

# Adapting Sexual and Reproductive Health education and youth work practices to emerging technology



## GUIDEBOOK



Co-funded by  
the European Union



# Adapting Sexual and Reproductive Health education and youth work practices to emerging technology

## GUIDEBOOK



This guidebook has been produced by the Alex: the SexEdBot project consortium, which consists of:



Project number: **2022-2-BE04-KA220-YOU-000100193**

Graphic design and layout: Katarzyna Baranek-Stachura

Further information about the project and partners is available at: <https://alexbot.eu/>



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

FREE PUBLICATION  
2023



## TABLE OF CONTENT

<b>1. Introduction to Alex: the SexEdBot</b>	<b>3</b>
What is Sexual and Reproductive Health and Sexual and Reproductive Health education?	5
Purpose of the guide	10
Overview of the guide	11
<b>2. The limits of traditional Sexual and Reproductive Health education</b>	<b>13</b>
Contextualising traditional Sexual and Reproductive Health education	13
The impact of traditional SRH education on youth in the EU	20
<b>3. Turning towards holistic Sexual and Reproductive Health education</b>	<b>25</b>
Defining holistic SRH education	30
How going 'holistic' can improve the SRH of youth	30
<b>4. Sexual and Reproductive Health education and technology: a perfect match?</b>	<b>32</b>
Technology facilitates inclusion	34
Technology ensures privacy and security	37
Important factors to consider when using technology for SRH education	39

<b>5. Five ways technology is being used to improve Sexual and Reproductive Health education for youth</b>	<b>41</b>
Technology as a way to facilitate first contact with Sexual and Reproductive Health	42
Technology as a way to promote safe sex practices	48
Technology as a way to identify healthy and unhealthy relationships	54
Technology as a way to connect youth to healthcare systems	62
Technology as a way to increase the visibility of LGBTQI+ issues	68
<b>6. Conclusions</b>	<b>75</b>
Recommendations on adapting SRH practices to digital tools/methods	76
General conclusions	84
<b>7. Bibliography</b>	<b>85</b>

# 1. Introduction to Alex: the SexEdBot

Can traditional sex education curricula and teaching methods meet the needs of today's youth, as they inquire about their changing bodies, thoughts and behaviours?

As education professionals, parents, and members of an increasingly digitised society, this is a question that we are likely to ask ourselves as we witness younger generations unrestrictedly accessing a multitude of sensitive information via the internet.

Today's youth are part of **'generation – Z'**, characterised by their digital-savviness and curiosity to the changing world around them. However, they have also been labelled as the 'most vulnerable' generation<sup>1</sup>, evidenced through their propensity to turn to online platforms such as social media to satisfy their many curiosities, particularly those related to sexual health (seen especially in young women and LGBT+ youth).

<sup>1</sup>European Parliamentary Research Service, "Next Generation or Lost Generation?"



Photo by freepik

Despite the fact that these digital sources may award them the privacy and anonymity they seek and prioritise<sup>2</sup>, health professionals are sounding the alarm that the information found online paints a **misleading and distorted picture** about sexual health - whether it be fallacies regarding HPV vaccines or increased exposure to pornography.

The tendency to turn online for such information can be explained by the nature of the subject (seen as taboo in many settings, both formal and nonformal) but also due to the lack of quality Sexual and Reproductive Health (SRH) information in formal education settings in the EU. SRH education is **optional** in more than 1/3 of Member States, and those that do implement it primarily focus on topics such as biology, risk-prevention, and love/relationships, which often only covers traditional matrimony<sup>3</sup>. Despite the fact that WHO and UNESCO recommend SRH education include topics relevant to **underrepresented/vulnerable groups** (young women, LGBTQI+ youth and those with disabilities) such as human rights, consent, LGBTQI+ issues and gender roles, **fewer than half of Member States** follow these guidelines<sup>4</sup>.

It is in this context that the Erasmus+ project Alex: The SexEdBot has been developed. The project ethos is to administer **quality and holistic SRH education** (SRH) through an innovative chatbot in order to provide private and non-biased answers to youth's queries about sexual and gender identities, sexually transmitted diseases and other subjects related to their sexual and emotional well-being. Holistic SRH education tackles topics with a **sex-positive, gender-blind and scientifically -accurate lens**.

---

<sup>2</sup> UNESCO, "A Review of the Evidence: Sexuality Education for Young People in Digital Spaces"

<sup>3</sup> Directorate-General for Employment and Picken, Sexuality Education across the European Union

<sup>4</sup> Directorate-General for Employment and Picken.



By adopting such an approach, our ultimate aim is to:

- increase safe-sex practices
- improve the well-being of young people, especially those that have been underrepresented in traditional sex education curricula, such as young women, LGBTQI+ youth and youth with learning disorders
- strengthen digital citizenship skills by identifying misinformation related to sexual and reproductive health and learning about our sexual rights & duties
- provide guidance for youth workers to become confident and knowledgeable sex educators

## What is Sexual and Reproductive Health and Sexual and Reproductive Health education?


Sexual and Reproductive Health is a state of physical, emotional and psychological well-being in all matters related to sexuality<sup>5</sup>.

As an integral part of overall health, positive SRH ensures that sexual experiences are **free of coercion, discrimination and health risks**, as well as that sexual and reproductive rights guaranteed to all individuals are respected.

Therefore, this extremely broad field covers medical topics, such as infertility and sexually transmitted diseases (STDs), but also individual and interpersonal emotions and relationships.

---


<sup>5</sup> European Parliament. Directorate General for Internal Policies of the Union., Comprehensive Sexuality Education

Three black-outlined speech bubbles of varying sizes are positioned in the top left corner of the page. Each bubble contains three horizontal lines representing text.

Educating children and young people about their SRH so that they can autonomously and in an informed way make decisions about these aspects is the purpose of SRH education. Learning about SRH equips these target groups with the needed information and skills to have safe and fulfilling relationships with themselves and others. In order to take advantage of the benefits of SRH education, it is meant to be administered as a life-long process, from early childhood into adolescence and beyond, to safeguard against the uncertainties and insecurities of starting or reminiscing about sexual activity without prior knowledge.

One of the risks stemming from a lack of SRH education from a young age is **increased occurrence of STDs** among youth. Reports state that young people are the most vulnerable groups for STI acquisition in Europe<sup>6</sup>. Adolescents and young people are a critical target group for STI monitoring because they are vulnerable due to lack of outreach, as well as behavioural and social reasons. In addition, quality SRH can ward against being exposed to and influenced **by unrealistic and exploitative depictions of sexual behaviour**, such as pornography. Children and adolescents often come across this uncensored media when looking for answers to their SRH-related inquiries on the internet, not knowing that it presents harmful and misogynistic messaging.

According to findings from the WHO and UNESCO, SRH education also helps to prevent **sexual violence**<sup>7</sup>. It teaches youth about the importance of consensual sexual relations, so they are less likely to abuse another person. It also equips the target group with the tools needed to react when somebody else attempts to manipulate or sexually harass them. A child exposed to quality and accurate SRH information has a higher chance of identifying a situation as wrong and abnormal, and as a result, recognise when they need to seek help.

Two black-outlined speech bubbles are located in the bottom right corner. The upper bubble is partially cut off by the edge of the page, and the lower bubble is also partially cut off.

---

<sup>6</sup> Sentis et al., "Sexually Transmitted Infections in Young People and Factors Associated with HIV Coinfection"

<sup>7</sup> WHO, International Technical Guidance on Sexuality Education





Despite the fact that international and regional bodies as well as academic and scientific experts recommend the administration of SRH education to young people for the prevention of the aforementioned risks, the actual implementation of this subject matter in a comprehensive way in the Member States of the EU leaves **a lot of space for improvement**. Schools in many countries avoid the topics of gender equality, sexual diversity, as well as the inclusion of specific groups such as people with disabilities<sup>6</sup>. Another observation is that in most countries **teacher training** to administer SRH-related information is also overlooked; simply put – SRH education suffers when teachers do not know how to take on the role of sex educators.



Photo by freepik

<sup>6</sup> Sentis et al., "Sexually Transmitted Infections in Young People and Factors Associated with HIV Coinfection"

<sup>7</sup> WHO, International Technical Guidance on Sexuality Education

## THE STATE OF SRH EDUCATION IN OUR PARTNERSHIP COUNTRIES



In **Belgium**, the standards of SRH education are relatively high compared to other European countries. The national curriculum includes specific learning objectives that should be achieved in SRH education lessons. Teachers from different disciplines are expected to address topics related to it. Nonetheless, training sessions for teachers are only provisional and voluntary, which means that while some educators have a lot of knowledge, others are unprepared to deliver SRH education to children.



In **Poland** SRH education takes on the form of “family life” lessons which are meant to be compulsory, but parents can opt their children out. These lessons often do not even mention sexual activity and, instead, focus on making friendships. The programme of these lessons also contains stereotypical and untrue information. In the textbooks, for example, the use of contraceptives is presented as morally wrong. The curricula are created in consultation with religious authorities, and in some schools “family life lessons” are taught by nuns. Various political forces are trying to not only remove SRH education from the curriculum but to criminalise it. In April 2020, the controversial bill “Stop Paedophilia”, treating SRH education as sexualizing children, was debated in the parliament<sup>9</sup>.



In **Slovenia**, the quality of sexual education in schools highly depends on the skills of individual teachers. The programme focuses on basic biological aspects, like reproduction and contraception. It rarely takes into account the psychological and social meaning of sexual behaviours and is taught as a part of another subject<sup>10</sup>.

<sup>9</sup> Séhier, “Sexual and Reproductive Rights in Europe: Between Threats and Progress”; European Parliament. Directorate General for Internal Policies of the Union., Comprehensive Sexuality Education.

<sup>10</sup> European Commission. Directorate General for Employment, Social Affairs and Inclusion., “Sexuality Education across the European Union.”



In **Hungary**, the Prime Minister published a letter in 2021 stating that SRH education should be exclusively left to parents to teach their children. Hungarian legislation outlaws sharing information that the government considers to be promoting homosexuality or sex correction surgeries with children. The law also says that only individuals and organisations listed in an official register can carry out sex education classes in schools<sup>11</sup>.



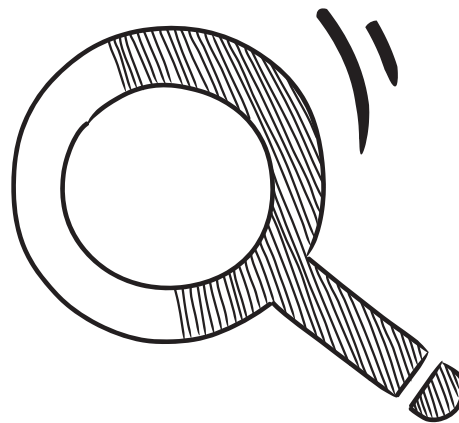
For **Spain**, SRH education is meant to be taught as complex transversal content in Spanish schools in theory. However, in practice, it is often completely excluded from the lessons or only addressed as part of science class lessons<sup>12</sup>.

In these circumstances, it is especially pertinent to make reliable information sources available for everyone, especially young people. Even though SRH education should be provided by schools, other ways of receiving it can also be effective. SRH education can take place **at home**, provided by caregivers, as well as in **a professional environment**, during sessions with a psychologist or sexologist. It is also accessible on the internet, through the use of digital materials created by experts in the field of SRH.

---

<sup>11</sup> Séhier, "Sexual and Reproductive Rights in Europe: Between Threats and Progress"; European Parliament. Directorate General for Internal Policies of the Union., Comprehensive Sexuality Education.

<sup>12</sup> Plaza-del-Pino et al., "Primary School Teachers' Perspective of Sexual Education in Spain. A Qualitative Study."



## Purpose of the guide

This guide is intended for youth workers and all stakeholders interested in promoting and improving SRH education of youth to develop their knowledge about holistic SRH education and how it can be administered to youth by means of digital tools and methods to **increase engagement, reliability of information, social inclusion and overall well-being of young people**. As such, this guide is meant as theoretical support for youth workers looking to improve their capacities for being SRH educators in the digital age.

It will do so by providing a state-of-the-art on SRH education in Europe and the interconnectedness between technology and youth's questions about sexual and emotional matters today. This theoretical basis of the guide will be bolstered by specific examples of how digital tools and methods are being harnessed to reach youth inquiring about their SRH, whether it be through improving their access to healthcare systems or promoting safe sex practices.

The priority of addressing the knowledge and competence of youth workers in particular with this guide stems from conducted studies and surveys that point to their **lack of preparedness and insight** on how to meet the SRH-related concerns and questions of the youth with which they engage. A 2019 EU-wide survey reported that **53%** of those working with youth report a lack of support for teaching sex education. In addition, the European Commission recently concluded that half of the Council of Europe Member States fail to provide training on LGBTQI+ issues, despite **20% of gen-Z youth identifying as LGBTQI+**.

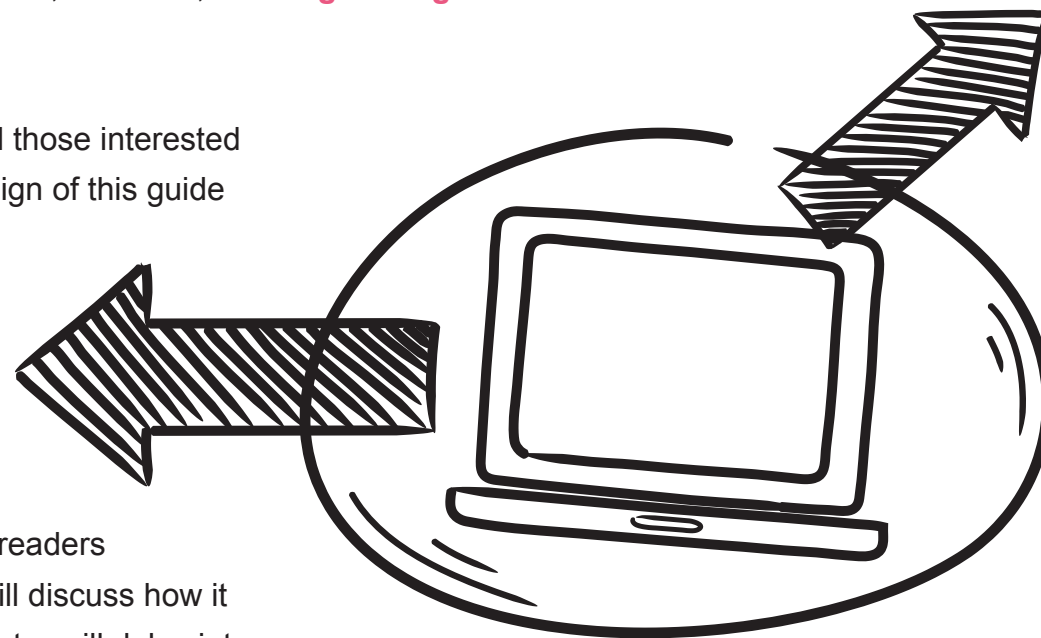
This guide will confront the reported lack of pedagogical skills and readiness by equipping youth workers with the relevant information to understand the diverse realities and needs of their youth target group. In the process, not only will they **improve the quality of their outreach efforts** (especially for reaching marginalised youth), they will also be able to adapt their practices to the needs of these youth for technological mediation and intervention, therefore, **meeting the digitisation demands of non-formal learning**.

The project is also dedicated to providing accessible materials for all those interested in this subject matter, and will, thus, ensure that the content and design of this guide will prioritise **readability and inclusive presentation**.

## Overview of the guide

After this introduction, the second chapter of the guide will acquaint readers with the **limits of traditional SRH education**; more specifically, it will discuss how it came to be taught in schools in its present form, after which the chapter will delve into the impact and effectiveness of this type of SRH education.

The third chapter will focus on defining and dissecting the components of **holistic SRH education**, as a proverbial counterbalance to traditional SRH programmes. It will also provide research and expert opinions on how a holistic way of teaching about SRH can improve the overall physical, emotional and sexual well-being of youth.



The fourth chapter will introduce a core concept of our project - digital tools in education - and explore its complementarity with teaching SRH.

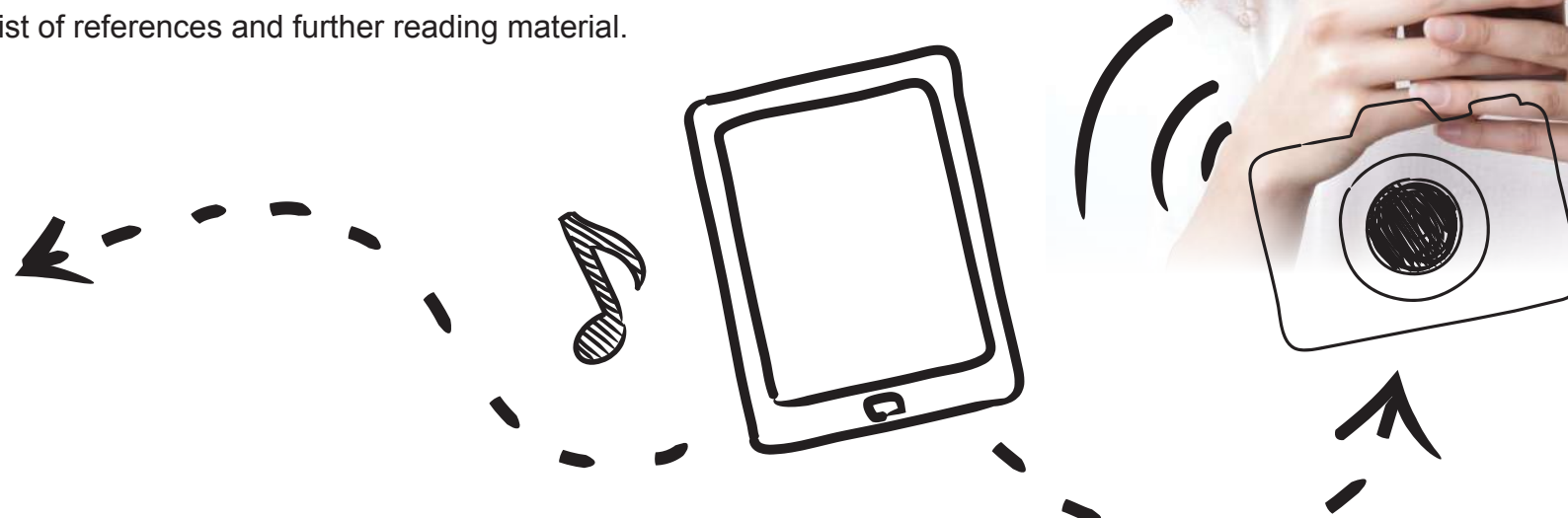
To tackle this phenomenon, we will discuss the prevalence of **today's youth turning to digitally-mediated tools (such as the internet) to satisfy their SRH-related inquiries.**

The fifth chapter consists of 5 sub-chapters, each of which examines **ways in which digital tools and spaces are being used to improve SRH education for youth:** to facilitate first contact with SRH, to promote safe sex practices, to identify healthy and unhealthy relationships, to connect youth to healthcare systems and to increase the visibility of LGBTQI+ and gender-based issues.

The conclusion will summarise the main points covered in the guide and provide **final recommendations on adapting SRH practices to digital tools/methods**, followed up with a bibliography that readers can turn to for a list of references and further reading material.



Photo by pexels





## 2. The limits of traditional Sexual and Reproductive Health education

### Contextualising traditional Sexual and Reproductive Health education

Sexual and Reproductive Health (SRH) education is a culturally relevant approach to teaching sex and relationships, providing accurate, realistic information to empower youths, improving their sexual health and quality of life, and aligning with WHO's definition on sexual health.

The content, messages, and approaches to delivering SRH education **vary across countries**. Traditional SRH education, which young people are exposed to in school or through public institutions, as well as in the family, is **a reflection of the social values of a society**. These still differ greatly around the world, so the approaches and topics included in SRH education are also different, and they do not always contain all the necessary information to satisfy the needs of comprehensive learning.<sup>13</sup>

Although for the last few years, especially in Europe, we have been aware of the importance of comprehensive and holistic SRH education, and most European countries are trying to provide expert and necessary teachings in a way that is suitable for young people, as this has not always been the case.

From a historical global perspective, sexuality education programmes can be grouped into two categories, as presented in WHO standards<sup>14</sup>:



---

<sup>13</sup> Leung et al. 2019

<sup>14</sup> WHO, 2010



## **Type 1: Traditional programmes, focused primarily or exclusively on abstaining from sexual intercourse before marriage, known as “how to say no” or “abstinence-only” programmes.**

Abstinence-only education and abstinence-only-until-marriage programs, rooted in religion, promote **complete abstinence from all extramarital sex**, including masturbation. These programs emphasise virginity and chastity, highlighting the importance of a monogamous relationship in marriage. However, contraception is often excluded in SRH education. Advocates of these traditional programmes argue that teaching students about contraception usage will undermine the abstinence-only message and **encourage immoral and health-harming sexual behaviour**, increasing the incidence of STDs and unintended pregnancies. Proponents use strategies to **induce fear, shame, and guilt** towards sexual behaviour, as well as promote stereotypical gender roles and religious messages.<sup>15</sup>

## **Type 2: Comprehensive or holistic SRH education. Its programmes pay attention to contraception, safe sex practices and put them to a wider perspective of personal and sexual growth and development.**

Comprehensive SRH education is an empowerment-based approach to sexual education, focusing on contraception, and safe sexual practices. It emphasises **human rights, gender equality, and cultural appropriateness**, with a focus on participatory learning. It equips students with knowledge, values, attitudes, and skills to make informed decisions promoting sexual health. Research supports the implementation of this type of SRH education, ensuring that students are equipped with the knowledge and skills necessary to make informed decisions and promote sexual health.

