and in the third one is of those who leave their family and marry as runaway brides. The State Statistical Office does not contain information for students who terminated their education due to being married and segregated by gender. However, one study examined more deeply, and child marriages are among the stated reasons why girls dropped from school<sup>65</sup>. Organisation, activities and professionals that deal with this issue recommend that the institutions should find a way to include these categories in the educational process at least by offering some shortened programs and urge for amending the law on Family in order to not allow legal marriage before 18 years old.<sup>66</sup>

## A BELIEF THAT GIRLS DO NOT NEED EDUCATION IN THEIR EVERYDAY LIFE

Equal access to professions and equal educational levels are equally important and independent of gender division, but practice and statistics still point to gender inequality. **Therefore a woman's level of education must be higher so that she will be included more in all spheres of social progress, which is especially important for her progress, the progress of her family, her education, and thus hopefully the whole of society.** The belief that a woman should primarily be a good housewife and, therefore, should not complete secondary education is still common in some traditional communities. While men have to support the family and education increases the opportunities for a better job, the woman's role in heteronormative terms, is to sit at home and take care of the household. **This patriarchy-based attitude is especially present in rural areas but not limited to, and strongly influences girls' career and educational choices<sup>67</sup>.**

## GENDER STEREOTYPES COMMUNICATED THROUGH THE EDUCATION

Gender bias and prejudice within schools and classrooms may also reinforce messages that affect girls' ambitions and their own perceptions of societal roles and reproduce labour market engagement disparities and occupational segregation. When gender stereotypes are communicated through the design of school and classroom learning environments or the behaviour of faculty, staff, and peers in a child's school, it goes on to have a sustained impact on academic performance and choice of field of study, significantly negatively affecting young women pursuing science, technology, engineering, and mathematics (STEM) disciplines<sup>68</sup>.

65 Ibid.

66 Малолетничките бракови се клучната причина за прекин на образованието, но не и единствената: <https://meta.mk/maloletnichkite-brakovi-se-kluchnata-prichina-za-prekin-na-obrazovaniето-no-ne-i-edinstvenata/>

67 Analysis of the situation of women in the rural areas – more obstacles than opportunities, [https://mhc.org.mk/wp-content/uploads/2018/03/Ruralni\\_Sredini\\_\\_\\_\\_.pdf](https://mhc.org.mk/wp-content/uploads/2018/03/Ruralni_Sredini____.pdf)

68 The Impact of Gender Stereotypes on the Self-Concept of Female Students in STEM Subjects with an Under-Representation of Females, Front. Psychol., 17 May 2017, Sec. Educational Psychology, <https://doi.org/10.3389/fpsyg.2017.00703>

Portraying the VET students primarily through male models on posters and other promotional materials is not in favour of promoting equal chances for both boys and girls. A study conducted by Microsoft (2017) among 11.500 girls across Europe established a connection between female role models and girls' interest in STEM, so **girls who know female role models show almost twice the level of interest in STEM as girls without them**. 64% of the girls interviewed could not identify women who excel in STEM.<sup>69</sup> In addition, the study shows the need to feel supported by their families, with 81% of girls who receive parental support reporting a predisposition to pursue STEM studies or VET Schools. Besides, the need to make women STEM role models visible, especially in schools, is also demonstrated by other studies. Thus, Microsoft's research proposes to boost girls' interest in STEM by providing information about the benefits and impact of STEM in people's lives, which even doubles their interest. In addition, the study underlines the need to provide real-life experiences to girls since only 31% of European girls participate in out-of-school STEM activities. In this way, they state the need to foster a learning environment that promotes curiosity and experimentation. Other studies also conclude that girls are more interested in STEM subjects when taught from an applied perspective and state that girls tend to opt for studies in which they can help others.

Education is an essential link to overcoming these discriminations. On the one hand, it is a factor that directly affects young people in every choice they make. On the other, another has become a factor on which society's economic growth and development depend.

Having practical experience as a Certified Career Counselor, one of the researchers brings her insights from the sessions working with minors and their parents. They all correspond with the research data presented above. The rural parents questions the need for daughters to seek additional education (sometimes even the secondary schools are in question.). The more urban surroundings influence the attitude that "it is not good for the girls to go to a VET School" – they could study at a University, very often not consulting the wish and approach the girls worked have for themselves.