---

<sup>15</sup> Leung et al., 2019



## A HISTORY PERSPECTIVE OF TRADITIONAL SRH EDUCATION

In many cultures, including European countries, the discussion of sexual issues has traditionally been considered taboo, and adolescents were not given any information on sexual matters. Such instruction was traditionally left to a child's parents, and often this was put off until just before their marriage. It depended on social norms, standards and values of that time and society.<sup>16</sup>

The introduction of sexuality education in Western Europe (in formal education - schools) largely coincided with **the development and wide availability of modern**, reliable methods of contraception, particularly the birth control pill, and the legalisation of abortion in most countries during the 1970s and 1980s. This change triggered a "sexual revolution" around 1970 and stimulated the process of women's emancipation. Values and norms related to sexuality lost its extreme taboo character and stimulated the formalisation of a new phase in life became known as "adolescence", characterised by **increased independence from parents, involvement in romantic relationships, more open sexual behaviour and cohabitation without marriage**, delaying marriage and the start of family formation.<sup>17</sup>



Photo by freepik



<sup>16</sup> Leung et al., 2019

<sup>17</sup> WHO, 2010

The onset of the HIV/AIDS epidemic in the 1980s introduced a much more serious risk that led to **increased prevention efforts**. Other factors also contributed to a stronger focus on adolescent sexuality and sexual health. **Sexual abuse and violence**, traditionally taboo issues that tended to be covered up, came more out into the open and gave rise to moral indignation and calls for preventive action. Similarly, the **“sexualisation” of the media and advertising** was increasingly felt to be negatively influencing the perceptions of sexuality of young people, requiring some form of counterbalancing action.<sup>18</sup>

All these fundamental social changes required new responses from society, new types of health services and new information and education efforts. Newly emerging visions, particularly human rights perceptions, on the (sexual) rights and roles of this intermediate age group in society, added to the perceived need for sexuality education.

The first iterations of SRH education were designed to teach young people how to avoid certain physical and social “ills.” This is why, in the past, SRH education was based **solely on the prevention of sexually transmitted diseases** (especially during outbreaks of these diseases, which could have far-reaching consequences, not only on the patient, but also on their children), and in the sense of preventing teenage pregnancy.



Photo by pexels

---

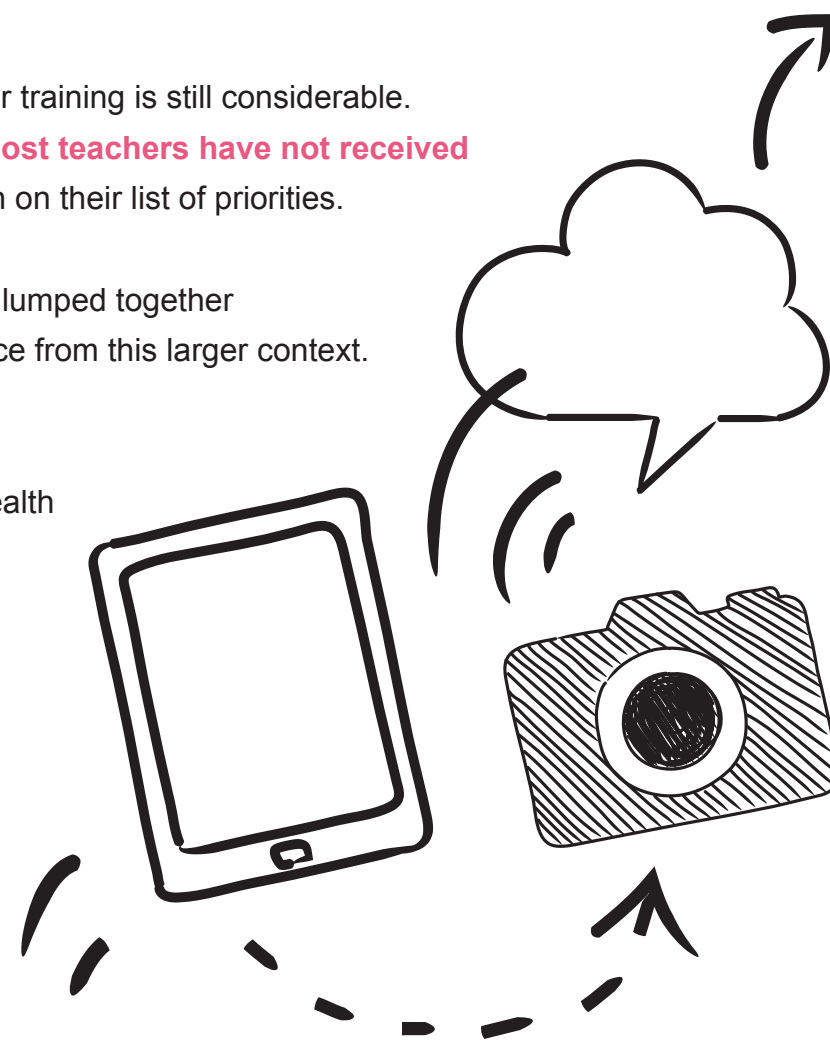
<sup>18</sup> WHO, 2010

In a document from 1981 reporting on SRH education in the 1970s and 1980s<sup>19</sup>, the following problems observed in its implementation among young people are highlighted:

- SRH education was blamed for **undermining parental authority, destroying the family, and stimulating sexual behaviour**.
- SRH courses are common, yet lack comprehensiveness. Concern with teacher training is still considerable. Despite the increasing number of training opportunities available each year, **most teachers have not received adequate preparation**, and organisations still do not place sex education high on their list of priorities.
- Opposition to abortion, LGBT+ rights, and a variety of other issues have been lumped together as „**pro-family**” **struggles**, and opposition to sex education derives much force from this larger context.

In general, the focus of SRH education had been more about preventing ill health (e.g., teenage pregnancy and sexually transmitted diseases) than promoting good health or wellness which is the emphasis of holistic SRH education.

Although the document was created 40 years ago and the situation is generally improving, this is not the case worldwide. This document testifies to very similar problems that are still faced in some countries, even today, **with SRH guidelines still not being met in all European countries**.<sup>20</sup>



<sup>19</sup> WHO, 2010

<sup>20</sup> UNESCO, 2018

## SRH EDUCATION IN EUROPEAN SCHOOLS

In Europe, SRH education as a school curriculum subject has a history of more than half a century, which is longer than in any other part of the world. It officially started in Sweden, when the subject was made mandatory in all schools in 1955. In practice, it took many years to integrate the subject into the curriculums, because the development of guidelines, manuals and other educational materials, as well as the training of teachers, took quite some years.<sup>21</sup>

In the 1970s and 1980s, sexuality education was introduced in Western European countries, including Germany, Austria, the Netherlands, and Switzerland. It continued in the last decades of the 20th century, with France, the United Kingdom, and some other Western European countries introducing it. In southern European countries, Portugal and Spain followed suit, and it even became mandatory in Ireland in 2003. Only in a few European countries, particularly in Southern Europe, has sexuality education not yet been introduced as compulsory or at all in schools.

Throughout Central and Eastern Europe, the majority of countries began with SRH education 20–30 years after Western Europe. Prior to this, the primary goals of these programmes were to prepare people for marriage and families while rejecting the desire of young people to engage in romantic relationships and premarital sexual activity.<sup>22</sup>



Photo by pexels

<sup>21</sup> European Expert Group on Sexuality Education, 2016

<sup>22</sup> Picken, 2021



## LIMITATIONS

The fact is that approaches and programmes for traditional SRH education differ due to differences in the social, moral, ethical and religious values of a community. However, we can highlight some common key limitations of traditional SRH education:

- A **negative approach to sexuality and sexual health issues**, as opposed to sex positivity.
- A lack of focus on **the emotional aspects of SRH** - pleasure is one of the key components for healthy relationships, sexual and emotional well-being.
- **Heteronormativity**. Many traditional SRH education programs assume heterosexuality as the norm and fail to address the needs and experiences of LGBTQ+ individuals, which can lead to feelings of exclusion, stigma, and misunderstanding among LGBTQ+ students.
- **Gender stereotypes and roles** (outdated notions of masculinity, femininity, and their associated behaviours) and failure to address consent and boundaries as the consequences of gender inequality regarding SRH.



Photo by pexels

## The impact of traditional SRH education on youth in the EU

SRH education, whether traditional or comprehensive/holistic, holds significant importance due to its potential to address a range of critical issues related to human sexuality. Even traditional SRH education, while more limited in scope, serves essential functions in promoting informed decision-making and reducing potential risks associated with sexual activity.

Traditional SRH education provides **fundamental information about human anatomy, reproduction, and the physical changes that occur during puberty**. This knowledge is crucial for young individuals to understand their bodies and the natural processes they experience. It equips young people with essential information about contraception methods, and the risks associated with unprotected sex, helps prevent unintended pregnancies and the transmission of sexually transmitted infections (STIs). In Europe and worldwide, studies claim the increase in condom use<sup>23</sup>, contraceptive prevalence increased from 55% in 1990 to 63% in 2010, and unmet need for family planning decreased from 15% in 1990, to 12% in 2010 - although the pace of change over time varied between countries.

Introducing the concept of SRH in a controlled manner can help reduce the stigma around discussing sexual matters. This can create a more open atmosphere for young people to seek guidance and support when needed. Providing young individuals with even basic knowledge about their bodies and sexual health empowers them to make informed choices. It allows them to take responsibility for their actions and their health. There is strong evidence that **programmes did not have negative effects: in particular, they did not hasten or increase sexual behaviour**.<sup>25</sup>

School-based SRH initiatives were established in Western Europe 50 years ago. SRH education is a controversial subject within the European Union, with a wide range of approaches to its organisation, delivery, and content across the Member States. There are differing views on what should be taught, when it should be taught, and the roles of parents and schools. The table below shows the topics which are covered by SRH education in different EU Member states.

---

<sup>24</sup> Alkema et al., 2013

<sup>25</sup> UNESCO, 2018

**FIGURE 2: WHAT TOPICS DOES SEXUALITY EDUCATION COVER IN EACH EU MEMBER STATE?**

Topics covered in sexuality education	Member States
Biological aspects/body awareness/puberty and anatomy	AT BE BG CZ EE FI DE IE LV ES SE PL LU MT SK SI HR CY EL HU IT LT NL HR
Love, marriage, partnerships, family	AT CZ EE DE IE SE PL LU SK HU NL PL BE BG FI LV ES HR
Sexual/domestic abuse and gender-based violence	AT BG CZ BE DK IE NL PT SI LU FR HU FI DE LV ES SE HR
Pregnancy and Birth	AT BE CZ EE FI DE IE ES SE LU SK NL PL PT BG LV HR
Sexual orientation / LGBTI issues	IE SE BE LU DK FR NL PT AT BG CZ FI DE LV ES HR
HIV/AIDs and STIs	AT BE BG CZ FI DE IE ES SE BE LU SK HU LT LV
Contraception	AT BE BG EE FI DE ES SE LU CZ IE LV
Gender roles	AT DE ES SE MT BG CZ FI IE LV
Mutual consent	BG CZ EE BE DK AT FI DE IE ES
Human rights	AT SE LU BG CZ FI DE LV
Online media	CZ FI DK AT BG DE ES SE



Table 1. The topics covered by Sexuality education in different EU Member states.<sup>26</sup>

Source: This infographic is based on data from Ketting and Ivanova (2018) and from McCracken et al. (2016). Data were supplemented by information from Beaumont et al. (2013) and other national sources.<sup>26</sup> Limited data was available for a number of Member States (Croatia, Cyprus, Denmark, France, Greece, Lithuania, Malta, the Netherlands) which were not extensively mapped by existing sources.

<sup>26</sup> AEuropean Commission, European Platform for Investing in Children (EPIC). 2020. Sexuality education across the European Union: an overview, <https://op.europa.eu/en/publication-detail/-/publication/5724b7d8-764f-11eb-9ac9-01aa75ed71a1>

Cultural and religious influences have played a crucial role in developing SRH education in Europe, given that before the internet, they were the only sources of information available.

In several European countries, such as Germany and France, the Catholic Church has resisted SRH education in schools, preferring to make these topics **taboo**. In France, a law authorising contraception was passed in 1967, and SRH education became an important subject also in schools.

The table below shows us how international standards have been established since 1990:



Table 2. How international standards have been established since 1990.<sup>27</sup>

<sup>27</sup> European Commission, European Platform for Investing in Children (EPIC). 2020. Sexuality education across the European Union: an overview, <https://op.europa.eu/en/publication-detail/-/publication/5724b7d8-764f-11eb-9ac9-01aa75ed71a1>



Some religious and conservative countries have been slower to adopt progressive approaches to SRH education. Some sources suggest that religion can affect sexual education in some European countries, particularly in countries where the Catholic Church has a strong influence, for example in Italy. Families and parents believe that the family should provide education on these topics and are concerned that discussing sexual topics may encourage adolescents to engage in them early. Liberal countries, on the other hand, have been more adaptive to comprehensive SRH education. It is concerning that, according to a 2018 survey, **only 11 of the 22 Council of Europe member nations had mandatory SRH education.**

These differences can be observed in the comparison of North and South European countries. **Nordic and Benelux countries are observed as having the highest quality of SRH education, while Eastern and Southern European countries have higher adolescent birth rates.** The data on the adolescent fertility (birth) rate per 1000 women aged 15 – 19 years presents differences as in the North EU rates are below 20, while in Eastern and Southern EU from 20 to 50 presenting the disparity and positive effects of comprehensive sexual education in the North of EU.

The study published in PMC<sup>28</sup> discovered that presentation with traditional SRH education campaigns is one of the key risk factors for unsafe sexual activity since it does not address subjects such as STD prevention and unwanted pregnancies. As a result, traditional SRH education programmes may be unsuccessful in preventing risky sexual activity. Furthermore, **pornography (29,3%) and the internet (12,4%)** were identified as the **key sources of SRH information among young people in countries where traditional SRH education was prevalent.** Poor SRH education, a lack of parental support, and easy access to sexual content on the internet all contribute to an environment in which adolescents increasingly use pornography, conditioning their sexual learning to the things they view. Comprehensive SRH education that goes beyond biology and reproduction, according to the research, is vital to ensuring that young people have the information they need.

---

<sup>28</sup> Navarro-Prado S., 2023

The review of studies<sup>29</sup> showed results in the Table 3 (below). It presents the main indicators of sexual health impacted by various SRH programmes, including traditional and comprehensive ones:

	Developing countries (N=29)	United States (N=47)	Other developed countries (N=11)	All countries (N=87)	
<b>Initiation of Sex</b>					
Delayed initiation	6	15	2	23	37%
Had no significant impact	16	17	7	40	63%
Hastened initiation	0	0	0	0	0%
<b>Frequency of Sex</b>					
Decreased frequency	4	6	0	10	31%
Had no significant impact	5	15	1	21	66%
Increased frequency	0	0	1	1	3%
<b>Number of Sexual Partners</b>					
Decreased number	5	11	0	16	44%
Had no significant impact	8	12	0	20	56%
Increased number	0	0	0	0	0%
<b>Use of Condoms</b>					
Increased use	7	14	2	23	40%
Had no significant impact	14	17	4	35	60%
Decreased use	0	0	0	0	0%
<b>Use of contraception</b>					
Increased use	1	4	1	6	40%
Had no significant impact	3	4	1	8	53%
Decreased use	0	1	0	1	7%
<b>Sexual Risk-Taking</b>					
Reduced risk	1	15	0	16	53%
Had no significant impact	3	9	1	13	43%
Increased risk	1	0	0	1	3%



To conclude, any SRH education program can have positive impacts and cannot be labelled 'harmful', even if the information taught is limited and restrictive in scope such as traditional SRH education. However, due to the insufficiency of the information it provides, it must serve as **a stepping stone for more comprehensive education** in the future. It can, therefore, lay the groundwork for understanding more complex topics related to sexual orientation, gender identity, and broader aspects of sexual health.

Table 3: Review identified numbers of sexuality education programmes demonstrating effects on different sexual behaviours<sup>30</sup>

<sup>29</sup> EUNESCO, 2018

<sup>30</sup> EUNESCO, 2018

### 3. Turning towards holistic Sexual and Reproductive Health education

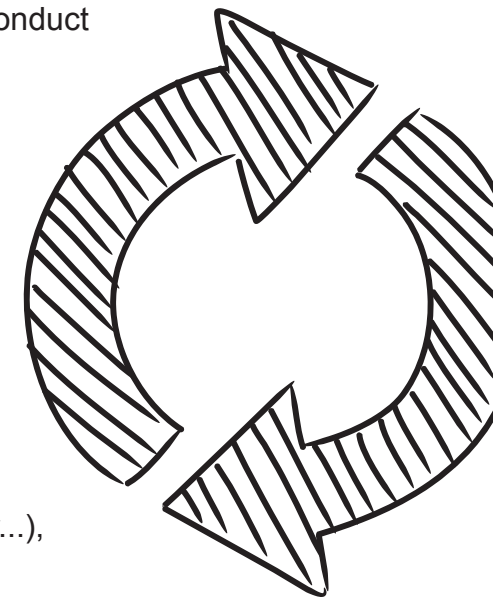


Holistic Sexual and Reproductive Health (SRH) education offers children and young people, girls and boys, **objective, scientifically correct information on all aspects of sexuality**. This holistic approach seeks to fully activate all aspects of the learner's personality (intellect, emotions, imagination, body) for more effective and comprehensive learning. It is, therefore, not limited to the prevention of risks related to sexual behaviour and does not favour one way to conduct oneself before, during and after these acts.

Holistic learning about SRH helps children and young people to develop fundamental attitudes, skills and competences that will allow them to make **independent decisions about their sexuality and relationships during all stages of development**. It gives them the tools they need to live a fulfilling and responsible sexual and romantic life. The general objective of holistic pedagogical intervention in SRH is the growth of the human being towards the promotion of his well-being, as well as of the group and the community.

To achieve this result, the holistic pedagogical methodology stimulates the person to discover and elaborate their experiences by revisiting their educational history using various types of language (music, drawing, theatre, other...), aiming at **the integration of the person, the search for individual and collective unity**.

When we discuss sexuality, we are referring to the complex of psychological, physical and behavioural phenomena that concern sex and contribute to the general well-being of a person. The first sexual experiences represent **an imprinting for future sexuality**, which provides an additional reason to be given knowledge on one's sexuality from childhood. Sexual well-being refers to the physical, emotional, mental and social well-being related to sexuality. It is linked to the possibility of having **pleasant and safe sexual experiences, free from coercion, discrimination and violence**.

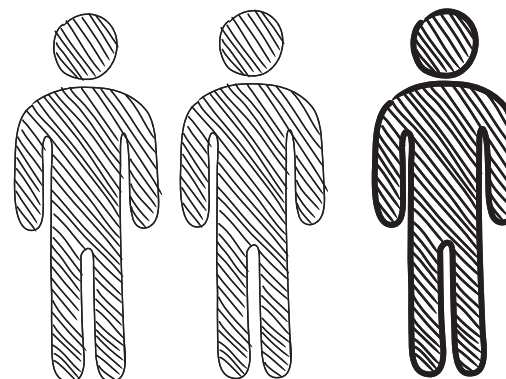


For this reason, SRH education, in addition to the fundamental basic elements linked specifically to the sexual act, must address essential issues such as **sexual equality, the right to sexual pleasure and sexual freedom**. Sexual equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world; the right to sexual pleasure, is now recognised as closely aligned with fundamental human rights.

Yet, there is still a gap recognising sexual pleasure as a fundamental human right and essential to the promotion of sexual health and overall health and wellbeing. With continued threats to sexual health and rights, there is a serious need to address the importance of **pleasure as a key component of sexual health and rights**. The experiences of human sexual pleasure are diverse and sexual rights ensure that pleasure is a positive experience for all concerned and not obtained by violating other people's human rights and well-being.

From this derive other very important subcategories, such as health, sexual justice (i.e. the need to address sexual harm in a way that is fair to everyone), affectivity, self-esteem & sexual self-efficacy, sexual identity and the relationship between well-being and body image. Once again, even in this case, the adolescent phase is a crucial phase, during which behaviours are implemented that could positively or negatively influence sexual well-being.

**SRH education is essential to prevent and combat abuse, sexual violence and sexual exploitation** because it constitutes an ideal context for raising awareness on the issue of sexual and reproductive health and rights.



It is important to understand as a society that, alongside the mere sexual act, there are emotions and sensations involved with sex, which it is important to learn about and manage.

**Developing awareness and control over one's emotions requires constant education and practice**, which starts from childhood and continues through all phases of our life.

“Emotionally competent people, those who know how to control their own feelings, read those of others and treat them effectively, find themselves at an advantage in all areas of life”, a phrase by Daniel Goleman who underlines the importance of holistic sexual education because managing emotions is a part of sexuality and is a fundamental key in our lives.

Emotional education serves to understand that emotions always have a reason. They can be a warning that something in our daily lives, in the environments we frequent and in our interpersonal relationships, is not going as it should. **The first step in young people understanding the relationship between emotions and sexuality is the development of personal awareness:** by recognising and acknowledging their feelings, they can better understand how these emotions may be connected to the topic of sex education.



Photo by pexels





The self-awareness should also explain how we react physically, psychologically, and cognitively to everyday events. Those who enjoy a good emotional balance, therefore, will certainly be able to „read” their emotions correctly and in time, thus facing unpleasant situations like these with awareness and greater inner strength. Emotional education dedicated to youth will have a different nature from that aimed at adults, but beyond these rather obvious considerations, in disciplines such as these following a personalised approach is fundamental.