## GENDER BIAS IN THE MEDIA

The Macedonian media, especially the Public Service, has an obligation to broadcast various programs intended for all segments of the audience, including the children. At the same time, the program should be distinctive by striving to achieve and maintain high quality. Distinctiveness and quality, mean that the Public Service should have a particularly high degree of sensitivity to gender aspects in each of the programs for children. From the analysis of the home-produced programs of Public Service TV Channels it can be concluded that **the program structured as a narrative/play story is completely focused on recurrent social values characteristic of patriarchal societies, which has significant implications for gender roles**. In it, in addition to the numerical superiority of male characters (there are visibly more male characters than female characters), there is also a clear value and character differentiation of the characteristics of male and female characters. The aggregate of male characters, in contrast to female characters, acquires characteristics that can be considered superior social markers - the analysis of the scales of semantic differentials showed that the male characters are constructed and represented as wiser, stronger and more active than the female characters, who are shallower, more fragile and passive. Also, the analysis of the scales showed that the

69 Girls in STEM: the importance of role models, <https://news.microsoft.com/europe/features/girls-in-stem-the-importance-of-role-models/>

male characters in the dramatic action are mostly in a dominant position, and the female ones are in a subordinate position. Additionally, the Albanian language program organized as a narrative/play story is based mostly on internationalized narratives such as the stories of the Brothers Grimm or Andersen and they bring with them a social ethos that they are insensitive to contemporary issues of gender equality and non-discrimination. But additionally, characteristic of MRT 2 - Program in Albanian language, is the atomized and conceptually extremely weak program of the narrative/feature story type, which is why even the characters that are part of its action do not offer enough rich information to make a more detailed analysis. A deeper qualitative analysis of the music programme supports the argument that the males and females in the lyrics of the songs are molded into typical gender roles in which the females are clever, calm and helpful to the mother in the private domain, and the males are strong, sports-oriented and even aggressive.<sup>70</sup> The situation is even worse with the private televisions. There is no thoughtful or careful editorial approach in selecting shows aimed at different age segments of the minor audience. Also, the broadcasting of programs for children on private televisions is far from satisfactory in terms of the frequency of publication, but even more so in terms of content and, from a gender perspective. The private televisions should take into account that the gender roles in their programme should reflect the contemporary effort for full equality in both the public and private spheres. They must also pay attention to ensure that all gender issues are addressed without discrimination. Additionally one other analysis on sport and gender in the media also shows the dominance of the sportsmen through streaming generally men sport, participation of male speakers on sport shows and male journalists<sup>71</sup>. In that regard, TV channels should work on increasing women presence in sports programme through including professional women journalists and more equal representation of women and men sport programme.

## ECONOMIC, LOGISTIC, AND INFRASTRUCTURE BARRIERS

The economic, logistic, and infrastructure barriers, traditionally, are considered one of the main factors affecting enrollment and completing secondary education, especially for adolescent girls. Additionally, if we observe them concerning insufficient family support, their influence is more substantial than seeing them as separate factors.

## FINANCIAL LIMITATIONS

Financial problems affect boys and girls differently, depending on beliefs about the importance of education. A family with an unfavourable financial situation is more likely to send a male child to secondary school than a female child. Girls children usually need more financial resources and are more sensitive if separated based on their social status and physical appearance. Namely, the study that analyses the obstacles and opportunities in academic and professional

70 Родот во медиумите 2019: Анализа на родовите аспекти во програмите за деца на националните терестријални телевизии; <https://resis.mk/attach/rodot-vo-mediumite-2020.pdf>

71 Родот во медиумите 2021: Родовите прашања и начинот на претставување на жените и мажите во спортската програма на националните терестријални телевизии; <https://avmu.mk/wp-content/uploads/2022/04/01-Родот-во-спортската-програма-за-ПЕЧАТ-најфинална.pdf>

advancements notes the lack of financial support and insufficient support from the family, i.e., the non-priority of the education of girls and women within many families<sup>72</sup>. Respondents said that they have not continued with their education primarily due to insufficient financial funds and the fact that education for girls burdens the family budget<sup>73</sup>. Parents lacking financial resources cannot provide clothes, shoes and school supplies. Also, some do not have access to water and due to the inability to maintain personal hygiene, they decide to not let their children go to school to protect them from further harassment and humiliation<sup>74</sup>.

## GAPS IN ACCESS TO TRANSPORT INFRASTRUCTURE AND SERVICES

Literature on gender and transport pinpoints that existing transport systems are not geared toward women's needs. In urban areas, for instance, transport systems often target radial commuter corridors going straight to city centres. The privatisation of public transport also impacts more women than men because bus companies operating under competitive market conditions are not usually interested in serving the less lucrative routes and connections on which women often depend. Therefore, these routes are more at risk of being cut. However, where services are maintained, this is often accompanied by increased fares, which impacts more women, whose income is generally lower than men's. In that line, girls that live in distant rural parts or urban parts where no vocational programs are available are facing more difficulties compared to boys, i.e. they need to travel more or stay in student dormitories which is not always acceptable for their families<sup>75</sup>. All primary and secondary education students who study at a distance of 2-2.5 kilometres from their homes have the right to free transportation or accommodation in a student dormitory. However, this only sometimes works in practice, and some municipalities provide no transportation. Additionally, rural families often live far from public schools; thus, girls' journey to the nearest school strains the family budget and exposes them to potential risks of violence<sup>76</sup>.

## COVID-19 PANDEMIC IMPACT ON GIRLS EDUCATION

During COVID Pandemic, as girls stayed at home because of school closures, their household work burden increased, resulting in girls spending more time helping out at home instead of studying. These new conditions might encourage parents, particularly those putting a lower value on girls' education, to keep their daughters at home even after schools reopen. Moreover, research shows that girls risk dropping out of school when caregivers are missing

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72 Analysis of the situation of women in the rural areas – more obstacles than opportunities, [https://mhc.org.mk/wp-content/uploads/2018/03/Ruralni\\_Sredini\\_.pdf](https://mhc.org.mk/wp-content/uploads/2018/03/Ruralni_Sredini_.pdf)

73 Ibid.

74 Малолетничките бракови се клучната причина за прекин на образованието, но не и единствената: <https://meta.mk/maloletnichkite-brakovi-se-kluchnata-prichina-za-prekin-na-obrazovaniето-no-ne-i-edinstvenata/>

75 Ibid.

76 Кон родова еднаквост: Пречки и перспективи во академскиот и професионален напредок на жените и девојките, [https://stella.mk/wp-content/uploads/2019/06/Rodova-ednakvost\\_03.04.2019\\_stella.pdf](https://stella.mk/wp-content/uploads/2019/06/Rodova-ednakvost_03.04.2019_stella.pdf)

from the household because they typically have to (partly) replace the work done by the missing caregiver, who might be away due to work, illness, or death. Therefore, with the current COVID-19 pandemic impact, we might see more girls than boys burdened with helping at home, lagging with studying, and dropping out of school. A study conducted by Dialogue<sup>77</sup> on the influence of the COVID-19 pandemic showed that 11% of youth responded did not continue their education during the pandemic. The negative effect is more significant for smaller ethnic communities than for ethnic Macedonians. Namely, while 14% of ethnic Macedonians did not continue their education, 22% of the Albanian youth and 33% of the young people belonging to the smaller ethnic communities did not continue with education<sup>78</sup>. Additionally, the same study shows that rural youth spent more time caring for another family member (53%) than urban youth (42%)<sup>79</sup>. Moreover, since the beginning of the crisis, the reports all over the world have alarmed about the shadow pandemic or the double pandemic which took place in parallel: an increase in domestic violence as a result of measures to restrict movement and sitting at home, and for some women, children and LGBTQIA+ - the home is a dangerous place<sup>80</sup>

## SECTORAL BARRIERS

### GENDER DIFFERENCES IN COMPETITIVENESS

Recently emerging literature documents significant gender differences in competitiveness based on laboratory experiments. While women are socially encouraged to shy away from competition, men often compete too much. These differences in competitiveness are based in the gendered social roles and can help explain gender differences in basic education and labour market outcomes. Maths and science intensity is one of the most significant dimensions of gender differences in educational choices. Gender differences in mathematics ability are minimal during early childhood and do not consistently arise until middle to late adolescence<sup>81</sup>. Researches<sup>82</sup> provide compelling evidence that differences in mathematical ability alone do not drive the gender imbalance among high-achieving maths students. However, among equally gifted students, males are much more likely to choose a maths-heavy college major. What are the gender differences in attitudes towards mathematics and their abilities to overcome mathematical problems? **Numerous studies indicate that teachers significantly promote gender stereotypes related to mathematics and natural sciences. They often affect girls' self-perception and create a negative image of their abilities in maths and science.** Their views that girls possess lower maths abilities than boys are further, through socialisation into gender roles, internalised by female students that influence them to behave following their