Furthermore, it is essential to address the issue of **consent** within a relationship and a sexual relationship and give them a clear and explicit definition, in order to understand and prevent episodes of violence and discomfort. Sexual consent means that each person voluntarily agrees to participate in sexual intercourse. **Being silent or not saying “no” does not mean giving your consent.**

**The absence of opposition/resistance or clothing does not mean consent.** Why is consent, despite appearing to be such a simplistic concept, constantly at the centre of controversy? The limit appears clear: yes or no. Even for long-term couples, we continue to talk about consent, since we may find ourselves facing **ambiguous situations**, which sometimes may not even be understood.

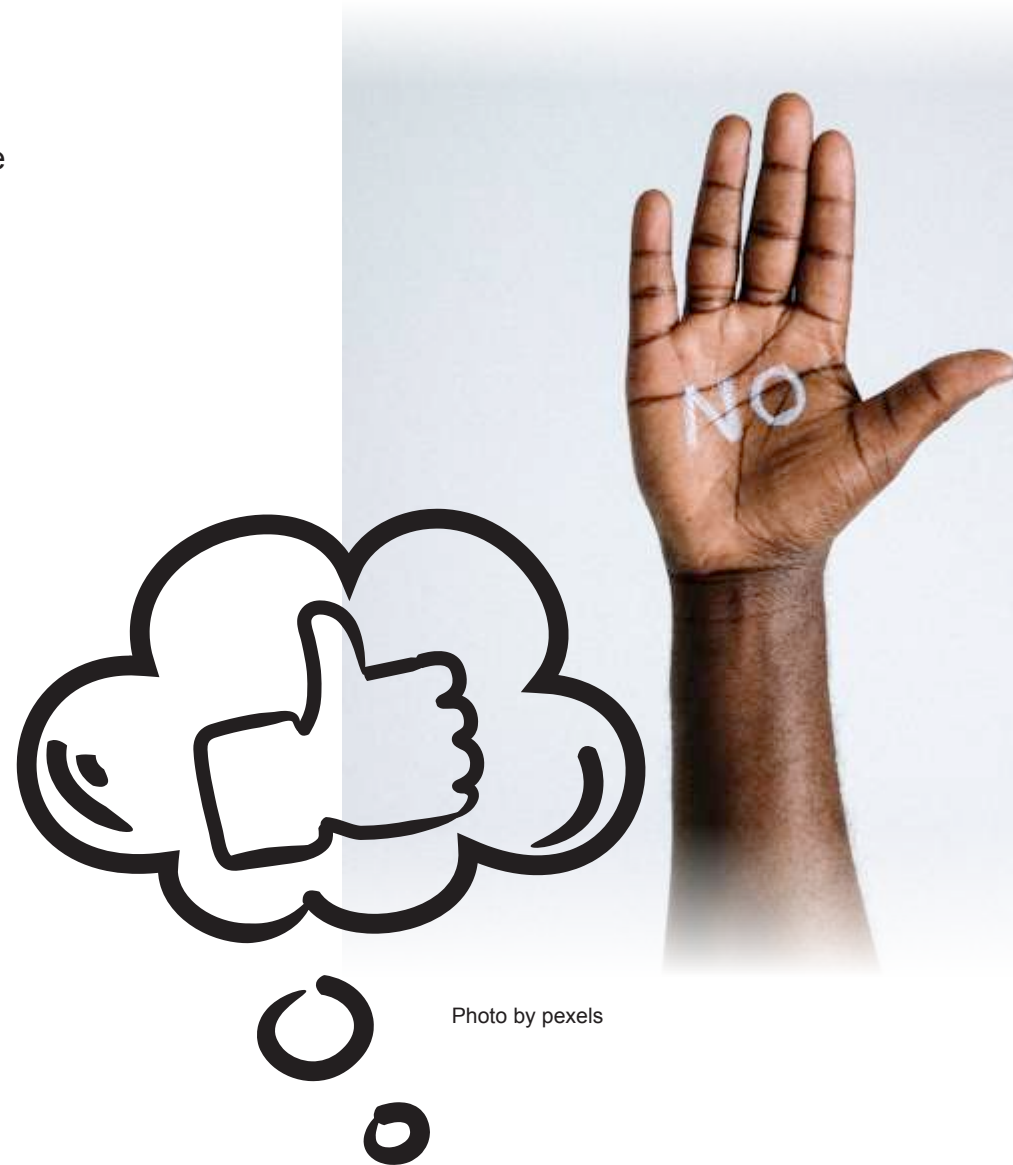


Photo by pexels

Talking about consent requires first of all awareness of the value of one's own person and the right to choose for ourselves. Holistic sexual education means **teaching the right to say no, to set limits, to know your limits and not to be persuaded to do something that doesn't make you feel good**. Saying no is right, intelligent and is not a lack of respect towards those around us. We must learn to say no, demand that this be respected and respect the „no” of others.

Through holistic sexual education you know your rights and learn to respect the rights of others, protect your health and adopt a positive attitude towards sexuality and relationships with others. It also allows you to acquire useful skills for life, such as self-confidence, critical thinking and the ability to make informed decisions.

It is of crucial importance to understand that there are numerous factors which may influence our feelings and that, at the same time, there are numerous tools we can make use of so as to control these feelings. Knowing where, for example, a sense of sadness comes from gives us the possibility of tempering it. Knowing the cause of some emotions does not mean eliminating them, but knowing how to manage them. By perceiving emotional hurdles in this way, **empathy, respect and consent become the building blocks of our relationships** because we understand that the behaviours and reactions of those around us may be impacted by their internal states, and not the external situation.

In addition, hormones can influence emotions and sexual feelings during puberty. But it's not exactly correct to assume that hormones are intrinsically linked to emotions, because the process is far more elaborate than 'x hormone causes x emotion'. A specific trigger could cause us to feel an emotion. For example, seeing an ice cream van could trigger a number of emotions: you might feel joy by remembering how much you love ice cream, you might crave the ice cream, you might even feel jealous that other people are purchasing ice creams and you are not.



## Defining holistic SRH education

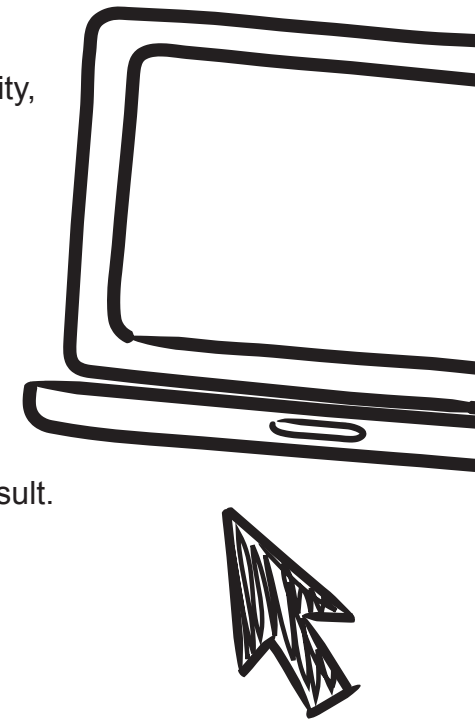


Holism finds its etymological origins in the Greek “holos” which means “the wholeness, the whole”. The adjective **holistic** therefore refers to an approach, a theory or a therapy that sees each organism or system as a whole and not just as composed of individual parts. In the context of SRH education, it means adopting a **360-degree approach**, which takes into consideration all the aspects that compose sexual and relational health. Holistic sexual education, therefore, includes theoretical/scientific elements such as the physiology of our body, reproductive processes, the spread of diseases and prevention, but also the affective and emotional part of sexuality, which can be defined as sexual well-being and is linked to emotions and to affections.

## How going ‘holistic’ can improve the SRH of youth

Talking about sexuality creates embarrassment because over time, culture has led us to see it as a vice, as something „dirty” and transgressive. Much of the „fault” - if we can call it that - of this distorted vision of sexuality can be attributed to religion which has always ruled on moral behaviours, including sexual ones. In the name of ethics and morality, sexual restrictions were imposed which, however, did not lead to the desired result. Little by little we are evolving and our society is realising that, being an important part of our lives, sex also needs to be taught and learnt. The holistic approach to sexual education is an approach that aims to analyse the topic in all its facets and not just from a theoretical side.

As children we begin to notice the difference between boys and girls, for example. In this phase, sexual education serves to explain to the child what can and cannot be done, especially in public, and to establish what the limits of physical contact are. As the child grows up, they go through the phase of questioning ‘why’ something is occurring and if there are questions relating to sex, it is important for the parent to develop a valid answer, rather than denying it to them and sending the message that sex is a taboo subject. Elementary school itself is the time for the child to learn more about procreation and what sexual intercourse is. **Preparing for the changes and transformations that await children with puberty is essential** to prevent this event from being traumatic.

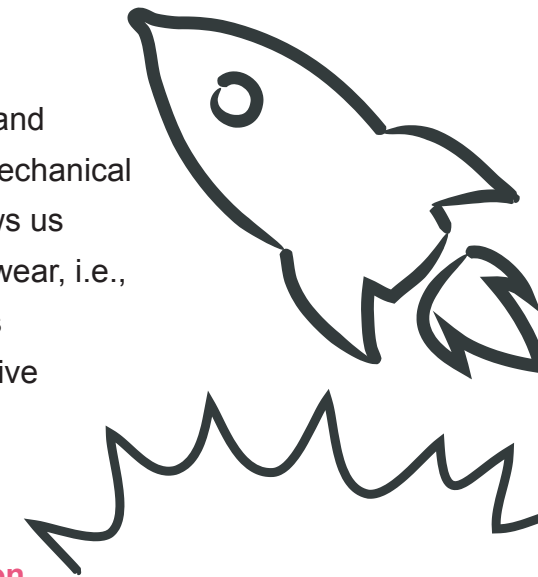




Adolescence is the most critical period of maturing from a sexual point of view: the first impulses are felt and at the same time the body undergoes continuous changes. This is the time to explain to children that having sexual desires is normal, and that sex is not just about having children, but that it can be a way of expressing one's feelings. It is important that adolescents can live their first experiences in a safe manner, prepared for the risks they run if they do not use contraceptive methods. It is not easy to communicate with children during puberty: they tend not to listen and to rebel at all costs. This is why we need to establish a **mature, open and non-judgmental dialogue** if we want to have any chance of relaying a holistic message.

Sexuality education is a journey that never ends, not even in adulthood. Enriching your knowledge about sex and the body is the only way to have conscious and satisfying sexual relationships, which go beyond the simple mechanical gesture. Holistic education in the field of sexuality, as well as in other fields, is a real **paradigm shift** that allows us to see the same reality with different eyes; this is because reality itself changes according to the 'glasses' we wear, i.e., the point of view we hold in front of it and the perceptions that reach us from it. Changing the paradigm means changing the way of conceiving reality, the world or life itself. The simple and clear connotations that we can give to the term holism are those of being a natural law according to which the whole is greater than the same sum of the parts; where complex systems originate from simple ones and a global way of viewing reality.

With this awareness, **it is important to leave in the past a science that depicts reality as an agglomeration of different components**, i.e., the science that is now being studied in schools, where one „part” is considered central. It is time to give space to holistic SRH and **see each part with its distinct function compared to the whole**, on the same level of importance and with the same right to be explained and learned by young people. This change allows us to return to an ethical science, and to a broader vision point of view in which man protects and does not destroy resources.



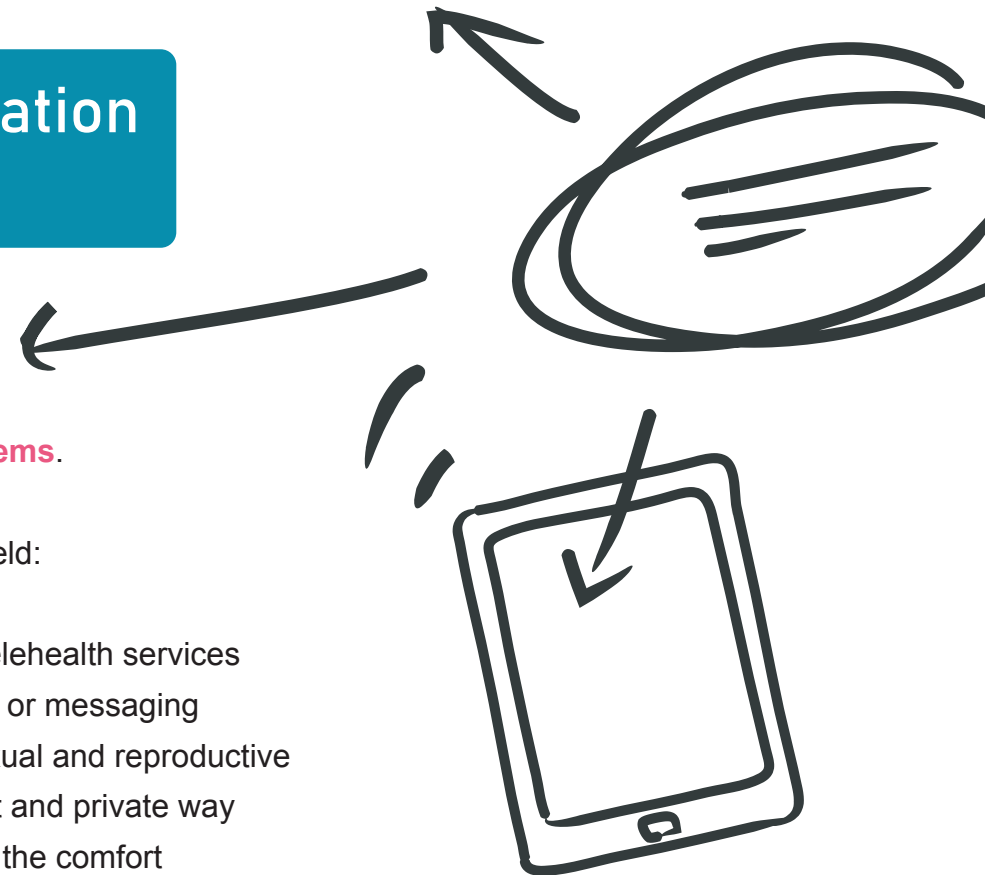
Holistic education is given the honour and the burden of promoting the understanding of the person in its entirety considering its **social, physical, biological, psychic, emotional and spiritual dimension** according to a perspective of integration and interdependence; a fusion between theory and practice, a state of balance between present, past and future by integrating knowledge so that there is a formation of whole and unified people who live in a unique and full world.

## 4. Sexual and Reproductive Health education and technology: a perfect match?

In an era characterised by rapid technological advancements, the integration of technology into Sexual and Reproductive Health (SRH) education offers **a powerful avenue to connect youth with healthcare systems**.

Two brief examples among many where technology can be beneficial in this field:

- **Telehealth services:** Rapid technological advancements have made telehealth services easily accessible for youth. Through virtual consultations via video calls or messaging platforms, young individuals can seek advice and information about sexual and reproductive health (SRH) from healthcare professionals. This provides a convenient and private way for youth to access SRH services, normalizing seeking healthcare from the comfort of their own spaces.



- **Mobile applications for SRH education:** Tailored mobile apps provide comprehensive SRH education for youth. For instance, LGBTQ+ youth can use LGBTQ+-focused apps to access SRH information and support networks, ensuring a safe and anonymous space for their unique needs. These apps empower youth to make informed decisions about their SRH in a convenient and inclusive manner.

This chapter explores the transformative potential of technology as a means to provide comprehensive SRH education, focusing on **how it addresses the unique challenges faced by youth**, especially underrepresented youth populations, including sexual minorities and youth with disabilities.

The digital age has ushered in a myriad of opportunities to revolutionise SRH education. Traditional approaches to SRH education often fail to resonate with youth, rendering them less effective in conveying vital information. However, technology has the capacity to **engage and empower** youth in ways previously unattainable.

Access to accurate and comprehensive SRH information is fundamental for informed decision-making. Technology provides a dynamic platform for disseminating SRH-related content. Online platforms, mobile applications, and dedicated websites have become valuable resources, offering interactive and engaging materials tailored to the diverse needs of youth. Through multimedia content, such as videos, animations, quizzes, and personal narratives, **comprehension and retention of information are enhanced**.

Furthermore, these digital tools allow for real-time updates, ensuring that youth have access to the most current SRH information. This adaptability is especially crucial in the ever-evolving landscape of SRH, where guidelines and recommendations may change over time.



Stigmatisation and cultural taboos often shroud SRH topics in secrecy, inhibiting open discussions, particularly among sexual minorities. Many youths fear discrimination when seeking information and guidance. Technology addresses this challenge by enabling anonymous participation in virtual discussions, forums, and support groups.

**Anonymity fosters an environment where youth can pose questions, share experiences, and access information without judgment.** Moreover, these platforms can connect youth with peers who have faced similar challenges, creating a supportive community that transcends geographical boundaries.

## Technology facilitates inclusion

Youth with disabilities often encounter barriers to accessing SRH education. Technology, however, offers customised solutions that cater to diverse learning needs. Adaptive technologies present content in various formats, including audio, visual, or tactile modalities, ensuring that differently-abled youth can engage effectively.

In the realm of sexual and reproductive health education, inclusivity is paramount. Every youth, regardless of their abilities, deserves access to SRH information that is meaningful and understandable. To achieve this goal, the integration of assistive technologies has become pivotal in breaking down barriers and ensuring equitable access to SRH information and resources.

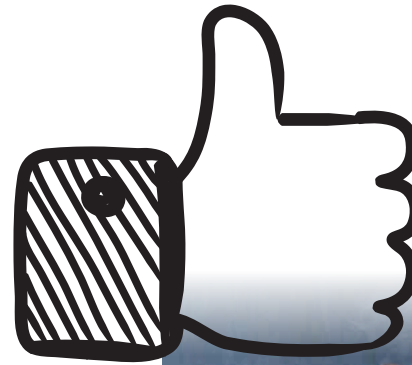


Photo by pexels





Assistive technologies encompass a wide array of devices and software designed to support individuals with disabilities in their daily lives. When applied to SRH education, these technologies can bridge gaps and make vital information accessible to all.

**Screen readers** are assistive technologies that convert on-screen text into synthesised speech, allowing individuals with visual impairments to access written content. In the context of SRH education, screen readers play a crucial role in ensuring that digital materials are accessible to youth with visual disabilities.

For instance, digital SRH educational content, such as websites, articles, or interactive modules, can be made compatible with screen readers. This ensures that visually impaired youth can independently navigate online resources and access SRH information as effectively as their sighted peers.

Moreover, screen readers **enhance privacy** for youth seeking SRH information. They can independently review sensitive content without needing the assistance of another person, thus preserving their confidentiality.

**Voice commands**, another facet of assistive technology, empower individuals with motor impairments by allowing them to control digital devices and applications through spoken commands. In the context of SRH education, this technology can be transformative.

Imagine a youth with limited motor control who wishes to engage with an SRH mobile application. With voice command functionality, they can navigate the app, access specific sections, and even ask questions using only their voice. This not only grants them independence but also ensures that they can actively participate in SRH education on their own terms.

The integration of assistive technologies has a profound impact on youth with disabilities, ensuring that they are not left behind in SRH education efforts.

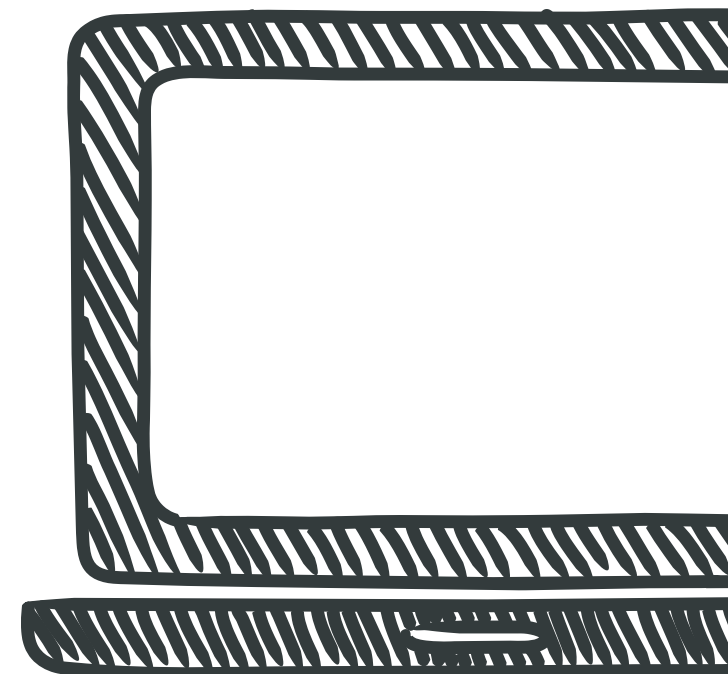
By making digital SRH resources accessible, these technologies also empower youth to:

- **Gain knowledge and awareness:** Assistive technologies enable youth with disabilities to access information about SRH, including topics like sexual health, contraception, and sexually transmitted infections. This knowledge is essential for making informed decisions about their own sexual and reproductive well-being.
- **Make informed choices:** Armed with accessible information, youth with disabilities can actively engage in discussions about their SRH choices. They can communicate their preferences, needs, and concerns with healthcare providers confidently, leading to more person-centered care.
- **Advocate for their rights:** Accessibility in SRH education equips youth with disabilities with the tools to advocate for their rights and access to healthcare. They can engage in discussions about the importance of inclusive SRH curricula and the necessity of accessible healthcare facilities.