77 Youth and Covid-19, CDDD, 2021, <https://cddd.org.mk/wp-content/uploads/2021/12/Youth-and-Covid-19-English-30.06.2021-CIP.pdf>

78 Ibid, p. 62

79 Ibid, p. 63

80 За многу жени домот е небезбедно место, <https://mhc.org.mk/news/za-mnogu-zheni-domot-e-nebezbedno-mesto-dva-sluchaj-na-femicid-vovreme-na-pandemija/>.

81 Gender Differences in Mathematics Motivation: Differential Effects on Performance in Primary Education <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.03050/full>

82 The Gender Gap in Secondary School Mathematics at High Achievement Levels: Evidence from the American Mathematics Competitions, Ellison and Swanson (2010), <https://www.aeaweb.org/articles?id=10.1257/jep.24.2.109>

gender stereotypes. The gender gap in mathematical abilities occurs early – during the first years of formal education as teachers rate girls’ abilities lower than boys. Additionally girls are encouraged to doubt that they possess the abilities and skills necessary for success in their careers, and the schools do not encourage or support them to develop carries in this field<sup>83</sup>. Therefore, as one of the ways to overcome the gender gap in technical professions, it is recommended to “break” traditional stereotypes and develop a positive image of one’s abilities during the schooling period by showing more positive examples in textbooks, by teachers and public space in general.

## GENDER ASPECTS OF THE LABOUR MARKET: MAN VS WOMEN PROFESSIONS

The labour market in North Macedonia is characterised by high unemployment levels and low employment levels, and an economically active population. As shown in Tables 5 and 6, the numbers of employed women are lower compared to men, and the most concerning is the much lower active participation of women in the labour market.

	Active population		Employment rate		Unemployment rate	
	Men	Women	Men	Women	Men	Women
<b>2018</b>	69.2	44.6	54.4	35.8	21.3	19.9
<b>2019</b>	67.8	46.6	56.6	38.1	16.5	18.4
<b>2020</b>	67.1	45.7	55.9	38.4	16.7	15.9
<b>2021</b>	67.2	44.9	56.2	38.3	16.4	14.6

Table 6 Rates of active population segregated by gender and years

Current practices indicate that women in the Republic of North Macedonia find themselves in a less favourable position than men in the labour market. Women are less present than men in managerial positions, and of course, there is also the indisputable wage gap between women and men. Women earn less than men for the same job position, which is another proof of gender segregation in society. Gender inequality in the labour market is often associated with the different professions women and men are encouraged to choose and pursue. While women gravitate toward care and service-related occupations, men work more in technical occupations. The division of working positions into “male” and “female” is still present in our society. Considering that the valuation of the two groups of professions is different, it contributes to the inequality of wages between men and women. It reinforces the general inequality of women in society. There is a smaller number of women MPs, a minimal number of women ministers, a small number of women mayors, a small number of women directors of public enterprises and a small number of women members of management boards. On the one hand, Table 6 confirms that women and, in contrast, men still dominate different industries. Women are more involved only in education and activities of health and social protection. Limited involvement of women is noted in competitive industries like construction, transport, information, and communication, as well as in public administration and defence. On the other hand, this situation corresponds with the numbers of women and men who are choosing to educate in these sectors, as observed in the above sections, and the fact that

83 Ibid.

separate professions are still considered typically male or female, and accordingly, the choice of the future profession is made for boys or girls.

	2018		2019		2020	
	Men	Women	Men	Women	Men	Women
Agriculture, Forestry, and Fisheries	71%	29%	69%	31%	68%	32%
Mining And Stone Quarrying	91%	9%	90%	10%	91%	9%
Processing Industry	49%	51%	49%	51%	50%	50%
Electricity, Gas, Steam, and Air Conditioning Supply	83%	17%	82%	18%	82%	18%
Water Supply; Waste Management and Environmental Activities	85%	15%	85%	15%	85%	15%
Construction	86%	14%	87%	13%	86%	14%
Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles	53%	47%	52%	48%	52%	48%
Transport and Storage	82%	18%	82%	18%	82%	18%
Accommodation Facilities And Food Service Activities	57%	43%	56%	44%	56%	44%
Information And Communications	60%	40%	60%	40%	60%	40%
Financial And Insurance Activities	39%	61%	38%	62%	38%	62%
Real Estate Activities	56%	44%	57%	43%	59%	41%
Professional, Scientific And Technical Activities	50%	50%	49%	51%	49%	51%
Administrative And Support Service Activities	61%	39%	59%	41%	59%	41%
Public Administration and Defense; Mandatory Social Insurance	67%	33%	67%	33%	66%	34%
Education	36%	64%	36%	64%	36%	64%
Activities Of Health And Social Protection	24%	76%	24%	76%	24%	76%
Art, Entertainment, and Recreation	49%	51%	49%	51%	48%	52%
Other Service Activities	45%	55%	44%	56%	44%	56%

Table 7 Percentage of employers segregated by industry, gender and years

Researchers confirm that a significant factor for the gender segregation of occupations is the stereotypes of “male” and “female” professions and “male” and “female” abilities, which develop from the earliest age through gender socialisation. A more in-depth analysis of the position of women in the labour market concluded that “the patriarchal matrix and the traditional division of male-female roles, especially in part around home and family matters, are still a significant obstacle, especially in rural areas”<sup>84</sup>.

<sup>84</sup> Analysis of the situation of women in the rural areas – more obstacles than opportunities, [https://mhc.org.mk/wp-content/uploads/2018/03/Ruralni\\_Sredini\\_\\_\\_\\_.pdf](https://mhc.org.mk/wp-content/uploads/2018/03/Ruralni_Sredini____.pdf)

# CONCLUSIONS

- With the identification of the importance of the dual VET, the Government of North Macedonia, with the support of international actors and civil society organisations, has undertaken several measures to attract; however, there is still a lack of intersectional approach and tackling gender stereotypes and prejudices in education. This next section presents an enumeration of conclusions that stem from a baseline analysis of the situation and the examined barriers' impact and recommendations on encouraging girls to seek, enrol, and complete (dual) VET.
- The legal framework at the national level for prevention and protection against discrimination and gender-based violence is improved with the adoption and amendments of the relevant laws in line with the EU directives on equality, the Istanbul Convention, and the conventions of the UN. Still, in general, they do not contain adequate mechanisms for ensuring its implementation, which proved inadequate for promoting gender equality.
- The Government's commitments to improving the dual VET can be confirmed by the fact that they are proposing increasing the budget for primary and secondary education, and in that line are foreseen 111 million MKD more for regional centres for VET.
- The decision to make secondary education compulsory for all children has positively affected progression rates from primary to secondary education, significantly improving the number of girls enrolled in secondary education. However, compared to males in lower numbers, females continue their education through the years. A high rate of girls leaving school, especially women and girls from rural areas and Roma are still present in the society.
- The Dual VET is still taking its roots in North Macedonia, and the overall impression is that it is mainly for boys. Data indicate that occupational areas catering to the highest numbers of students are the electro-technical, machine engineering, medical, economy-law, and trade. Through the years, young girls are most attracted by chemistry, personal services, health, economic Law, and trade, while they have the lowest interest in electro-technical and machine engineering areas. This is a possibility for the further communication and promotional activities, to present these profiles as equally accessible and valid for the girls that are showing interest in engineering and technical careers.
- The presence of discriminatory gender stereotypes about the roles and responsibilities of women and men in the family, society, the education system, and the media is still very high. It has a significant impact on girls' decisions to continue their education and what to choose as their future carrier. The power and the influence of the media (especially the social media) is significant and the global trends also affect the perception young women have of successful career models for themselves. This could be addressed in the local level campaigns – to provide different perspective, free from gender career stereotypes.
- The economic, logistic, and infrastructure barriers observed concerning insufficient support from the family are considered one of the main factors affecting enrollment and passing through secondary education, especially for adolescent girls.

- Researchers confirm that a significant factor for the gender segregation of occupations is the stereotypes of “male” and “female” professions and “male” and “female” abilities, which are developed from the earliest age through gender socialisation.