**Geographical constraints and limited access to healthcare facilities can deter youth from seeking essential SRH services.**

Technology introduces the concept of telehealth, allowing youth to consult healthcare professionals remotely via video calls, chatbots, or messaging platforms. This innovation not only improves access but also normalises seeking healthcare, as youth can initiate contact from the comfort and privacy of their own spaces.

Telehealth extends beyond consultations; it encompasses services such as prescription refills, follow-up appointments, and even mental health support. These services can be particularly beneficial for youth who may face transportation challenges or those who prefer the convenience of remote healthcare.



## Technology ensures privacy and security

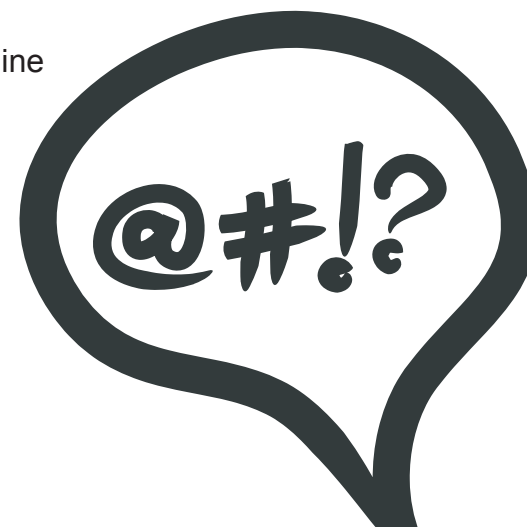
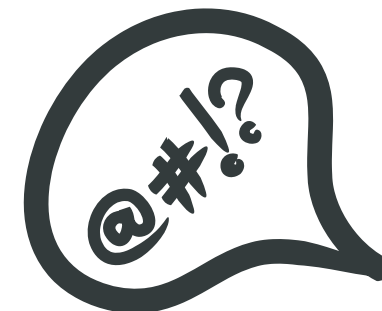
As technology has become deeply integrated into SRH education, concerns surrounding privacy and data security have come to the fore. Robust data protection measures must be established to ensure user safety. **Youth should retain control over their personal information and determine their preferred level of anonymity.** Transparency regarding data collection and utilisation is essential for building trust between users and technology platforms.

Additionally, it's imperative to educate youth about online privacy and responsible digital citizenship. By equipping them with the knowledge and skills to protect their personal information, they can engage safely in the digital SRH landscape.

We would like to highlight some **examples where digital citizenship and SRH education go hand in hand.**

SRH educational platforms often include interactive online modules that focus on online privacy and digital citizenship. These modules engage youth through scenarios and quizzes that teach them about privacy settings on social media platforms, recognising phishing attempts, and the importance of strong, unique passwords. As they progress through the modules, they acquire practical skills for safeguarding their personal information online.

For example, an SRH educational platform may offer an interactive module called „Safe Online SRH Navigation.“ In this module, youth engage in scenarios and quizzes that simulate real-life online situations. They learn to recognise the importance of setting strict privacy controls on social media, ensuring that only trusted individuals have access to their personal information. They also gain the ability to identify phishing attempts, helping them avoid potentially harmful scams and deceptive websites.





Peer education programs within schools and communities often incorporate sessions on digital citizenship and online privacy into their curricula. Trained peer educators guide discussions on topics like ethical online behaviour, respecting digital boundaries, and recognizing and addressing cyberbullying. These programs create a safe space for youth to ask questions and share their experiences.

Some NGOs engaged in SRH collaborate with tech-savvy youth to **create engaging content on online privacy**. These young digital ambassadors develop videos, blog posts, and social media campaigns that resonate with their peers. They share their own experiences and offer practical advice on protecting personal information while using digital platforms, while they also launch online privacy campaigns targeting youth. These campaigns use social media, informative videos, and infographics to raise awareness about the importance of safeguarding personal information online. They also provide practical tips and resources, such as how to adjust privacy settings on popular social media platforms or how to recognise and report online harassment.

Incorporating lessons on online privacy and responsible digital citizenship into SRH education empowers youth to navigate the digital SRH landscape safely. These examples demonstrate that SRH education goes beyond traditional topics and addresses the unique challenges and opportunities presented by the digital age, ensuring that youth **are well-prepared to make informed decisions about their sexual and reproductive well-being** in the online world.



Photo by pexels



## Important factors to consider when using technology for SRH education

**Internet safety is a paramount concern when it comes to using technology for sexual and reproductive health (SRH) education**, particularly for youth. While online platforms provide valuable resources and information, they also expose users, especially vulnerable youth, to various risks. Understanding and addressing these concerns is essential to create a safe and secure online environment for SRH education.

Some digital phenomena which may impact how youth receive SRH education are:

- **Cyberbullying and online harassment**

Cyberbullying involves using digital communication tools, such as social media, to harass, threaten, or harm individuals. In the context of SRH education, youth who seek information or engage in discussions may be subjected to cyberbullying if their identities or queries are disclosed. This can deter them from seeking help and support online. Education programs should equip youth with strategies to recognise and report cyberbullying incidents, as well as mechanisms to address such issues within online SRH communities.

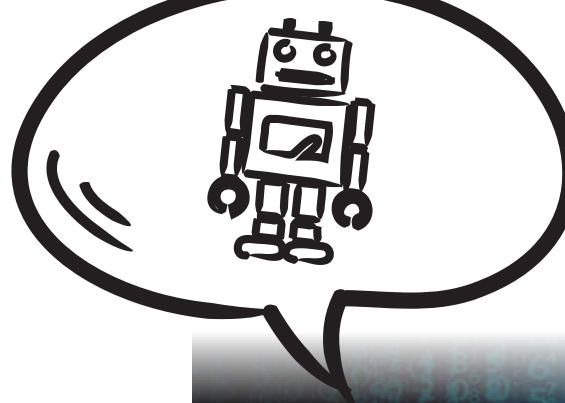


Photo by pixabay



- **Privacy violations**

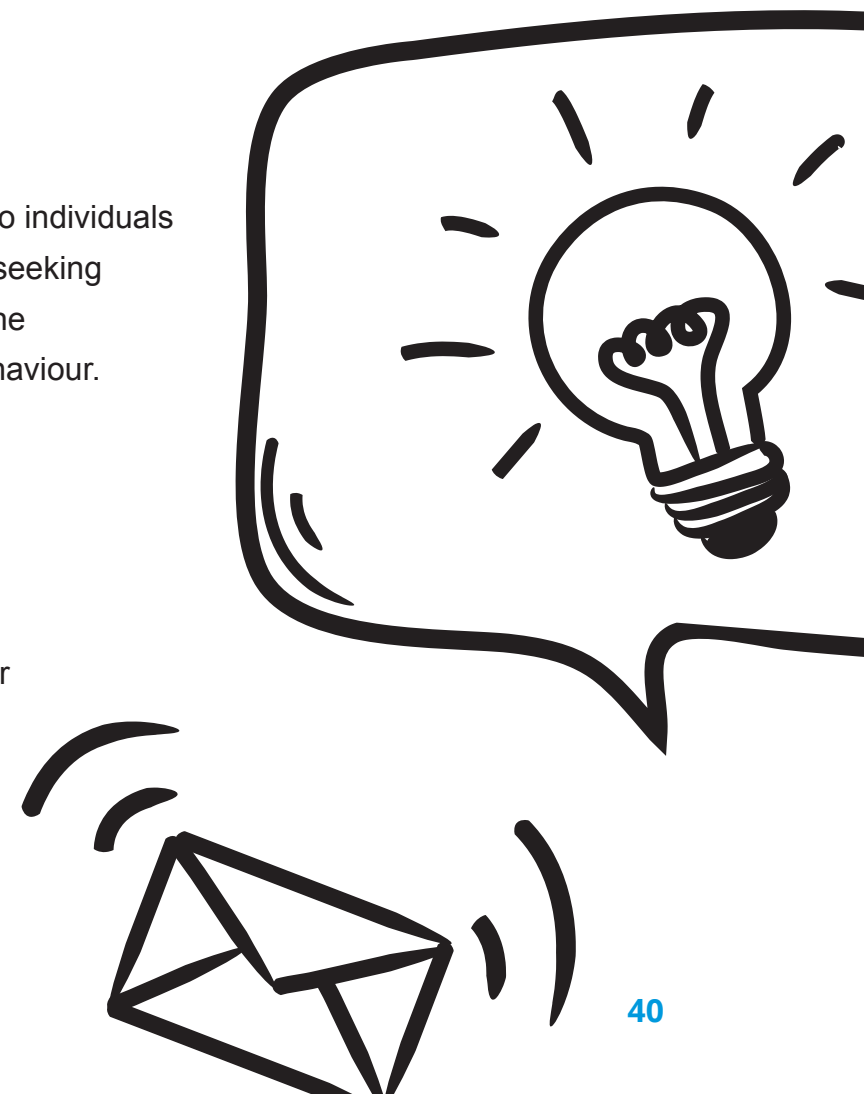
The sharing of personal information, intentionally or unintentionally, can lead to privacy violations. Youth may disclose sensitive SRH-related details online, thinking they are in a safe space, only to find that their information is misused or exposed. Ensuring that platforms have robust privacy settings and educating users about how to protect their personal information is crucial. Consent mechanisms should be clear and transparent, and users must have the option to remain anonymous if they choose.

- **Grooming and exploitation**

Vulnerable youth, especially those who are unaware of the risks online, can fall victim to individuals with malicious intent. Online predators may attempt to groom or exploit youth who are seeking SRH information or support. Education programs should include awareness about online exploitation and strategies for identifying and reporting inappropriate or exploitative behaviour.

- **Misleading and harmful content**

While the internet is a valuable source of information, it can also be a breeding ground for misinformation and predatory content. Youth seeking SRH education may encounter misleading advice or content that is inappropriate or harmful. Online SRH platforms must prioritise evidence-based information and provide resources for users to fact-check information they come across.

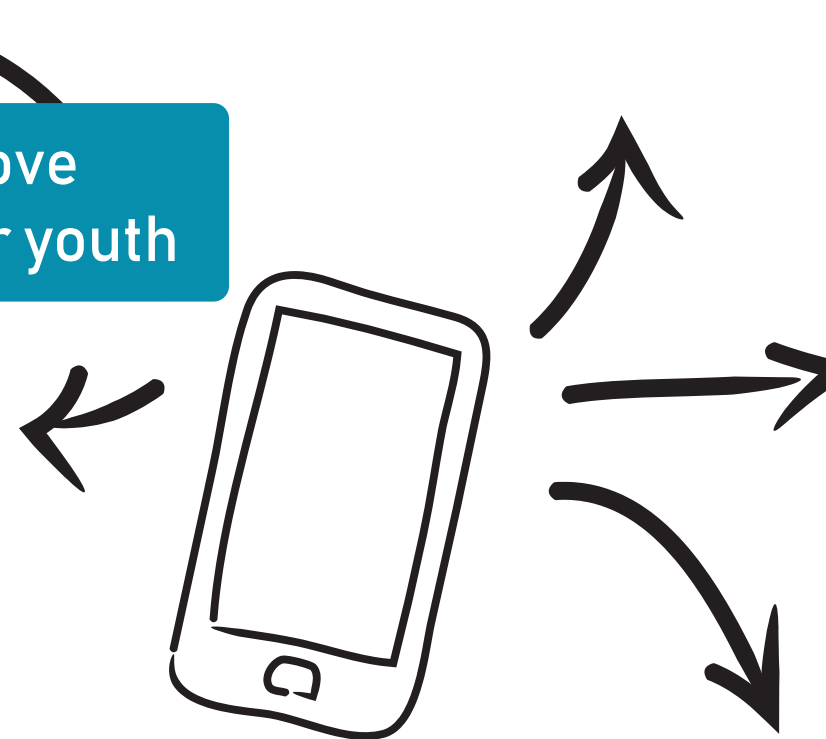


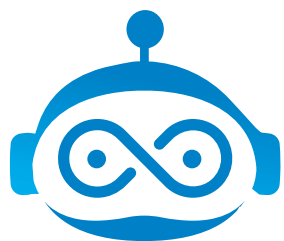
Online educational programs and SRH platforms should address these concerns comprehensively. Providing resources for reporting and addressing online safety issues, educating users about privacy settings and safe online behaviour, and promoting respectful and ethical interactions within online communities are crucial steps.

The fusion of technology and SRH education holds immense promise for connecting diverse youth populations, including sexual minorities and those with disabilities, to crucial healthcare systems. The digital tools discussed in this chapter have the potential to overcome barriers related to **stigma, limited accessibility, and misinformation**.

## 5. Five ways technology is being used to improve Sexual and Reproductive Health education for youth

Now that you've become acquainted with factors that have led to the phenomenon of youth turning to digitally-mediated tools to satisfy their sexual health-related inquiries, read on to discover five ways that technology can be used as a tool for educators and youth workers to improve SRH education and practices.





## Technology as a way to facilitate first contact with Sexual and Reproductive Health



The first contact with Sexual and Reproductive Health (SRH) is a crucial milestone in young people's development, as it involves learning about the cognitive, emotional, social, interactive, and physical aspects of sexuality. These initial experiences significantly influence their attitudes, behaviours, and decisions throughout their lives.<sup>31</sup>

Children learn about SRH from an early age, as **these topics are intertwined with everyday life**. Children and adolescents have the right to be educated about themselves and the world around them in an age- and developmentally appropriate manner – and they need this learning for their health and well-being. Intended to support school-based curricula, the UN's global guidance indicates starting comprehensive sexual education **at the age of 5** when formal education typically begins. However, sexuality education is a lifelong process, sometimes beginning earlier, at home, with trusted caregivers. Learning is incremental; what is taught at the earliest ages is very different from what is taught during puberty and adolescence.<sup>32</sup>

Understanding and accepting body differences will help them accept their differences as they grow up. Starting with SRH education early, before puberty and habit formation, enables the opening of more complex topics in the course of growing up, enabling young people to make **more informed decisions regarding their sexual health and rights**.

Puberty is the time when children become even more interested in topics related to sexuality, as they observe changes in their bodies and emerging feelings. In adolescence particular changes occur, and decisions made during this period will affect young people's health and well-being for the rest of their lives.

---

<sup>31</sup> WHO, 2010

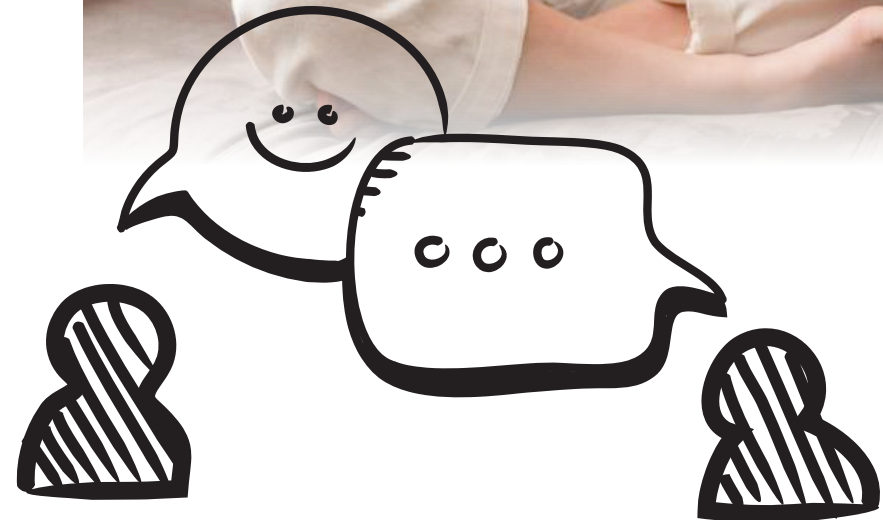
<sup>32</sup> WHO, 2023

## Understanding the intersection between technology and SRH

Technology can play a significant role in facilitating the first contact with SRH for young people. It offers innovative ways to provide accurate information, create engaging educational experiences, and promote open dialogue.

The features inherent to digital tools are key for facilitating and prompting first interactions between youth and SRH content:

- **Anonymity:** The possibility to anonymously ask questions, get advice and interact with peers or adults allows young people to ask what they would be embarrassed to ask in the real world and, thus, try to get the desired information.
- **Interactivity:** Young people prefer digital resources and tools where they can contribute their comments, ask questions and collaborate with their peers. In addition, interactive content such as quizzes, videos, animations, and apps... is much more interesting for young people, which increases their engagement.





- **Accessibility:** Access to smartphones and consequently the Internet is very high in Europe (only 4% of young Europeans do not have access to the Internet), which means that digital tools and information are accessible to the vast majority of young people. They can be accessed anytime and anywhere, making it possible to get information quickly and efficiently when someone needs it.
- **Updated information:** On credible websites, we can quickly and efficiently access the latest information, as well as on SRH topics. As this topic changes and evolves rapidly, also differences can be found among countries, and young people must have access to the latest information about their country.

Young people increasingly rely on the internet for information, with almost **70%** of them using digital spaces for body, sex, and relationship information<sup>33</sup>, additionally **29%** of young claim that the digital environment is their top source of sex education.

Trustworthy sources should provide accurate, age-appropriate, and nonjudgmental information about sexual health and rights. Privacy and data security should be prioritised to create a safe and trusted digital environment. The global gender gap in access, use, and ownership of digital technologies limits their equitable realisation. In Least Developed Countries, **only 54% of women use mobile internet, and women are 20% less likely to own smartphones.**<sup>34</sup>

It is essential to not only rely on digital resources for initial contact with SRH but also include offline resources to ensure the full involvement of all young people.

---

<sup>33</sup> Thompson, "Nearly 80% of Young People Don't Know What to Trust When Accessing Sex Ed Online"

<sup>34</sup> Unesco, 2020

# How digital tools can help in the first contact with SRH



## Online sources and websites

SRH information can be found in in-depth and age-appropriate ways on educational websites and online platforms. These sources can provide information on a variety of subjects. Young people should be given an overall understanding of SRH from the very beginning (instead of just emphasising specific elements like safe sex, sexually transmitted diseases, and anatomy, which typically make up the majority of the school curriculum on SRH). They can be used at home for information seeking or in the classroom as a tool for study and analysis.

## Educational apps

Mobile apps designed for SRH can provide interactive learning experiences with quizzes, videos, animations, and interactive lessons. It makes the learning process more enjoyable, and interactive and helps individuals better understand complex concepts about SRH. Similar digital tools will engage young people and help them to improve their knowledge and widen their horizons about acceptance, decision-making and societal diversity. Examples are period tracking apps<sup>35</sup>, Tabu app and other<sup>36</sup>.

## Virtual reality (VR) and augmented reality (AR)

These tools immerse youth in educational experiences, such as virtual tours of reproductive anatomy or interactive simulations of condom use. A study<sup>37</sup> indicated that an AR application to learn about the anatomy of the reproductive system enhanced participants' knowledge of reproductive organs. VR use is linked with proper equipment, whereas AR is much more accessible, as you only need a smartphone to use AR content. It allows in-depth learning and can be more engaging for students.

---

<sup>35</sup> Worsfold et al., 2021

<sup>36</sup> Unesco, 2022

<sup>37</sup> Baran et al., 2020



## Text messaging and chatbots

Automated text messaging systems or chatbots can provide instant answers to common questions about SRH, offering a discreet and accessible way for young people to seek out information<sup>38</sup>.

In a study which reviewed interventions that sought to reach youth through SMS platforms, the findings provided support for distinct uses of mobile phones to improve SRH teachings worldwide – sending information about the topic, tips, and health-care reminders.

It evidenced robust acceptability and relevance for young people globally and led to improved SRH knowledge, less unprotected sex, and more STI testing.<sup>39</sup>

## Social media and online forums

Platforms can provide spaces for young people to discuss SRH-related topics, share experiences, and ask questions in a supportive community.

Organisations and experts can also use these platforms to provide accurate information and address concerns, and also to organise events or closed groups, reaching targeted audiences.

## Audio podcasts, videos and YouTube channels

These can present SRH information in an engaging and relatable format. For example, the initiative AMAZE provides adolescents, educators, and parents with animated video learning resources and lesson plans engagingly through short, fun and informative animated videos accessible online. It reaches 3500 teachers and around 700000 students, adapting the materials to different contexts and for different countries.



Photo by freepik



<sup>38</sup> Wang et al., 2022  
<sup>39</sup> L'Engle et al., 2016



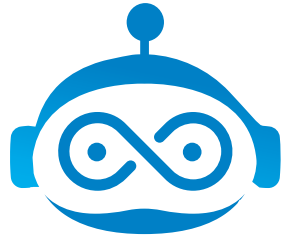
## ENHANCING COMMUNICATION IN SRH THROUGH DIGITAL TECHNOLOGY

The digital environment offers a lot of content that can be used in practice when introducing young people to SRH, be it in the school environment or the home environment, as parents, in a conversation with their child. In this way, young people can read and familiarise themselves with various topics at their own pace, and in addition, they get a broader insight into SRH topics, which are both very important and extensive. This sets the stage for **more open and effective conversations in the future**.

Digital tools that facilitate the first contact with SRH provide valuable resources for individuals who may feel hesitant or uncomfortable discussing these topics face-to-face. These tools should be presented as offering reassurance and guidance to any related topic and object while maintaining confidentiality, reducing barriers and promoting open dialogue.

Regardless of the plethora of possibilities with using technology to introduce pupils to SRH concepts, certain precautions should be taken, as digital content **must be age-appropriate and credible**. Since the first contact with SRH is usually made in the home or school environment, i.e., in the real world, not the digital world, it is important to direct young people to the appropriate digital sphere and to teach them about the benefits and issues they may come across in the digital world.