## HOW TO ENCOURAGE GIRLS TO ENROL AND COMPLETE DUAL VET PROGRAMS?

- While there is an intention to openly promote the (dual)VET as an equally valid education option for girls, there should not be a note of persuasion that they should choose this option to be equal to boys. This career path should be communicated in an educational, open-minded, and encouraging tone to the girls finishing primary school and their parents, influencing their career choices. “Follow your interests, not the stereotypes for certain professions” could be the underlying motto of the communication.
- Presenting the specific job positions deriving from the VET education would be also beneficial. What does it mean to be a production technical specialist, machine operator? How does a working day look like? Promote the concept: Choosing an education that leads to specific, aspirational job positions - not simply choosing an education and then thinking where to apply the skills and knowledge. This leads to higher awareness of the proential employment options and higher motivation to not only enroll but also finish the secundar school.
- The family is the best environment to start breaking down the negative stereotypes related to specific professions through a positive attitude of the family regarding this profession, i.e., offering full support to girls who show an interest. Family related events (debates, talk shows, printed materials delivered thorough the primary schools), targeted videos and testimonials of parents that already supported their children to choose VET – all of this could stimulate the parents and the wider family circle to develop a more open view on possible career paths for the girls.
- One of the social factors that contribute to the reduction of the gender gap and greater involvement of women in VET is the possibility of their exposure to technology from an early age through various entertainment and educational formats by the family.
- Another way is to meet successful female figures in relevant fields who will encourage girls to continue by presenting their achievements in the family circle or schools. Lectures and meetings can be attended by successful women, which through conversation, questions and answers, promote to the students the good sides of the professions in

which they work and, at the same time, encourage enthusiasm among young girls and motivate them to consider wider options when choosing their professional future.

- The quality of learning is closely related to the quality of teaching and the positive and negative messages conveyed in classrooms. In that direction, it is possible to act through the education of teachers/professors who teach subjects related to natural and technical sciences on conveying the teaching-scientific material. It should be done in the context of gender equality and rights corresponding to the interests of both sexes and all gender identities, and social/ethnic groups equally to prevent the outflow of female staff from the same. Relating the content to a specific field of professional application (the jobs related to applied physics/electrotechnics) is also in the hands of secondary, but also the primary schools teachers. Specific up-skilling program for the natural and technical sciences teachers might be also considered, so they are better equipped to communicate these career options to the students in their regular classes.
- Supporting programs and initiatives that make available free materials for every student, such as various mobile applications, tools, courses, webinars. Schools could also organize visits to local companies that employ VET graduates, especially with the students of the finishing grades (8<sup>th</sup>-9<sup>th</sup> grade). Seeing on the spot what it means to be an electrician or machine operator for example, might stir interest to further explore the related VET option for the girls.
- Organising women's camps, establishing women's scientific associations in specific areas of natural and technical sciences, and developing a network of successful women in technology – spreading the narrative that science know no gender – it is available to all and everyone is invited to explore career path in this area Testimonials from women already working in natural science and (machine and electro) technical position can also encourage both parents and future students to consider this career path.
- The schools should follow world trends around technical sciences and get involved in global events that encourage the involvement of young people in the world of natural and technical sciences. Additionally virtual and in person exchanges can be organized and facilitated by schools in cooperation with the state institutions or/and projects.
- Implementing specific policies aimed at increasing the number of women in certain professions by providing financial assistance. Partnering with the business community to provide scholarships that support equal opportunity – free from gender bias, can also be considered. Businesses can be invited to share their side of the story – how the businesses (can) benefit from more girls choosing the tech-VET as their future career.
- Development of support structures, especially mentoring programs, gender and social inclusion sensitive counselling, career counselling services for career path determination, and availability of information about available jobs in the fields of

natural and technical sciences that encourage women and young girls to build careers in them.