It is worth mentioning that SRH must be **carried out in the native language** when it is being introduced to them for the first time. For the most part, digital tools are available in only a few of the most widely spoken languages, most often in English, so it is important to find relevant resources for young people in your country that are available in the native language for full inclusion.



## Technology as a way to promote safe sex practices



**Safe sex** refers to anything we do to lower our risk - and our partners' risk - of contracting a sexually transmitted infection (STI)<sup>40</sup>. Taking safe sex measures, such as using birth control like condoms, is not a guarantee that engaging in a sexual act will not bear consequences as many people with STIs are not aware they have them due to a lack of symptoms, and unintended pregnancy can occur even with the correct use of birth control.

The effectiveness of safe sex behaviour among youth hinges on the quality and comprehensiveness of Sexual and Reproductive Health (SRH) education as it can **inform and reinforce young people's decisions** to be more mindful when engaging in sex acts, reducing the risk of infection and harm to their well-being. In addition, comprehensive SRH education helps debunk misconceptions about safe sex that deter young people from engaging in it in greater numbers, such as safe sex practices removing the pleasure from sexual acts.

The late 20<sup>th</sup> century saw a rapid growth in the popularity of SRH education focused on promoting safe sex practices, due to the **AIDS crisis** and an increasing need to raise awareness on the dangers of unprotected sex. Parents at the time, being misinformed and ill-equipped to educate themselves, saw the need to promote safe sex to their children. The health epidemic, therefore, acted as a catalyst for discussion on protecting the well-being of young people, resulting in formal learning settings introducing prevention programmes. However, they were mostly concentrated on the biomedical aspects of the AIDS disease and **preached abstinence instead of mindful contraceptive use** as a way to avoid contagion.

With time, more comprehensive SRH programmes were developed, and moving away from an abstinence-only to a sex-positive approach proved itself to be effective in protecting young people's health. The importance of using protection was emphasised and, in many places, condoms were handed out for free, especially in areas frequented by youth such as universities.

---

<sup>40</sup> What's the Difference between 'Safe Sex' and 'Safer Sex'?

SRH educators spread information on the importance of early detection of STIs, so additional testing centres were created to make it accessible for as many people as possible. Numerous organisations, including educational and medical institutions as well as various LGBT groups, worked together to fight the AIDS epidemic and develop insight into safe sex practices that we know and apply today.

The end of the urgency of the AIDS epidemic did not signal the end of the need to teach about safe sex. In fact, the prevalence of STIs in Europe today point to very **alarming rates of infection**. In 2016, there were an estimated 376.4 million new cases of the four most common curable STIs globally: chlamydia, gonorrhoea, syphilis and trichomoniasis<sup>41</sup>. Although curable, these infections can lead to foetal and neonatal deaths, infertility, increased risk of HIV, not to mention their impact on individuals' psyches. Infection with HPV in particular has been linked to several cancers among both male and female populations, but vaccination rates still lag behind expert recommendations.

Compared to other regions, the incidence of these curable STIs presented a substantial burden in Europe, with chlamydia being the most frequently reported STI. In addition, the data shows that certain sub-populations, such as young people (15–24 years old) and marginalised LGBT groups, are **disproportionally diagnosed with bacterial STIs**<sup>42</sup>. Despite the fact that the European Parliament published a report which stressed that all member states should provide **universal access to contraceptive methods**<sup>43</sup>, government policies across the European Union continue to vary.



Photo by freepik



<sup>41</sup> Francis et al., "Technologies, Strategies and Approaches for Testing Populations at Risk of Sexually Transmitted Infections."

<sup>42</sup> Francis et al.

<sup>43</sup> European Parliament, "EU Countries Should Ensure Universal Access to Sexual and Reproductive Health."



These statistics on a global and European level have now opened discussions on how best to reach the young populations most affected by poor outcomes related to STIs. While technology has been an integral part of youth lives for the majority of the 21<sup>st</sup> century, only in the past decade have specialists and policy-makers begun to harness its possibilities to facilitate and promote safe sex practices. Due to the fact that digital tools are accessible on a large scale and scope, they are seen as an opportunity to spread awareness and knowledge with greater success.

This has led to the development of what the research calls technology-based interventions - also known as **eHealth, mHealth, or digital media interventions**. They typically utilise computers, smartphones, text messaging, and/or other web-based platforms to contact or reach young people in regards to safe sex practices. The various types of technology that are used to promote and facilitate safe sex practices differ according to their **level of intervention** in the target group's lives.

The least interventionistic technology type does not inform the target group or interact with them directly, and instead is designed to predict and assess their needs by observing their online behaviour and preferences. According to a policy brief by the WHO<sup>44</sup>, this type of technology includes:

- **Rapid online surveys:** These are short surveys meant to help SRH programmes and policy-makers better understand how target groups can better benefit from the use of virtual services for STI detection. They are meant to increase the understanding of risk behaviour-related service needs, technology use and social media interests.
- **Social media mapping:** This technology enables programmes to find and list online spaces where people meet virtually (e.g., social media groups, pages, group chats), and identify potential social media influencers (popular people on social media) as potential access points for disseminating safe sex information.

---

<sup>44</sup> UNAIDS and WHO, "Virtual Interventions in Response to HIV, Sexually Transmitted Infections and Viral Hepatitis."

- **Density mapping of data from dating apps:** This technology aims to identify users with the use of geo-mapping to identify the most frequented locations of a sexually-active target group. This, in turn, can help outreach workers estimate the size of and reach populations that would benefit from safe sex interventions.
- **Audience segmentation:** This refers to technology used to categorise populations according to risk behaviours, health-seeking actions and current health status, in order to tailor communication campaigns to these differentiated users.

A more hands-on approach to reaching users in the promotion of safe sex practices is the use of social media and apps to educate target populations, especially via user-generated content or online sex educators. SRH-focused companies and educators use social media platforms frequented by youth, such as TikTok, YouTube, Snapchat and Instagram to transmit safe sex information in an engaging, shortform and easy-to-understand format.

An even more interventionist type of technology that's meant to contact specific users based on their individual situations and/or allows users to get specialised and instantaneous feedback is the use of **messaging and chat services**.

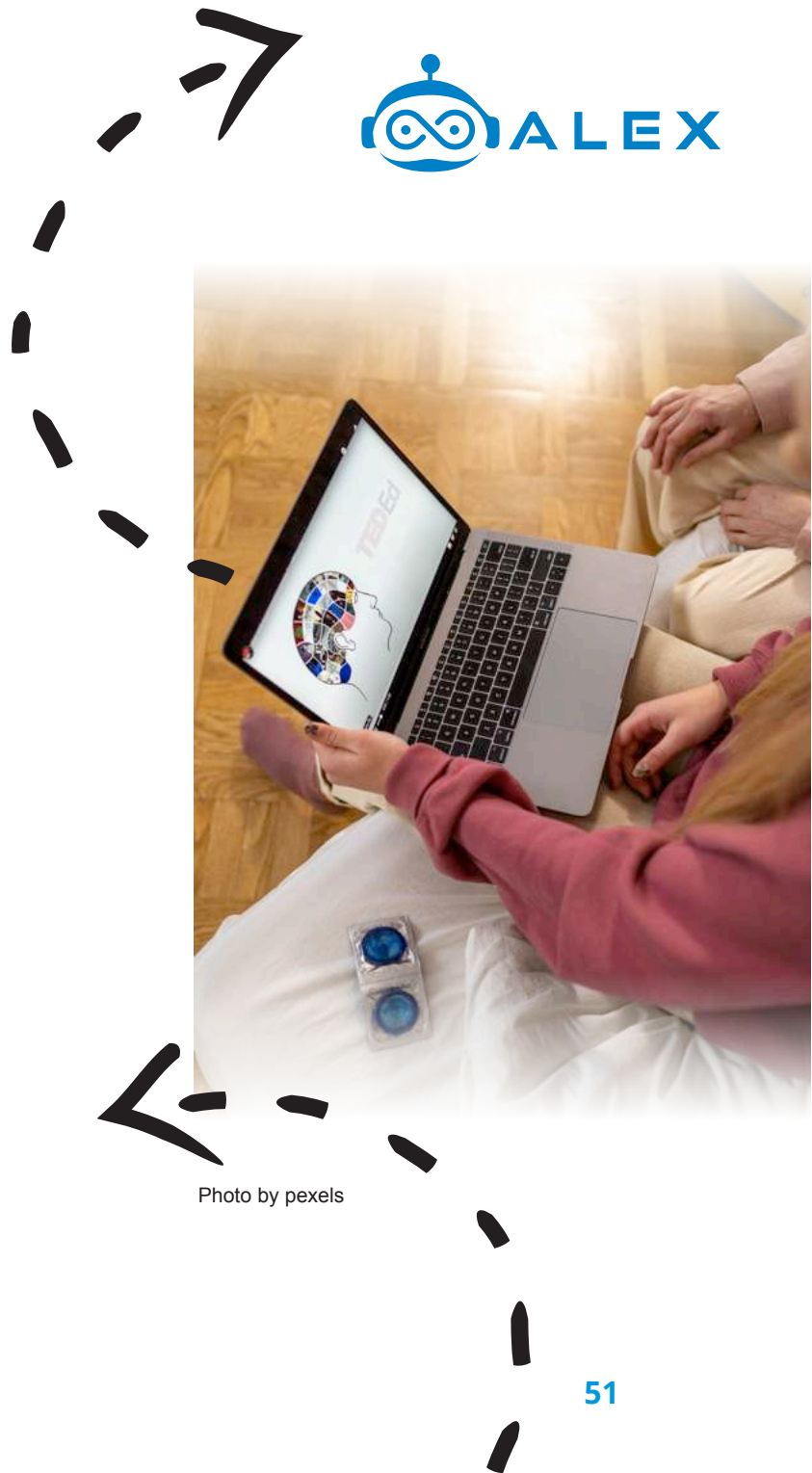


Photo by pexels





An early example of this type of mHealth technology was SMS messaging, wherein users would get up-to-date reminders and information regarding their SRH statuses, leading to improvements in clinic attendance, adherence to treatment protocols and turnaround time from testing, identification and treatment<sup>45</sup>.

More recent iterations of messaging/chat services aim to provide users with user- or AI-generated personalised answers to their inquiries. One of the online tools that serves as an avenue for the exchange of this type of information is a live chat intervention, run by a community of users or mediated by a professional. MiChat was a **live chat intervention** developed with the help of SRH educators. It was intended for young adults from 18 to 29 years old and consisted of eight one-hour motivational interviewing and online sessions designed to reduce condomless anal sex and substance use. The studies found that participation in at least one session of the intervention was associated with reductions in instances of condomless anal sex, which was a promising result<sup>46</sup>.

For users looking for more privacy and a judgement-free zone in which they can get their safe-sex questions answered, **chatbots** are considered a highly effective alternative. This technology provides useful information about STIs and safe practices in a convenient and anonymous atmosphere, and can refer users to relevant services if they detect that there is a need for in-person intervention.

The most hands-on type of technology for promoting and administering safe sex information and services today is **virtual case management**. This is a virtual intervention used to improve the well-being of users living with STIs which consists of a relationship between a case manager and a client. The case manager helps clients achieve goals and supports them to initiate and sustain antiretroviral therapy or PrEP. It also tracks clients as they access healthcare services such as doctor consultations.

---

<sup>45</sup> Bailey et al., "Interactive Digital Interventions for Prevention of Sexually Transmitted HIV."

<sup>46</sup> Brixey et al., "SHIHbot."



Despite being a relatively new phenomenon, the use of technology to promote safe sex practices has been identified as effective in the research for a number of reasons:

- **Increase in condom use:** Youth that acquire SRH information via technological interventions adopt more positive norms surrounding safer sexual activity, positively affecting their sexual behaviour<sup>47</sup>.
- **Quick access to information:** Compared to traditional methods, technological interventions are highly scalable and dissemination of information is fast and cheap. One of the studies on the accessibility of data on the internet showed that adolescents were able to find information on condom use and STD symptoms in an average of 4 minutes, using fewer than six clicks and two searches<sup>48</sup>.
- **Reach of vulnerable populations:** Using technology as a mediator to inform about safe sex practices allows traditionally harder-to-reach populations, such as rural youth and LGBT+ youth, to find and be provided customised and contextualised solutions<sup>49</sup>.

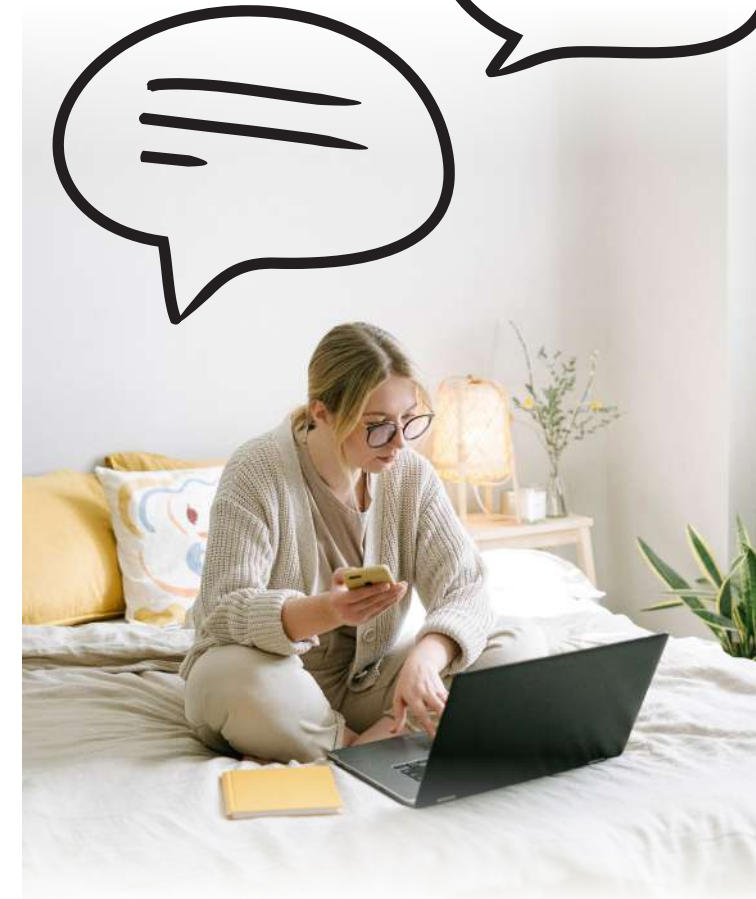
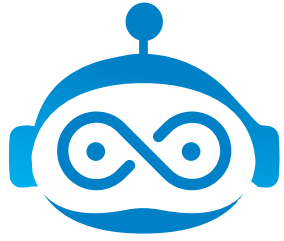


Photo by pexels

<sup>45</sup> Widman et al., "Technology-Based Interventions to Reduce Sexually Transmitted Infections and Unintended Pregnancy Among Youth."

<sup>46</sup> Smith et al., "The Content and Accessibility of Sex Education Information on the Internet."

<sup>47</sup> Daher et al., "Do Digital Innovations for HIV and Sexually Transmitted Infections Work?"



## Technology as a way to identify healthy and unhealthy relationships



In recent years, the advent of new media has led to various changes in the management of collective life and in the relationships between individuals who increasingly resort to the new spaces of the web to interact with friends and acquaintances or establish new relationships.

The creation of these new contacts which do not end exclusively on the web but also have implications in everyday life has prompted the social sciences to question **the transformations that technologies increasingly bring about** in different contexts and times.

Speed is seen as a value in itself, and then the implication is that whoever slows down could become an interference, a nuisance. How does this affect a key concept of Sexual and Reproductive Health (SRH), interpersonal relationships? **Has technology improved or worsened these dynamics?**

Clearly, there are positive and negative effects in the advent and development of technology within our lives. The positive effects can be enhanced through awareness and knowledge of the tools we use and, consequently, the correct balance between technology and reality, i.e., the use of technology as a tool to improve reality and not to replace it. Technology, particularly smartphones and messaging apps, has made it easier for people to stay in touch, irrespective of physical distance.



Photo by pexels





Technology also provides easy access to information, allowing individuals to learn more about various topics and interests, including about SRH. What used to be simple devices for texting and calling other people has now turned into portable computer devices. We now possess something in our hands capable of doing many functions that a computer can do. Furthermore, social media platforms enable people to **share their life experiences with friends and family, providing a way to stay connected and involved in each other's lives even when they can't be physically present.**

On the other side of the coin, however, there are many negative effects: if we are not aware that rapid communication is only a tool and not a substitute for real life, it can lead us to neglecting the time we spend with other people. Millennials and previous generations, for example, grew up with an entirely different way of communicating, with most of their communication being in the form of **direct interpersonal relationships**; essentially, the only tool for remote dialogue was the telephone. The need, therefore, to have to interact face-to-face was decidedly marked, both in terms of private and professional life.

In 2022, **96% of young people** aged 16-29 years in the EU reported using the internet every day, compared with 84% of the adult population . However, in a 2023 consultation by the European Commission, it noted that the platforms and apps which have become integral to the lives of young people have become “a detriment of [their] physical and mental health”, and that loneliness, especially, has reached alarming levels, with **1 in 5 people aged 16 to 25 reporting feeling lonely most of the time**<sup>51</sup>.

The use of technology affects the interpersonal relationships of young people in a number of ways. Excessive digital habits can lead to distractions during face-to-face interactions. Constant checking of phones and devices during conversations can **disrupt the quality of communication**. Technology can also raise concerns about privacy in relationships. The ease of sharing personal information and the potential for online breaches can cause stress and mistrust in relationships.

---

<sup>51</sup> Mental Health.”

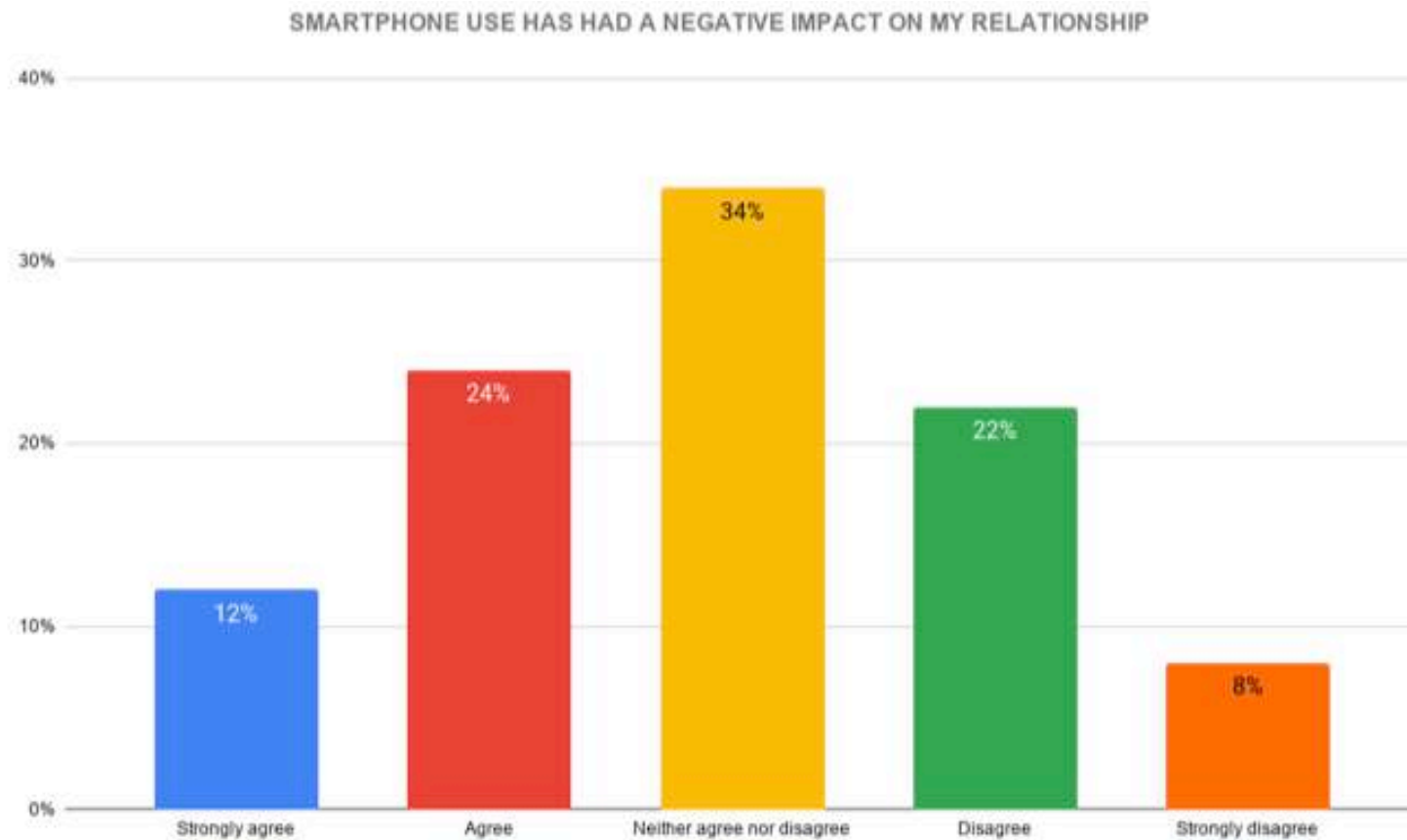
Sellcell, a U.S. telephone company, did research into the effect of the telephone on relationships and found that **54% of people would rather spend time on their phone than in their romantic partner's company**<sup>52</sup>. The survey also shines a light on unhealthy interpersonal behaviours executed with phones, with 43% of men stating they have caught their partners snooping on their phone.