- Presentations and workshops for parents and family members about the importance of early career planning and the ways they can support the young adults in making the best choice that fits their interests and future employment opportunities. Production of short videos on these topics (maybe filmed during these workshops) that can be disseminated through the social media and available to a wider audience, finishing with the call-to-action: Consider VET: more career options - more life options, ensure a better (employment) future.
- Promoting policies for equal employment opportunities for men and women, including with disability, with ethnic minority background etc. as well as opportunities for equal treatment in terms of advancement and financial compensation in these areas. One way to achieve this goal is to use gender-neutral language in job postings or to rate managers on their ability to achieve gender equality and diversity in team building and leadership.
- Highlight benefits arising from jobs in the technical world, such as the possibility of flexibility and working from home, the possibility of working with foreign companies and possibilities abroad, high demand for personnel on the labour market, and therefore more excellent financial stability for employees in natural and technology sciences.
- Working with directly students and Student Bodies to breaks the stereotype that technical professions are static and uniform.
- Developing a practice for regularly awarding the most successful women in the world of technology during the year at the level of companies, institutes, and organisations, as well as at the local and global levels.
- Media should carefully choose what they will present and focus on equal representation of women and men in different aspects such as sport, public life, as well as pay attention to promoting equal opportunities and values instead of traditional and patriarchies norms. Partnering with selected media (programs, TV shows) can also mean a more targeted approach and specific messages to be conveyed to the target groups of parents and youth.
- Explore the possibilities for the business/private sector to be more involved in the primary education – practical side in terms of specific profiles present and the open career possibilities both for boys and girls. The primary schools appear to be reserved/closed systems that do not have active relations with the businesses. There is a vast area of improvement in this respect that can be supported through the Municipalities that influence the primary schools initiatives in this area. Putting specific private-sector related activities in the Annual programs of the schools might be the first step.

# COMMUNICATION STRATEGY - OVERVIEW

## KEY MESSAGES

There are two main target groups for communication:

1. Parents and family – the unofficial career advisors for the primary schools students (in the context of this paper – specifically the girls)
2. Young girls (11-13 years old, 8<sup>th</sup>-9<sup>th</sup> grade in primary schools)

The third, secondary but equally important target group are the teachers in the primary schools. They influence the perception of the specific sciences, professions and jobs through their teaching and personal attitudes. The communication strategy should be closely linked with the specific field activities, supporting their impact. Various events, presentations, fairs and visits of the companies in the private sector should be made visible to educate, inform and interest according to the AIDA method – Attention, Interest, Desire and Action.



The content developed along with the chosen visual should contribute to at least three of the above mentioned aspects. The Action aspect is often left to the target audience decision, once they have enough information, interest and desire to act upon the presented options. In choosing the wording and the appeal of the communication messages, the specifics of all demographic groups must be considered. Simple messages that can be easily understood and remembered, even repeated and shared further is the best option to influence the change in the perceptions and (softly) challenging the stereotypes. Strong, confronting messages should be avoided – it is a matter of choice, not persuasion to go one way or the other.

The tone of voice should be light, easy to understand, and stimulating for further exploration. Using good photos and images of the professions available after finishing the VET Education is also advised.

# PROPOSED COMMUNICATION OUTLINE

## PARENTS AND FAMILY

- From school to an actual job position – VET secondary education enables practical skills for early employment.
- Keep your (all) options open – explore what it means (for your children) to learn about tech professions in VET Schools.
- Talk with your children (girls) and involve them to actively think about their future – choosing a career path is an important life decision. Listen to their interests, wishes and aspirations-support them to choose a path close to what they find interesting
- Your role is important – ask open questions and listen! Career planning is a life skill that your children can develop from early age
- Success has many faces – discover how it looks to your child (daughter). Stay away from stereotypes – all is possible and available!
- Your voice matters – how you speak about certain professions becomes the way your children see them. Leave a space for them to discover their own story.
- We all want what is best for our children (girls)– let us talk what THE BEST looks like for them. Let them be engaged, inspired and motivated to build their own future, with your support
- Girls deserve equal right to choose their career – support them. It is among the most important decisions they will ever make.
- Family is the crucial support network of making the best career choice, especially in the early age. Get informed – don't leave it to chance! (Specific data presented, statistics etc)
- Open workshops for parents – “Support your children in their career choice – The parent as the first career advisor.”

## YOUNG GIRLS (11-13 YEARS OLD, 8TH-9TH GRADE IN PRIMARY SCHOOLS)

Technology knows no boundaries – explore what it means for you!