QUESTION	YES	NO
Would you rather spend time on your phone than in your partner's company?	<b>54%</b>	46%
Do you usually check your phone before saying good morning to your partner?	<b>76%</b>	24%
Do you ever message your partner when they are in the house with you rather than speak to them face to face?	30%	<b>70%</b>
Have you ever had a disagreement with your partner by text whilst in the same house?	26%	<b>74%</b>
When you eat dinner together do you ever check or play with your phone?	42%	<b>58%</b>
Do you have any 'no phone zones' in your home, like the bedroom for example?	18%	<b>82%</b>
Have you ever interrupted lovemaking or bedroom intimacy to check your phone?	12%	<b>88%</b>
Does your partner know the passcode to your phone?	<b>63%</b>	37%
Would you let your partner use your phone?	34%	<b>66%</b>
Have you ever caught your partner snooping on your phone?	39%	<b>61%</b>
Have you ever placed your phone face down on the table in the company of your partner so they can't see messages/activity?	21%	<b>79%</b>
Has phone use in your relationship ever caused arguments with your partner?	25%	<b>75%</b>

Picture courtesy of Sellcell

<sup>51</sup> Mental Health."

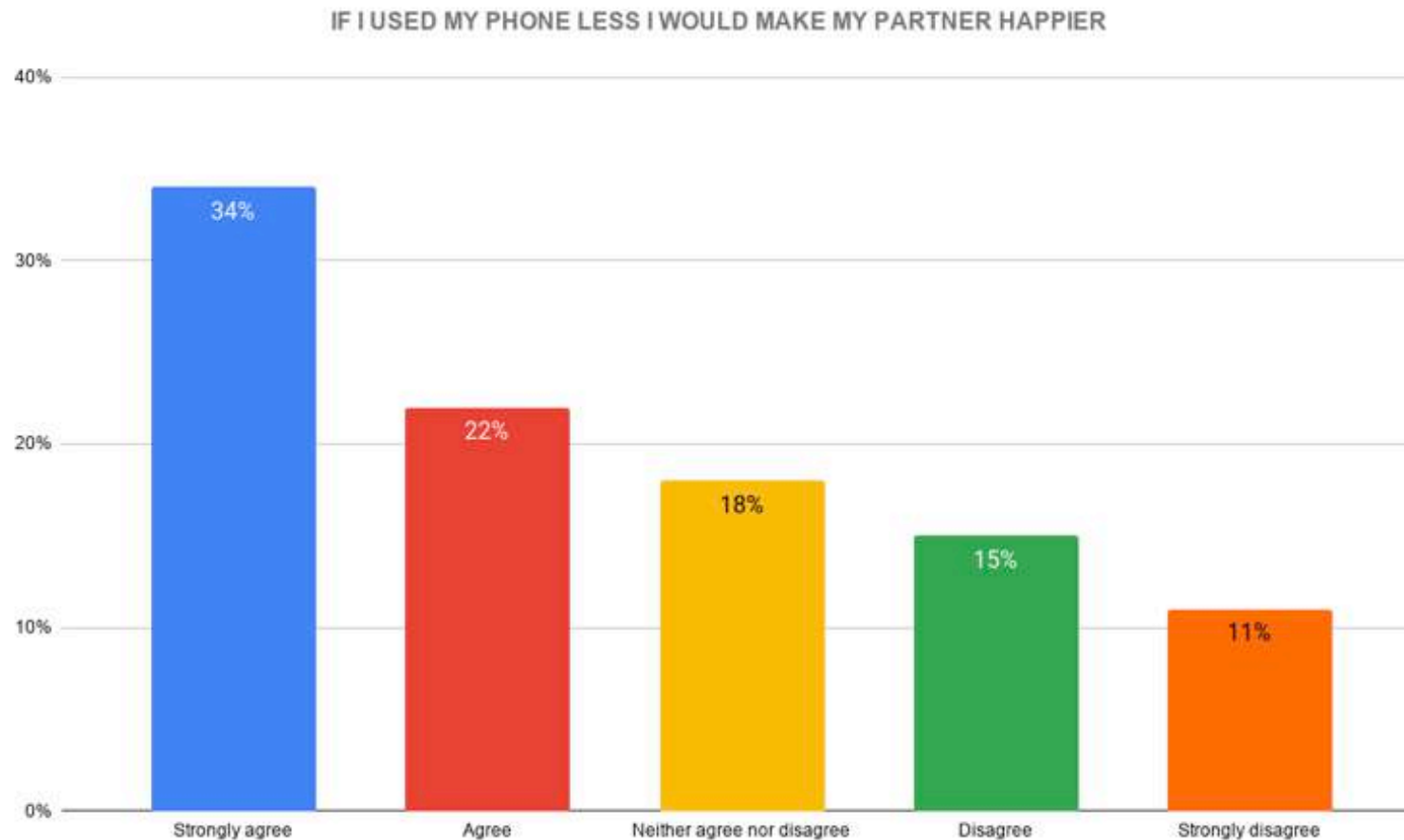
When prompted by the survey to answer whether **the use of their phone has a negative impact on their relationship with their partner**, 36% stated that it did, which exceeds the percentage of those that state it has neither a negative nor positive effect (34%) and those that state it does not have a negative effect (30%).



Picture courtesy of Sellcell



Perhaps most alarming are the responses to the question **“If I used my phone less, I would make my partner happier”**, with 56% of respondents agreeing to this prompt. This finding can have several implications, either related to excessive phone use or unreasonable expectations for interpersonal time in a relationship. Regardless, the survey findings raise questions on how interpersonal relationships may be facilitated or hindered with phone use.



For developing and maintaining a healthy relationship, it is important to have open and honest communication to share our thoughts and feelings and to try to listen actively to the thoughts and feelings of others, either using technology as a helpful medium to facilitate this exchange or not.

When it comes to the impact of the web, it has proven to be an extraordinary driving force for **increasing the number of one's friendships**, with the possibility of meeting people from any corner of the world. The success of forums, first, and of social media pages following this, have been the most shining testimony to this. The web is now a place where users can strike up a kinship by **sharing their passions** for a famous person, a sport, a television series and more.

The other side of the coin, focusing above all on youth who build their identity with the help of the community that surrounds them (family, friends and their social network) is **the distortion of emotions and identity** that may occur with the use of social apps. Text messages, emails and other messaging services allow us to delay our responses and conceal non-verbal communication cues, thus, allowing for more controlled emotional reactions and a “curated” identity, as we decide which side of ourselves to show to the other. Users, and teens above all, should be made aware that regulating our emotions is needed, but should not come at the expense of concealing parts of ourselves to be likable to others.



Picture courtesy of Sellcell

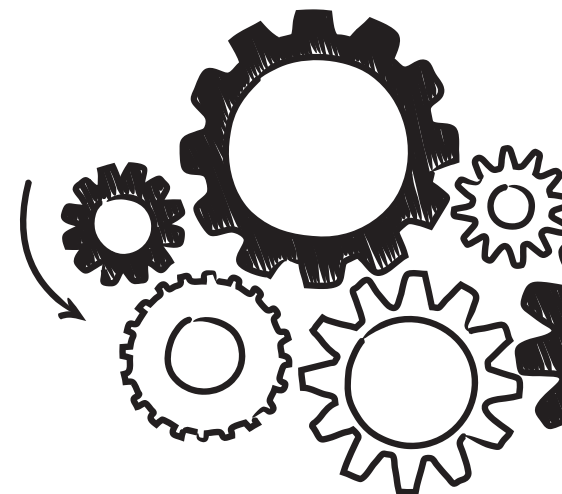
This ‘concealing’ of one self in relation to others to be seen in a more positive light is intrinsically linked to an epidemic of loneliness experienced by young users online, discussed earlier in the text. By relating to the concept of „I share therefore I am”, youth feel alone when they neglect the ability to validate their own experiences and feelings outside of the online world.

However, it would be shortsighted to not consider how technology can and has helped youth **navigate and identify whether their relationships are healthy**, which reinforces key elements of SRH education. Conversations and introspection related to interpersonal relationships that had once been confined to a therapist’s office or had not been discussed at all due to fear or stigma have now become more accessible and commonplace, being brought to light and given a name thanks to digital tools.

Several websites and apps offer quizzes and assessments designed to evaluate the presence of healthy or unhealthy dynamics in a relationship. These tools typically ask users a series of questions about their relationship habits, such as communication, trust, respect, self-esteem, and other relevant elements, and provide feedback based on the responses. One such resource is the website That’s Not Cool which helps young people **prevent and identify the signs of abusive and toxic dating relationships** among adolescents with their online tools, materials and games.

Certain mobile apps are designed to be used by couples together, to facilitate and simplify their interactions. These often include features that **encourage communication, shared activities, and goal-setting**.

- One such app that can help with communication is Love Nudge, which couples can use to discover and understand their partner’s love language, fostering better communication and connection.
- Between allows partners to share notes, photos, and memories privately. It’s a digital version of a scrapbook or journal that both partners can contribute to.

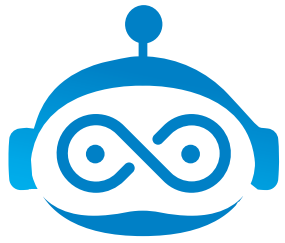


Some apps offer ideas for date nights, conversation starters, or intimacy-building activities. These can add variety and excitement to a relationship, especially for couples looking to **strengthen their emotional and physical connection**.

- Paired is an app s a relationship app that offers daily questions, relationship games, quizzes, exercises, and expert video guidance for couples on topics like sex & intimacy to connection and growth
- Purpose Built Families is meant to teach couples the skills to maintain healthy relationships. It uses a system called PAIRS (Practical Application of Intimate Relationship Skills) to help partners understand their own and their spouse's needs, and come up with practical ways to meet them. The scientifically-accurate Relationship Assessment test offers a realistic look at your current status through six questions. Several guides like „Five questions for clarifying expectations” or the „Letting go of grudges letter” enable smoother communication for difficult topics.

While apps can be valuable tools, it's important to remember that they should complement, not replace, real-life interactions and communication. **The key is to use these tools in a way that enhances your relationship and supports the unique needs of you and your partner**. Communication and understanding each other's preferences regarding technology use are crucial for a healthy balance.





## Technology as a way to connect youth to healthcare systems



In our rapidly advancing technological age, technology is revolutionising how youth access healthcare systems. This chapter delves into the transformative potential of technology in Sexual and Reproductive Health (SRH) education, particularly in addressing the unique challenges faced by underrepresented youth, including sexual minorities and those with disabilities.

To empower youth in SRH, providing them with accurate and accessible information is crucial. Technology offers dynamic platforms for disseminating SRH content. Stigma often obstructs open discussions about SRH, especially for sexual minorities.

**Technology enables confidential participation in virtual discussions and support groups**, fostering a judgement-free zone for obtaining information.

This section will explore three crucial ways technology connects youth to healthcare systems: telehealth, gamification, and enhancing privacy and security. Telehealth provides remote access to healthcare, improving accessibility. Gamification and social media engage youth actively in SRH education, dispelling myths. Privacy measures are essential for building trust in technology platforms.



Photo by freepik



In the rapidly evolving digital landscape, technology has emerged as a powerful tool for reshaping communication, education, and access to information. Conventional approaches to SRH education often encounter limitations when attempting to reach and engage diverse segments of the youth population. Notably, sexual minorities and youth with disabilities frequently find themselves marginalised within SRH curricula due to various barriers, including **stigma, inadequate inclusive content, and communication barriers**.

Technology serves as a powerful ally in healthcare access. From remote consultations through telemedicine to health management via mobile apps, electronic health records, wearable devices, and online portals, technology has transformed the healthcare landscape. Technological advancements **connect individuals with healthcare professionals, empower self-management, streamline data exchange, monitor health metrics, and provide easy access to vital information**, ultimately enhancing healthcare accessibility and quality.

Let's delve into each of these technological innovations and their far-reaching impact on connecting youth with healthcare systems.

- Telemedicine for remote consultations

Telemedicine utilises digital communication tools such as **video calls and messaging platforms** to connect patients with healthcare professionals. This approach allows individuals to receive medical advice, prescriptions, and consultations without the need to travel to a physical clinic. For example, a rural resident with a reproductive issue can consult a gynaecologist through a video call, receiving expert advice and a prescription without traveling for hours to a distant clinic.





- Mobile health apps for self-management

Mobile health apps empower patients to monitor their health conditions, track medications, and access personalised health information. These apps **promote self-management** and enable users to make informed decisions about their well-being. For example, a diabetic patient interested in improving their fertility can use a mobile app to track blood sugar levels, log meals, and receive personalised dietary recommendations.

- Electronic Health Records (EHRs)

EHR systems enable healthcare providers to securely store and share patient medical records electronically. This technology **streamlines information exchange between different healthcare settings**, enhancing continuity of care and reducing duplication of tests or procedures. Thanks to EHRs, the healthcare provider can quickly access the patient's medical history, allergies and recent tests, ensuring the continuity of care without repeating unnecessary procedures.

- Wearable devices for health monitoring

Wearable devices, such as **smartwatches and fitness trackers**, monitor various health metrics like heart rate, activity levels, sleep patterns and menstruation. Young people can use these devices to proactively manage their health, even when it's related to SRH, and share data with healthcare professionals

- Online health portals for access to information

Online health portals provide patients with access to their medical records, test results, and appointment scheduling. This convenience can empower youth to actively engage in their care and communicate with their healthcare providers.

Stigma and cultural taboos frequently hinder open discourse about SRH topics among young individuals. For sexual minorities, expressing concerns and seeking guidance can prove particularly daunting due to apprehensions about discrimination.

Technology tackles this obstacle by enabling anonymous participation in virtual discussions, forums, and support groups.

**Anonymity creates an environment in which youth can pose questions, share experiences, and access information freely, without the fear of judgment.**

The integration of assistive technologies plays a pivotal role in fostering the inclusion of youth with disabilities in healthcare systems through the use of digital tools. These individuals often encounter formidable barriers when seeking access to SRH education.

Technology serves as a critical enabler, effectively addressing the diverse learning needs and disabilities they may contend with.

Through the deployment of adaptive technologies, SRH content can be tailored and presented in a multitude of flexible formats, ranging from audio and visual to tactile modes. This adaptability ensures that young individuals, each with their unique abilities and learning styles, can effectively engage with and comprehend the material. Furthermore, the seamless integration of assistive technologies, including screen readers and voice commands, substantially amplifies accessibility.

This enhancement is particularly significant for visually impaired and differently-abled youth, ultimately contributing to **the establishment of a more inclusive healthcare system.**



Photo by pexels



This inclusive approach caters to the distinctive needs of all, ensuring that no youth is left behind in their pursuit of comprehensive SRH education and healthcare access.

Geographical constraints and limited access to healthcare facilities can dissuade youth from seeking vital SRH services. Technology introduces the concept of **telehealth**, enabling youth to consult healthcare professionals remotely through video calls, chatbots, or messaging platforms. This innovation not only improves accessibility but also normalises seeking healthcare, as youth can initiate contact from the comfort and privacy of their own spaces.

**Gamification**, the integration of game elements into educational contexts, holds the potential to captivate youth's attention and stimulate engagement. Through gamified applications and platforms, youth can acquire knowledge about SRH practices in a dynamic and interactive manner. Meanwhile, social media, an integral part of contemporary communication, serves as a platform to disseminate SRH information widely. By harnessing popular social media channels, youth workers can share reliable content, dispel myths, and cultivate positive behaviours.

As technology becomes increasingly intertwined with SRH education, concerns pertaining to privacy and data security gain prominence. To ensure the safety of users, robust data protection measures must be established. Youth should retain control over their personal information and possess the capacity to determine their desired level of anonymity. Furthermore, transparency concerning data collection and utilisation is essential for fostering trust between users and technology platforms.

From the perspective of youth, technology can bridge gaps in the healthcare system, making SRH information and services more accessible. For example, telehealth platforms allow young individuals to consult healthcare professionals remotely, providing a safe space for discussions about sensitive topics.

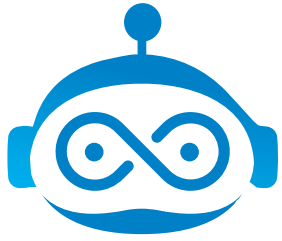


Additionally, mobile apps and online portals grant them easy access to personal health data and appointments, promoting active engagement in their care.

However, healthcare professionals have their own considerations. They recognise the potential of technology in enhancing SRH education and service delivery but also express concerns about the quality of information available online and the reliability of mobile health apps. **Ensuring that digital platforms provide accurate and evidence-based information is crucial for healthcare professionals.**

Regarding data privacy, both sides agree on the importance of robust data protection measures. Youth should maintain control over their personal information and have the ability to determine their desired level of anonymity when seeking SRH information or services. Transparency concerning data collection and utilisation is equally vital for fostering trust between users and technology platforms, ensuring that both youth and healthcare professionals can confidently navigate the digital SRH landscape.

In summation, the fusion of technology and SRH education holds considerable promise for connecting youth, including sexual minorities and those with disabilities, to healthcare systems. The digital tools discussed possess the potential to **transcend barriers encompassing stigma, limited accessibility, and misinformation**. By embracing technology as a means to empower youth and youth workers, society takes a substantial stride toward constructing an all-encompassing and comprehensive SRH education framework.



## Technology as a way to increase the visibility of LGBTQI+ issues



### Explanation of the term LGBTQI+ and a historical overview

- L - lesbians**
- G - gays**
- B - bisexual people**
- T - transgender people**
- Q - queer people**
- I - intersex people**

The term LGBT (lesbian, gay, bisexual, transgender) was coined in the 1960s in the United States, but it did not become widely used until the 1990s. There are various abbreviations that develop this basic term, such as LGBTQ - people who identify as queer or are unsure of their sexual identity (questioning) or LGBTI – intersex people. These acronyms are sometimes combined to form one common one - **LGBTIQ or LGBTQ+**.

The “+” includes people who do not identify as either men or women and includes individuals who are attracted to many genders or to individuals regardless of gender. It also includes those who experience little to no sexual attraction to others and those who do not experience romantic attraction.

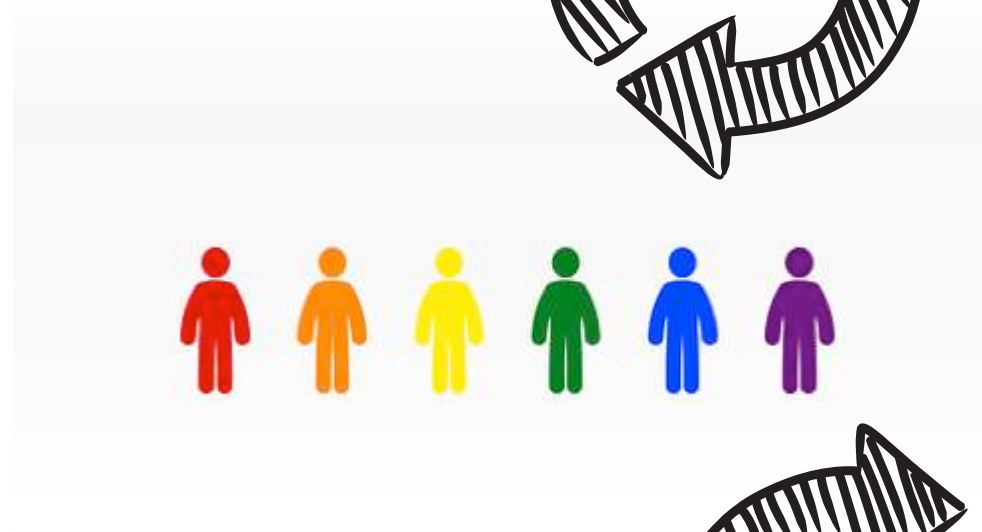
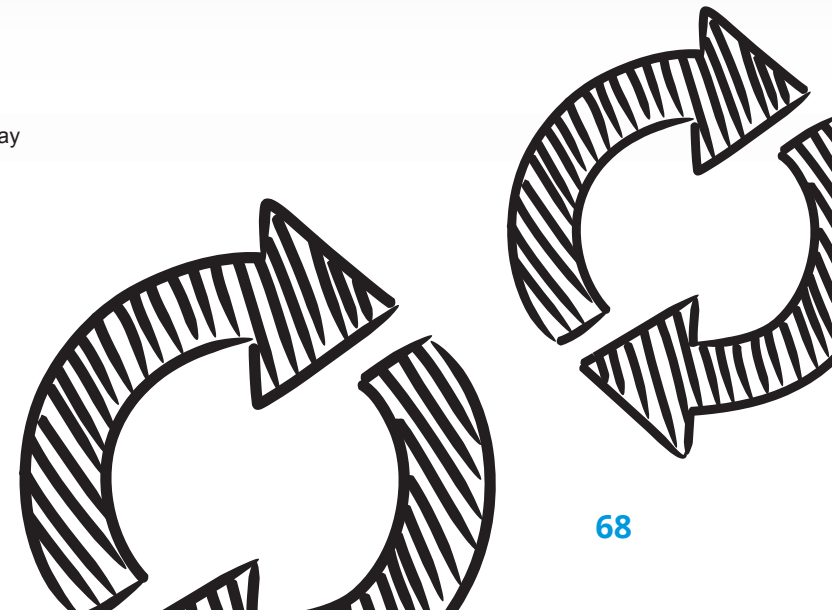


Photo by pixabay





The first social movements related to the fight for LGBT rights emerged in the late 1960s. In June 1969, demonstrations by members of the LGBT community took place in New York against a police raid that occurred at the Stonewall Inn club.

In France in the 1960s, there was the Front homosexuel d'action révolutionnaire, whose slogan was „Proletarians of all countries, masturbate!” In Sweden, the building of the National Council for Health and Welfare was occupied for weeks, demanding that homosexuality be removed from the list of diseases. In Spain, the first LGBT+ rights march took place less than two years after Francisco Franco's death. After World War I, a strong gay movement grew in Germany. Tolerance and acceptance of LGBT+ people in this country increased in the 1920s (only to collapse after Hitler came to power). London's LGBT venues have received tens of thousands of aid funds from Mayor Sadiq Khan to help them weather the coronavirus crisis.

The Equality Parade has been taking place in Warsaw (and other Polish cities) since 2001 – Its postulates are: protection against discrimination, rights of transgender people, gender equality, legal regulations on hate crimes and hate crimes against LGBTQ people, the right to reliable sex education.

## Visibility and activity of the LGBTQI+ community in digital media

1. **Streaming** has proven to be the most inclusive medium when it comes to LGBTQI+ representation - about 69 % of all LGBTQ+ audiences say they see efforts to improve media inclusivity . It shows that LGBTQ+ people are on average 10% more likely to consider streaming services as the most inclusive media platform and 5% more likely to more likely to preferentially treat social media as more inclusive than non-LGBTQ+ respondents. According to the report, the LGBTQ+ community expects **more accurate portrayals of LGBTQ+ people** from the media sector and the brands that serve it.



### **Avoiding stereotypes and offering more authentic and realistic images of LGBTQ+ people**

**in materials and ads** is the best way to improve inclusivity. As of 2022, over 817,000 movie titles are available on traditional TV channels and streaming services, but just over 1,000 are LGBTQI+ related. The number of new LGBTQ+ titles dropped from 50 in 2020 to 36 in 2021. The level of inclusivity in the media, TV series, and advertising campaigns is focused on gays and lesbians, which means that many other groups are underrepresented (e.g., transgender, bisexual, pansexual people).

Moreover, according to the aforementioned Nielsen report, members of the LGBTQI+ community are ready to express their needs and share their experiences so that advertisers and publishers from the media sector can establish a dialogue with them and create content that will be perceived as real by the community.

2. In Western Europe, many companies support events aimed at the LGBT community, which is the subject of numerous **advertisements**.

a) IKEA is recognised in the world as one of the most important brands supporting the LGBT community; the first time a same-sex couple appeared in their advertisement was in 1994.

b) Foreo, introduced Issa 2 sonic toothbrushes available in gift sets addressed to homosexual couples and used a video with a pair of homosexual youtubers in the advertising campaign.

c) The airport carrier PLL LOT from Poland in 2014 launched the „Friendly Travel” tab, which included, among others, a rainbow flag and the slogan „Discover the colourful side of the world! Plan your vacation in lively, LGBT-friendly places.”

3. Showing solidarity with LGBTQI people by **sharing graphics in social media** with information that you are an ally of this community (e.g. in June, which is an important month for the LGBTQI community and is called Pride Month).

4. **Online actions** of individuals belonging to the LGBTQI+ community to increase visibility.

- **Social media**

Social media has been extremely useful as an avenue which sexual minorities can use to spread their ideas and normalise their lifestyles to the outside world, unlike before. LGBT+ celebrities like singers, writers, dancers, choreographers, politicians participate in social media campaigns against discriminations and stigmatisations. They showcase stories from own private and professional life, help and support the LGBT+ community in different actions. In this way, they declare that everyone has the right to freedom, to conducting a normal domestic life. By discussing 'coming out' and how difficult life can be as a sexual minority due to the fear of not being accepted, they fight for humanity and dignified treatment.



Photo by freepik



- **Showcasing influencers promoting valuable content**

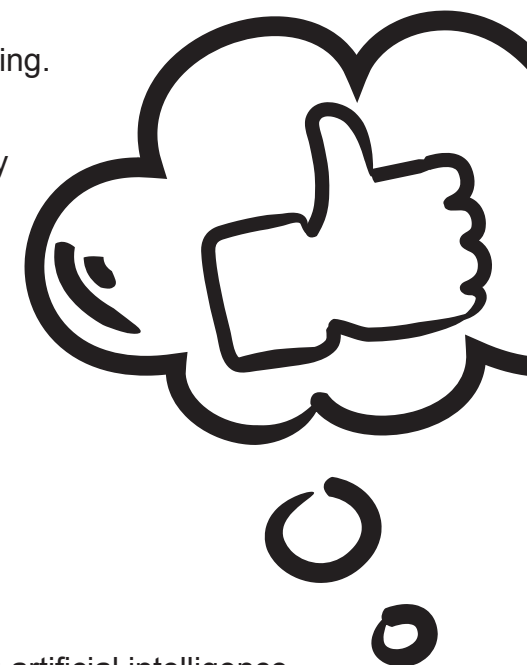
a) Jakub and Dawid represent the most popular gay couple in Poland. As representatives of the LGBT community, they managed to gain visibility in national mass media and their social media accounts have an extensive reach. They have repeatedly been invited to speaking engagements to discuss issues related to the LGBT+ community.

b) Rickey Thompson gained widespread success on the platform Vine and has continued to broaden his following. He is a successful model, actor, and comedian. He openly came out as gay in 2016 and has continued to rise to fame since. He then appeared on the cover of Gay Times in 2019. Thompson has a distinct feisty personality and a strong sense of humour, which has spurred his career. He often posts comedic videos on Instagram.

c) Chella Man is an Asian-American actor, model, artist, and famous YouTuber. As a social media influencer, he inspires his follower base and shares his unique experiences as a transgender, deaf, and Jewish person of colour.

- **Artificial intelligence**

Since early 2021, the Trevor Project, the largest LGBTQ youth suicide prevention organisation, has been using artificial intelligence technology called the Crisis Contact Simulator to train its counsellors on how to talk to youth in crisis. The tool simulates what such a conversation might look like with the help of AI chatbots. At the time of its launch, CCS gave access to one such personality. At the end of 2021, The Trevor Project added a second one called Drew. The new chatbot represents a fictional youth in their 20s who lives in California and face stalking and harassment. The technology has trained over 1,000 advisors.



Thus, it has created **a database of people well prepared to talk to young LGBTQ people** who have different experiences, intersecting personalities, each of whom has their own story and feelings. Drew, the more modern of the chatbots, offers a wider range of practice scenarios and narratives to better prepare counsellors to engage with any young person in times of crisis. In this case, technology directly serves those involved in helping LGBTQ youth, but it can contribute to greater transparency of LGBTQ communities, openness and expression of one's personality without fear of stigmatisation and discrimination.

## Good practices of SRH education that tackles LGBTQI+ issues online

There are several avenues online that prioritise the holistic learning of Sexual and Reproductive Health (SRH) education, from the perspective of including LGBTQI+ topics.

- “Equality Lesson” provides materials for teachers on **how to talk about sexual orientation at school and support young people**. Topics covered in the publication that are available on the Internet include:
  - knowledge about sexual orientation and various forms of discrimination
  - answers to key questions about sexual orientation and the situation of non-heterosexual youth at school
  - tips on how to talk to a young person revealing their non-heterosexual identity in order to gain their trust and guarantee a sense of security
- „Know your rights” campaign (2017, Poland). Its aim is to draw attention to violations of **the rights of LGBTI patients** and to make them aware that they can fight for them. The organiser of the Internet campaign „Know your rights” is Campaign Against Homophobia.

Research conducted by the Commissioner for Human Rights shows that the rights of LGBT patients are violated by: inappropriate, offensive and even vulgar comments regarding the patient's sexual orientation, identifying homosexuality with illness and pedophilia, making further treatment dependent on an HIV test, in extreme cases - refusing treatment or even referral for tests and disclosing the patient's sexual orientation without consent and knowledge. Using visual material with messages such as, „The best cure for your ailment will be intercourse with a real man”, and „Is it a man, is it a woman?” (in relation to an intersex patient) on websites and applications addressed to LGBTI people, **discrimination and propaganda is disseminated.**

- The project Tranzycja.pl has created **a map of trans-friendly specialists and specialists.** It contains the names of doctors of various specialties, psychologists and psychotherapists, and represents the largest publicly available database of knowledge about transgenderism and the transition process in Poland.



## 6. Conclusions



### The goals of the Guide – a brief reminder

As the overarching objective of the project is to promote the teaching of digitally-mediated & holistic Sexual and Reproductive Health (SRH) education, this Guide has been written to ensure that youth workers in their outreach efforts will have the necessary pedagogical and digital readiness to take advantage of innovative digital methods and tools. In saying this, we have strived to provide youth workers with relevant data, advice and best practices on adapting their methods to the 'new (digital) normal' that they, along with the young people they teach, find themselves navigating, making sure to emphasise how these tools can facilitate contact with underrepresented groups, such as those with disabilities.

As a whole, this Guide on adapting SRH practices to existing digital tools ensures that the youth professionals and stakeholders interested in the project will gain deeper insight into:

- the limitations of traditional SRH programmes
- the inclusive and essential nature of the topics and approach taken by holistic SRH practices,
- how digital and online mediums today (social media, interactive apps, telehealth programmes, etc.) can be used as avenues for the better reach and impact of this subject matter.



Photo by freepik





## Recommendation on adapting SRH practices to digital tools / methods

This part of the content explains how this Guide contributes to the project's objectives and gives some recommendation on adapting SRH practices to digital tools/methods based on the chapters prepared by project partners.

### The state of SRH education in Europe today

Younger generations have unlimited access to a wealth of information through the internet. Today's youth belong to „Generation Z,“ characterised by their digital proficiency and curiosity about the world around them. However, they have also been labelled as the „most sensitive“ generation, as evidenced by the inclination of young people to use online platforms to satisfy their various interests, especially those related to sexual health (particularly affecting young women and the LGBTQ+ community). The tendency to seek such content online can be explained by the sensitive nature of the topic (considered taboo in many environments), but also by the lack of high-quality information on SRH in formal education systems in the EU.

Despite international and regional organisations, as well as scientific experts, recommending the introduction of SRH education for young people, the actual implementation of this topic in a comprehensive manner in EU member states leaves much room for improvement:

- Many schools in various countries avoid topics related to gender equality, sexual diversity, and the inclusion of specific marginalised groups, such as those with disabilities
- In most countries, teacher training for delivering SRH information is also neglected; in other words, education in this area suffers when teachers are unsure of how to assume the role of sexual educators.

## The limitations of traditional SRH education

Approaches and programs for administering traditional SRH education vary due to differences in the social, moral, ethical, and religious values of a given country. Nevertheless, we can highlight some key limitations present in traditional SRH teachings:

- A negative (fear-based) approach to sexuality and its corresponding aspects.
- A lack of focus on the emotional aspects of SRH, such as pleasure being one of the key components of healthy relationships, sexual health, and emotional well-being.
- A heteronormative lens applied to all information. Many traditional sexual education programs assume heterosexuality as the norm and do not address the needs and experiences of LGBTQ+ individuals, leading to feelings of exclusion, stigma, and misunderstanding among LGBTQ+ students.
- A diffusion of gender stereotypes and roles (outdated notions of masculinity, femininity, and associated behaviours) and a lack of emphasis on consent in sexual relationships and setting boundaries as a consequence of gender inequality.

## Holistic SRH education

This form of education is a more balanced and comprehensive approach that considers not only the physical aspects but also the emotional, social, and cultural aspects of sexuality. It aims to promote gender equality, respect, and understanding, contributing to more satisfying and responsible sexual behaviours, as well as increased well-being of young people.

Holistic SRH education offers children and young people, girls and boys, objective, scientifically correct information on all aspects of sexuality.

This holistic approach seeks to fully activate all aspects of the learner's personality (intellect, emotions, imagination, body) for more effective and comprehensive learning. It is, therefore, not limited to the prevention of risks related to sexual behaviour and does not favour one way to conduct oneself before, during and after these acts. To achieve this result, the holistic pedagogical methodology stimulates the learner to discover and elaborate their experiences by revisiting their educational history using various types of mediums (music, drawing, theatre, other...), aiming at the integration of the person, and the search for individual and collective unity.

**In summary:** Holistic SRH education, therefore, includes theoretical/scientific elements such as the physiology of our body, reproductive processes, the spread of diseases and prevention, but also the affective and emotional parts of sexuality, which can be defined as sexual well-being and is linked to emotions and to affections.

## Recommendations for educators: implementing holistic SRH education in youth work

- > SRH education is essential to prevent and combat abuse, sexual violence and sexual exploitation because it constitutes an ideal context for raising awareness on the issue of sexual health and rights.
- > It is important to understand as a society that, alongside the mere sexual act, there are emotions and sensations involved with sex, which it is important to learn about and manage. Developing awareness and control over one's emotions requires constant education and practice, which starts from childhood and continues throughout all phases of our life.

- > Emotional education is an important element because it serves to help learners understand that emotions always have their reasons. They can serve as a warning that something in our daily lives and in our interpersonal relationships is not going as it should. The first step in understanding the relationship between emotions and sexuality for young people is the development of personal awareness: by recognising and acknowledging their feelings, they can better understand how these emotions may be related to the topic of SRH education.
- > Holistic SRH education means teaching consent, which is the right to say no, to understand and set one's limits, and to not be persuaded to do something that doesn't make you feel good.
- > Holistic SRH education promotes the understanding of the person in their entirety considering their social, physical, biological, mental, emotional and spiritual dimensions according to a perspective of integration and interdependence. It is a fusion between theory and practice.

## How technology can complement the teaching of holistic SRH education

The digital age has ushered in a myriad of opportunities to revolutionise SRH education. Traditional approaches to SRH education often fail to resonate with youth, rendering them less effective in conveying vital information. However, technology has the capacity to engage and empower youth in ways previously unattainable. Technology provides a dynamic platform for disseminating SRH-related content. Online platforms, mobile applications and dedicated websites have become valuable resources offering interactive and engaging materials tailored to the diverse needs of youth. Through multimedia content, such as videos, animations, quizzes, and personal narratives, comprehension and retention of information are enhanced.

## The benefits and considerations of utilising digital tools in youth work practices:

- > Many youths (especially sexual minorities) fear discrimination when seeking information and guidance. Technology addresses this challenge by enabling **anonymous participation** in virtual discussions, forums, and support groups.
- > Assistive technologies, such as **screen readers and voice commands**, present content in various formats, including audio, visual, or tactile modalities, ensuring that differently-abled youth can engage effectively.
- > Online platforms can include interactive modules that focus on **privacy and digital citizenship**. These modules engage youth through scenarios and quizzes that teach them about privacy settings on social media platforms, recognising phishing attempts, and the importance of strong, unique passwords.



Photo by freepik



## Recommendations for educators: how technology can facilitate first contact with SRH

- > **Online sources and websites.** These resources can be used at home for information seeking or in the classroom as a tool for giving young people an overall understanding of SRH from the very beginning.
- > **Educational apps.** Mobile apps designed for SRH, such as period tracking apps, can provide interactive and engaging learning experiences with quizzes, videos, and interactive lessons.
- > **Gamification of SRH education.** Digital games and simulations can simulate real-life scenarios related to SRH, helping young people understand the consequences of their decisions and actions.
- > **Virtual reality (VR) and augmented reality (AR).** They can immerse young people in educational experiences, such as virtual tours of reproductive anatomy or interactive simulations of condom use.
- > **Text messaging and chatbots.** Automated text messaging systems or chatbots can provide instant answers to common questions about SRH, offering a discreet and accessible way for young people to seek information.
- > **Social media and online forums.** Platforms can provide spaces for young people to discuss SRH-related topics, share experiences, and ask questions in a supportive community.
- > **Audio podcasts, videos and YouTube channels** can provide adolescents, educators, and parents with video learning resources and lesson plans through short, fun and informative videos.





## Recommendations for educators: how technology can promote safe sex practices

- > **eHealth, mHealth, or digital media interventions** typically utilise computers, smartphones, text messaging, and/or other web-based platforms to contact or reach young people in regards to safe sex practices.
  - > **Rapid online surveys, social media mapping and audience segmentation** are examples of technology designed to predict and assess users' safe sex needs by observing their online behaviour and preferences.
  - > **Social media and apps** educate target populations via user-generated content or online sex educators by transmitting safe sex information in an engaging, shortform and easy-to-understand format.
  - > **Chatbots** answer users' safe-sex questions in a highly private and confidential manner.
- resources and lesson plans through short, fun and informative videos.

## Recommendations for educators: how technology can identify healthy and unhealthy relationships

- > **A balance between technology and reality.** Technology should be used as a tool to improve communication and trust in romantic relationships, instead of hinder it.
- > **Setting boundaries** in virtual interactions is a needed step to ensure relationships remain healthy.



- > **Time limit.** It might be helpful to put technology under a time limit if it negatively impacts real-world relationships.
- > **Active listening.** In healthy relationships, openness to communication with another person is important and technology can help facilitate this.
- > **Using apps.** Young people can turn to apps to help them identify signs of toxic relationships and aid in communication with a partner.

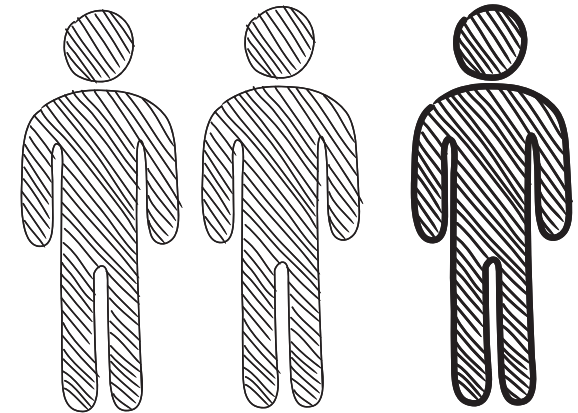
## Recommendations for educators: how technology can connect youth to healthcare systems

- > **Sexual minorities and individuals with disabilities.** Technology enables these youth groups to have better access to healthcare in the field of SRH, without stigma and judgment.
- > Content related to SRH can be presented in various formats: **auditory, visual and tactile.**
- > **Telemedicine, gamification** and **enhancing privacy and security** are three key ways in which technology connects youth with healthcare systems.
- > **Technology as a way to improve access to healthcare.** Remote consultations, telemedicine, health management through mobile apps, electronic health records, wearable devices, and special internet portals are all examples of digital tools that can connect patients with healthcare.
- > **Inclusivity** in the healthcare system is a key benefit of integrating health with technology.

# Recommendations for educators: how technology can increase visibility of LGBTQI+ and gender - based issues

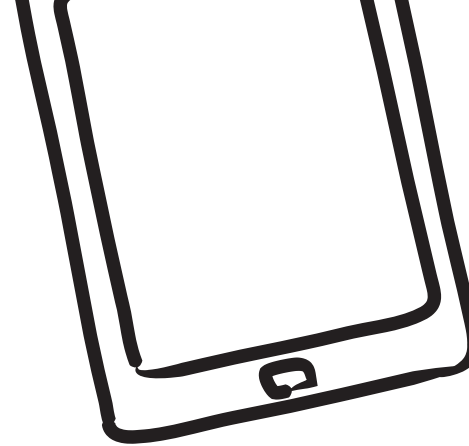


- > **Streaming services** offer diverse and inclusive narratives that resonate with a wide audience, fostering understanding, empathy, and representation.
- > Avoiding stereotypes and offering more authentic and realistic images of LGBTQ+ people can be achieved today with inclusive **materials and ads**
- > Showing solidarity with LGBTQI people with **social media posts**
- > **Online actions can help by:**
  - a) Showcasing **influencers** that promote LGBTQI+ content
  - b) **Using artificial intelligence** to streamline conversations related to LGBTQO+ issues



## General conclusions

- **Traditional SRH education has numerous limitations** and does not align with the challenges and requirements of contemporary times.
- A **holistic approach** to SRH education is crucial.
- **Technology is a powerful tool** that can support the acquisition of knowledge in the field of SRH, especially among marginalised youth. However, it is essential to consider not only the benefits of its use but also the limitations it may bring.
- **Sexual educators, youth workers, teachers and other individuals who work or aspire to work with youth** in the realm of SRH should be equipped with the necessary digital readiness and skills to purposefully use technology as a tool to enhance the knowledge and skills of young people in this subject matter.



## 7. Bibliography

Angeli, Romeo A. Società, relazioni e nuove tecnologie. Milano: Angeli, 2011.

Araújo, T. M. E., P. Dantas Almeida, A. F. Castro Prerira Chaves, E. C. da Costa Leite Sousa, R. V. Nunes, Á. F. L. de Sousa, I. Fronteira. „Factors associated with unprotected sex in people who consume sexually explicit media.” *Rev. Bras. Enferm.* 74 (2021): doi: 10.1590/0034-7167-2021-0061.

Aslinda, Nora, Mohd Amin, Saiful Farik Farik, Saiful Mat Yatin, Jafalizan Md, Noor Zaidi Sahid, Shamila Shuhidan, Siti Noordin, Wan Malek, Wan Abdullah. „Making an Informed Decisions in a Teaching Hospital: How Medical Record System Helps.” *Behavioral & Social Sciences Librarian*, doi: 10.6007/IJARBSS/v10-i11/8124.

Babbel.com, and Lesson Nine GmbH. „Co oznacza akronim LGBTQIA?” *Wszystko o językach – Magazyn Babbel*, 22 June 2023, [pl.babbel.com/pl/magazine/lgbt](https://pl.babbel.com/pl/magazine/lgbt).

Bailey, Julia V., et al. „Interactive Digital Interventions for Prevention of Sexually Transmitted HIV.” *AIDS (London, England)* 35, no. 4 (March 15, 2021): 643–53. <https://doi.org/10.1097/QAD.0000000000002780>.