- Do you speak the tech language? Ask for more info on the professions enabled through the secondary VET Schools.
- “This is how it works”! Promote the applicative side of technology – How does VET enable practical improvements (show the specific jobs and outcomes – make them practical and understandable, thus appealing to the youth)
- Explore – understand – learn – apply! Learning Tech can be fun!
- Always keep an open mind – ask and explore before deciding on secondary education! Time-traveler stories – If you could imagine yourself 5 years from now – how do you look like? What do you do? What you work? How does it look? What do you like about it? \_ Board game with questions/cards that can be played in groups, in classes at schools. Online version can also be developed.
- Gamification is also something to be considered – quizzes, educational games of exploration of the professions – rather than plain portraying to stimulate further interest.

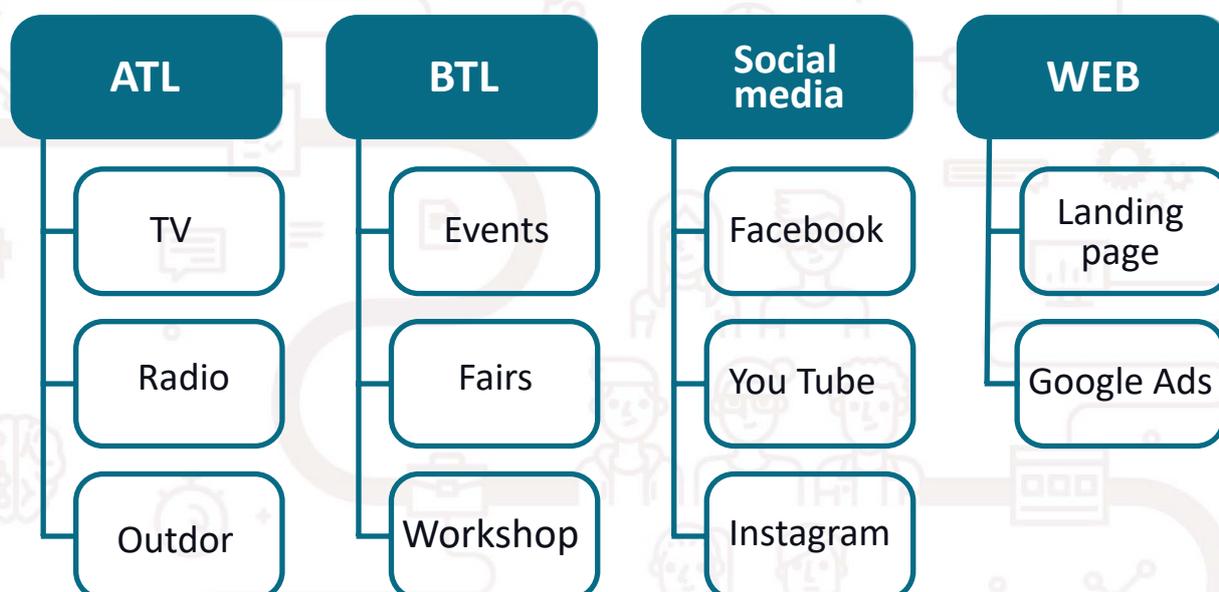
## TEACHERS/PROFESSORS IN PRIMARY SCHOOLS

You are the primary source of knowledge and inspiration to the students. Very often they like the subject because of the way you teach it! Make it closer to their future profession. Make them quurious and open for possibilities. It is a lifetime gift you are giving them!

- Specific activities (seminars, events, printed materials) for the natural sciences and tech teachers – as they are closely related to the interests and attitudes girls have towards the professions deriving from these interests.
- Teachers in VET Schools can also be invited to speak out: Interviews with teachers speaking about the subject they teach in VET Schools, the interesting aspects and connection to specific profiles

## MEDIA – COMMUNICATION CHANNELS

The media strategy refers to the usage of specific media to reach the target audience. The graph below illustrates the general outline of the media usage to convey the key messages to the target groups



ATL – “Above the line “ – traditional (paid) media, specially relevant for the rural area

BTL – “Below the line” – other media, can be non-paid in terms of direct communication with the target groups or creating content from the events that the media would like to convey at their own will

- Web page/landing page with rich information about the available professions-career paths with VET; schools listed in each city – ensuring gender and social inclusion sensitivity
- Social media – Instagram, Facebook, places where young people get their information from
- Printed materials distributed in schools through the teachers (posters, leaflets, cards to collect, stickers, etc.) – to the pupils and their parents, activities that they can do together while exploring possible career paths.