Baran, Bahar, Sirin Kaptanoglu, Erol Esen, & Diğdem Siyez. „Reproductive System Augmented Reality Application for Sexual Health Classes.” *International Journal of Sexual Health* 32 (2020): 1-13. doi: 10.1080/19317611.2020.1825028.

Businessinsider. „Jakie firmy kierują swój przekaz do gejów i lesbijki?” Businessinsider, 9 June 2018.

Retrieved from [businessinsider.com.pl/biznes/media/marketing-lgbt-jakie-firmy-kieruja-swoj-przekaz-do-gejow-i-lesbijki/ntlkrre](https://businessinsider.com.pl/biznes/media/marketing-lgbt-jakie-firmy-kieruja-swoj-przekaz-do-gejow-i-lesbijki/ntlkrre).

“Co oznacza LGBT, LGBTQ, LGBTI czy LGBT+? Wyjaśniamy.” Wprost, 15 June 2020, [www.wprost.pl/zycie/10334862/co-oznacza-lgbt-lgb-tq-lgbti-czy-lgbt-wyjasniamy.html](https://www.wprost.pl/zycie/10334862/co-oznacza-lgbt-lgb-tq-lgbti-czy-lgbt-wyjasniamy.html).

Coleman, E., J. V. Ford, & E. Corona-Vargas. „The World Association for Sexual Health’s Declaration on sexual health.” *tandfonline* (2021). doi: 10.1080/19317611.2021.2023718.

“Compare LGBT Rights in Germany & Poland.” Equaldex, (n.d). [www.equaldex.com/compare/germany/poland](https://www.equaldex.com/compare/germany/poland).

Council of Europe. „Comprehensive sexuality education protects children and helps build a safer, inclusive society.” <https://www.coe.int/en/web/commissioner/-/comprehensive-sexuality-education-protects-children-and-helps-build-a-safer-inclusive-society>.

Directorate-General for Employment, Social Affairs and Inclusion (European Commission), and Natalie Picken. *Sexuality Education across the European Union: An Overview*. LU: Publications Office of the European Union, 2020. <https://data.europa.eu/doi/10.2767/869234>.

Dicheva, Darina, Christo Dichev, Gennady Agre, & Galia Angelova. „Gamification in Education: A Systematic Mapping Study.” *Educational Technology & Society* 18 (2015): 75-88.

Eurostat. „96% of Young People in the EU Uses the Internet Daily,” 2023. <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20230714-1>.

European Academy on Religion and Society. „Sexual education in Europe.” (n.d).  
<https://europeanacademyofreligionandsociety.com/news/sexual-education-in-europe/>.

European Centre for Law and Justice. „Mental Health: The European Commission Wants to Protect Youth from ‘Inappropriate Content’ Online,” 2023. <https://eclj.org/family/eu/sante-mentale--la-commission-europeenne-veut-protoger-les-jeunes-des--contenus-inappropriés--en-ligne?lng=en>.

European Commission. Directorate General for Employment, Social Affairs and Inclusion. “Sexuality Education across the European Union: An Overview.” LU: Publications Office, 2020. <https://data.europa.eu/doi/10.2767/869234>.

European Expert Group on Sexuality Education. „Sexuality education – what is it?” *Sex Education* 16, no. 4 (2016): 427-431. DOI: 10.1080/14681811.2015.1100599.

European Parliament. „EU Countries Should Ensure Universal Access to Sexual and Reproductive Health,” June 24, 2021. <https://www.europarl.europa.eu/news/en/press-room/20210621IPR06637/eu-countries-should-ensure-universal-access-to-sexual-and-reproductive-health>.

European Parliament. Directorate General for Internal Policies of the Union. *Comprehensive Sexuality Education: Why Is It Important? : Executive Summary*. LU: Publications Office, 2022. <https://data.europa.eu/doi/10.2861/360298>.  
European Parliamentary Research Service. “Next Generation or Lost Generation?,” 2020, 12.

Flanders, Corey, Lauren Pragg, Cheryl Dobinson, Carmen Logie. „Young sexual minority women’s use of the internet and other digital technologies for sexual health information seeking.” *The Canadian Journal of Human Sexuality* 26 (2017): 1-9. doi: 10.3138/cjhs.261-A2.





Forrest, S. P. „A Comparison of Students’ Evaluations of a Peer-delivered Sex Education Programme and Teacher-led Provision.” 2002. Available at: [https://www.researchgate.net/publication/30054387\\_A\\_Comparison\\_of\\_Students'\\_Evaluations\\_of\\_a\\_Peer-delivered\\_Sex\\_Education\\_Programme\\_and\\_Teacher-led\\_Provision](https://www.researchgate.net/publication/30054387_A_Comparison_of_Students'_Evaluations_of_a_Peer-delivered_Sex_Education_Programme_and_Teacher-led_Provision).

Frawley P, Wilson NJ, David J, O’Shea A, Areskoug Josefsson K. „Access to Sexual Health Services and Support for People with Intellectual and Developmental Disabilities: an Australian Cross-sector Survey.” *Sex Res Social Policy* 19, no. 4 (2022): 1935-1943. doi: 10.1007/s13178-022-00734-7.

Francis, Suzanna C., et al. „Technologies, Strategies and Approaches for Testing Populations at Risk of Sexually Transmitted Infections: A Systematic Review Protocol to Inform Prevention and Control in EU/EEA Countries.” *Systematic Reviews* 9 (March 25, 2020): 64. <https://doi.org/10.1186/s13643-020-01303-y>.

Gabarron E, Wynn R. „Use of social media for sexual health promotion: a scoping review.” *Glob Health Action* 9 (2016): 32193. doi: 10.3402/gha.v9.32193.

Hirst, J. „It’s got to be about enjoying yourself: young people, sexual pleasure, and Sex and Relationships Education.” *Sex Education* 13, no. 4 (2013): 423-436.

Hole R, Schnellert L, Cattle G. „Sex: What Is the Big Deal? Exploring Individuals’ with Intellectual Disabilities Experiences with Sex Education.” *Qual Health Res* 32, no. 3 (2022): 453-464. doi: 10.1177/10497323211057090.

„Jak rozmawiać o orientacjach seksualnych w szkole.” [epedagogika.pl, epedagogika.pl/wsparcie-uczni-i-rodziny/jak-rozmawiac-w-szkole-o-roznorodnosci-orientacji-psychoseksualnych-2349.html](https://epedagogika.pl/wsparcie-uczni-i-rodziny/jak-rozmawiac-w-szkole-o-roznorodnosci-orientacji-psychoseksualnych-2349.html).

Keating, P. (n.d.). „Using Games in Youth Work.” Limerick Institute of Technology. In K. Wolschke, B. Nea, & R. Bradburn (Eds.)



Konsumenci LGBT cały czas niedoceniani przez firmy w Polsce. Są jednak wyjątki.” Businessinsider, 2018, [businessinsider.com.pl/biznes/media/marketing-lgbt-jakie-firmy-kieruja-swoj-przekaz-do-gejow-i-lesbijki/ntlkrre](https://businessinsider.com.pl/biznes/media/marketing-lgbt-jakie-firmy-kieruja-swoj-przekaz-do-gejow-i-lesbijki/ntlkrre).

L’Engle, Kelly, et al. „Mobile Phone Interventions for Adolescent Sexual and Reproductive Health: A Systematic Review.” *Pediatrics* 138 (2016). DOI: 10.1542/peds.2016-0884.

Leung, Hildie, Daniel Shek, Edvina Leung, Esther Shek. „Development of Contextually-Relevant Sexuality Education: Lessons from a Comprehensive Review of Adolescent Sexuality Education across Cultures.” *International Journal of Environmental Research and Public Health* 16, no. 4 (2019): 621. <https://doi.org/10.3390/ijerph16040621>.

Logie C, Okumu M, Abela H, Wilson D, Narasimhan M. „Sexual and reproductive health mobile apps: results from a cross-sectional values and preferences survey to inform World Health Organization normative guidance on self-care interventions.” *Glob Health Action* 13, no. 1 (2020): 1796346. doi: 10.1080/16549716.2020.1796346.

Lopez, A., A. Detz, N. Ratanawongsa, U. Sarkar, D. Schillinger. „What Patients Say About Their Doctors Online: A Qualitative Content Analysis.” *Journal of General Internal Medicine* 33, no. 6 (2018): 854-860.

Mantelero, A. „Data protection in a big data society: Ideas for a future regulation.” *Digital Investigation* (2015).

Mellanby, A. R. „A comparative study of peer-led and adult-led school sex education.” 2001. Available at: [https://www.researchgate.net/publication/279419402\\_A\\_comparative\\_study\\_of\\_peer-led\\_and\\_adult-led\\_school\\_sex\\_education](https://www.researchgate.net/publication/279419402_A_comparative_study_of_peer-led_and_adult-led_school_sex_education).

Mirosława Makuchowska, et al. „Tęcza pod lupą: Czyli wszystko co chcecie wiedzieć o LGBT, ale boicie się zapytać.” Warszawa, Kampania Przeciw Homofobii, Copyright, 2018.



Mileva, Geri. "10 Most Inspiring LGBTQ+ Influencers to Follow." Influencer Marketing Hub, 1 Sept. 2022, [influencermarketinghub.com/lgbtq-influence](https://influencermarketinghub.com/lgbtq-influence)

MOFOKENG, D. T. Dr T: A Guide to Sexual Health and Pleasure. PAN MACMILLAN, 2021.

Moran, Jeffrey P. "Sex Education." Sex Education - Early History, Origins of a Movement, Moving into the Schools, More than Hygiene - Encyclopedia of Children and Childhood in History and Society, n.d. <http://www.faqs.org/childhood/Re-So/Sex-Education.html>.

Navarro-Prado S, Tovar-Gálvez MI, Sánchez-Ojeda MA, Luque-Vara T, Fernández-Gómez E, Martín-Salvador A, Marín-Jiménez AE. „Type of Sex Education in Childhood and Adolescence: Influence on Young People’s Sexual Experimentation, Risk and Satisfaction: The Necessity of Establishing School Nursing as a Pillar.” Healthcare (Basel). 2023 Jun 6;11(12):1668. doi: 10.3390/healthcare11121668. PMID: 37372786; PMCID: PMC10298691.

Nikkelen, Sanne W., et al. "Sexuality Education in the Digital Era: Intrinsic and Extrinsic Predictors of Online Sexual Information Seeking among Youth." The Journal of Sex Research 57, no. 2 (2019): 189–199. <https://doi.org/10.1080/00224499.2019.1612830>.

Nuova Società. (n.d.). „Come la tecnologia ha cambiato le relazioni interpersonali.” Retrieved from [nuovasocieta.it/come-la-tecnologia-ha-cambiato-le-relazioni-interpersonali/](https://nuovasocieta.it/come-la-tecnologia-ha-cambiato-le-relazioni-interpersonali/).

Patkar, Mihir. "5 Relationship Apps for Couples to Rekindle Romance and Communicate Better." MUO, November 22, 2022. <https://www.makeuseof.com/relationship-apps-for-couples/>.

Phillips, A., S. Kumar. Holistic Education: Learning from Schumacher College. Green Books in association with Schumacher College, 2008.



Picken, Natalie. Sexuality education across the European Union: An overview, 2021.

<https://ec.europa.eu/social/BlobServlet?docId=23654&langId=en>.

Pira, F., & V. Marrali. „Infanzia, media e Nuove Tecnologie: Strumenti, paure E certezze.” (2007).

Planned Parenthood. „What’s the Difference between ‘Safe Sex’ and ‘Safer Sex’?,” 2010. <https://www.plannedparenthood.org/blog/what-is-the-difference-between-safe-sex-and-safer-sex/>.

Plaza-del-Pino, Fernando Jesús, Isabelle Soliani, Cayetano Fernández-Sola, Joaquín Jesús Molina-García, María Isabel Ventura-Miranda, María Ángeles Pomares-Callejón, Olga María López-Entrambasaguas, and María Dolores Ruiz-Fernández. “Primary School Teachers’ Perspective of Sexual Education in Spain. A Qualitative Study.” *Healthcare* 9, no. 3 (March 5, 2021): 287. <https://doi.org/10.3390/healthcare9030287>.

Policies for Sexuality Education in the European Union (2013). [https://www.europarl.europa.eu/RegData/etudes/note/join/2013/462515/IPOL-FEMM\\_NT\(2013\)462515\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/note/join/2013/462515/IPOL-FEMM_NT(2013)462515_EN.pdf).

Ramiro L, Windlin B, Reis M, Gabhainn SN, Jovic S, Matos MG, Magnusson J, Godeau E. „Gendered trends in early and very early sex and condom use in 20 European countries from 2002 to 2010.” *Eur J Public Health*. 2015 Apr;25 Suppl 2:65-8. doi: 10.1093/eurpub/ckv030. PMID: 25805791.

Rea, Samantha, Aaron Zynda, Bianca Allison, Sue Tolleson-Rinehart. „Adolescent Perceptions of Technology-Based Sexual and Reproductive Health Services: A Systematic Review.” *Journal of Adolescent Health* 71, no. 5 (2022): 533-544. ISSN 1054-139X.

Ryu S. „History of Telemedicine: Evolution, Context, and Transformation.” *Healthc Inform Res* 16, no. 1 (2010): 65–6. doi: 10.4258/hir.2010.16.1.65.

Rusak, A. "Jak wspierać osoby LGBT+? Pride Month, czyli Miesiąc Dumy, zaczynamy samym dobrem - VibeZ."

VibeZ.pl, 1 June 2022, [vibeZ.pl/wydarzenia/jak-wspierac-osoby-lgbt-pride-month-czyli-miesiac-dumy-zaczynamy-samym-dobrem-6645950949210688a](https://vibeZ.pl/wydarzenia/jak-wspierac-osoby-lgbt-pride-month-czyli-miesiac-dumy-zaczynamy-samym-dobrem-6645950949210688a).

Sarata, N. "Sytuacja osób LGBTQI – PNWM Różnorodność." (n.d). [roznorodnosc.pnwm.org/podobienstwa-i-roznice-kulturowe/sytuacja-osob-lgbtqi/](https://roznorodnosc.pnwm.org/podobienstwa-i-roznice-kulturowe/sytuacja-osob-lgbtqi/).

Scales, P. 1981. „Sex Education in the '70s and '80s: Accomplishments, Obstacles and Emerging Issues.” *Family Relations*, 30(4), 557. doi:10.2307/584345.

Sedgh G, Bearak J, Singh S, Bankole A, Popinchalk A, Ganatra B, Rossier C, Gerdtts C, Tunçalp Ö, Johnson BR Jr, Johnston HB, Alkema L. „Abortion incidence between 1990 and 2014: global, regional, and subregional levels and trends.” *Lancet*. 2016 Jul.

Séhier, Véronique. "Sexual and Reproductive Rights in Europe: Between Threats and Progress." *Official Journal of the French Republic*, 2019.

SellCell.com Blog. "Smartphone Relationship Survey: 71% of People Spend More Time With Their Phone Than Their Romantic Partner," 2021. <https://www.sellcell.com/blog/smartphone-relationship-survey/>.

Semsey, Gábor. „Szexuális nevelés az iskolában.” *Iskolakultúra* 28, no. 12 (2018): 17-34.

Sentís, Alexis, Mario Martin-Sanchez, Maider Arando, Martí Vall, María Jesus Barbera, Inma Ocaña, Ana González Cordón, et al. "Sexually Transmitted Infections in Young People and Factors Associated with HIV Coinfection: An Observational Study in a Large City." *BMJ Open* 9, no. 5 (May 5, 2019): e027245. <https://doi.org/10.1136/bmjopen-2018-027245>.

Sexualaufklärung Schule. (n.d.). „Concetti. Educazione sessuale a scuola: Concetti.”  
Retrieved from [sexualaufklaerung-schule.ch/web.php/2/it/quadro-di-riferimento/concetti](http://sexualaufklaerung-schule.ch/web.php/2/it/quadro-di-riferimento/concetti).

Simovska V., Kane R. 2015. „Sexuality education in different contexts: Limitations and possibilities.” Health Education.  
Health Education, Vol. 115 Iss: 1, pp.2 - 6. 2-6. 10.1108/HE-10-2014-0093.

Sidiq, Saima, Puneet Pathak. „RIGHT TO INCLUSIVE EDUCATION OF CHILDREN WITH DISABILITIES: A STUDY.”  
ARMY INSTITUTE OF LAW JOURNAL XVI (2023): 208-222.

Smith, Meghan, et al. „The Content and Accessibility of Sex Education Information on the Internet.” Health Education & Behavior 27,  
no. 6 (December 2000): 684–94. <https://doi.org/10.1177/109019810002700603>.

“Streaming najbardziej inkluzywnym medium w oczach osób LGBT+.” [www.wirtualnemedi.pl](http://www.wirtualnemedi.pl), 8 July 2022, [www.wirtualnemedi.pl/artykul/streaming-inkluzywnosc-osoby-lgbt](http://www.wirtualnemedi.pl/artykul/streaming-inkluzywnosc-osoby-lgbt).

Subasinghe, Yuganthi, Migara Karunarathne, & Nethra Senadi. „Utilization of digital devices as a tool for enhancing sexual  
and reproductive health awareness: an experience of undergraduates.”

Thompson, Rachel. “Nearly 80% of Young People Don’t Know What to Trust When Accessing Sex Ed Online.” Mashable, May 17, 2022.  
<https://mashable.com/article/young-people-dont-trust-online-sex-education>.

UNAIDS and WHO. „Virtual Interventions in Response to HIV, Sexually Transmitted Infections and Viral Hepatitis,” 2022.  
[https://www.unaids.org/sites/default/files/media\\_asset/policy-brief\\_virtual-interventions\\_en.pdf](https://www.unaids.org/sites/default/files/media_asset/policy-brief_virtual-interventions_en.pdf).





UNESCO. "A Review of the Evidence: Sexuality Education for Young People in Digital Spaces," 2020.

<https://unesdoc.unesco.org/ark:/48223/pf0000373885>.

UNESCO. Switched on: sexuality education in the digital space. 2020. <https://unesdoc.unesco.org/ark:/48223/pf0000372784>.

UNESCO. „Using digital tools to support classroom-based sexuality education.” 2022. Published: United Nations Educational, Scientific and Cultural Organization, Paris, France.

UNESCO. International technical guidance on sexuality education. Paris, 2018. <https://www.who.int/publications/m/item/9789231002595>.

United Nations. „Gender equality and women’s empowerment.” Available at: <https://www.un.org/sustainabledevelopment/gender-equality/>.

van Lieshout, S. „Long Live Love+: Evaluation of the Implementation of an Online School-Based Sexuality Education Program in the Netherlands.” *Health Education Research* 32, no. 3 (2017): 244–257. <https://academic.oup.com/her/article/32/3/244/3800465>.

von Arx, Lill-Brith, Trine Kjeer. „The patient perspective of diabetes care: A systematic review of stated preference research.” 2014. DOI: 10.1007/s40271-014-0057-0. PMID: 24691766.

Wang, H., S. Gupta, A. Singhal, P. Muttreja, S. Singh, P. Sharma, A. Piterova. „An Artificial Intelligence Chatbot for Young People’s Sexual and Reproductive Health in India (SnehAI): Instrumental Case Study.” *J Med Internet Res* 24, no. 1 (2022): e29969.

doi: 10.2196/29969. PMID: 34982034; PMCID: PMC8764609.



Wheldon M., V. Kantorová, P. Ueffing and A. N. Z. Dasgupta (2018). „National, regional, and global rates and trends in contraceptive prevalence and unmet need for family planning between 1990 and 2015: a systematic and comprehensive analysis.” *The Lancet*. Vol. 381, Issue 9878, pp. 1642–1652.

WHO. *International Technical Guidance on Sexuality Education: An Evidence-Informed Approach*. Rev. ed. Paris, New York, Geneva: UNESCO, 2018.

WHO Regional Office for Europe and BZgA. „Standards for Sexuality Education in Europe: A Framework for Policy Makers, Educational and Health Authorities and Specialists.” World Health Organization: Cologne. 2010. [https://www.bzga-whocc.de/fileadmin/user\\_upload/WHO\\_BZgA\\_Standards\\_English.pdf](https://www.bzga-whocc.de/fileadmin/user_upload/WHO_BZgA_Standards_English.pdf).

Widman, Laura, et al. „Technology-Based Interventions to Reduce Sexually Transmitted Infections and Unintended Pregnancy Among Youth.” *Journal of Adolescent Health* 62, no. 6 (June 2018): 651–60. <https://doi.org/10.1016/j.jadohealth.2018.02.007>.

World Association for Sexual Health. 2014. „Declaration of Sexual Rights.” <https://worldsexualhealth.net/resources/declaration-of-sexual-rights/>.

World Health Organization. (n.d.). „Comprehensive sexuality education.” Retrieved from [who.int/news-room/questions-and-answers/item/comprehensive-sexuality-education](http://who.int/news-room/questions-and-answers/item/comprehensive-sexuality-education).

Zagni, R. „Come la tecnologia ha Cambiato Le Relazioni Interpersonali.” *Nuova Società*, 2022. Retrieved from [nuovasocieta.it/come-la-tecnologia-ha-cambiato-le-relazioni-interpersonali/](http://nuovasocieta.it/come-la-tecnologia-ha-cambiato-le-relazioni-interpersonali/).

Zechmeister, Andrea. „Szexuális nevelés gyakorlata értelmileg akadályozott tanulók körében.” *Gyermeknevelés Tudományos Folyóirat* 4, no. 3 (2016): 78-86.

