# **Teaching Puberty: You Can Do It!** Human Development & Sexual Health Curriculum Support for Grades 5 and 6

# Lesson 3: Changes at Puberty

Target Group: Grades 5 and 6

Suggested Time: 60 minutes

## **Learning Goals:**

*Today we are learning to:* 

- review ground rules as a class
- review key information from previous lessons
- understand what the word 'diversity' means and begin to value the diversity in our bodies, our families, and our peers
- increase understanding of the words sexuality, gender and sexual orientation
- describe the physical, emotional, and social changes that happen during puberty
- understand the role of hormones and the production of sex cells
- demonstrate confidence in asking questions
- be aware of other resources that can assist us to learn about puberty
- share our learning with an adult we trust

## **Suggested Materials:**

- 2 sets of markers or pencil crayons one set all the same colour, one set a mix of colours
- SMART board or white/black board
- flip chart paper
- puberty pamphlets, anatomical posters and/or felt models (check with your local school board or public health department)
- question box (with a small opening in the lid and the lid taped shut)
- paper for the question box (uniform colour/size)

# **Activity #1: Introduction**

Review information from Lesson 2.

Clarify any confusion indicated through Lesson 2 Exit Cards – discuss actual questions from Exit Cards and take up answers as a group.

# **Activity #2: Diversity**

Referring to the Additional Information below, discuss the concept of diversity.

Write the word 'Diversity' on the board.

#### **Teacher prompt:**

• "In our classroom, we value and accept the many ways in which we are diverse."

Ask the class to try to define diversity (see Appendix B: Glossary).

Show two sets of markers or pencil crayons – one set all the same colour and one set with several different colours.

#### **Teacher prompt:**

• "Which set is more diverse?"

Point out that it is the set with a variety of colours that is the diverse set.

## **Teacher prompts:**

- "Even if this (same colour) set had many more markers in it, it is this set with the different colours that is more diverse because of the variety in it."
- "With your elbow partner, discuss the many ways that people are diverse."

Have students report back to the large group. On the board, compile a list of ways in which we are diverse. Be sure the list includes the following:

- > gender
- ➢ height
- > weight
- skin colour
- type of household we live in (e.g., one adult, two adults, multi-generational home, different gender parents, same gender parents, step families, foster families)
- culture
- > religion
- birth place
- our abilities
- sexual orientation (who we are attracted to)
- age when we begin puberty

- Diversity is the difference or variety that exists within a group.
- An individual is not by themselves diverse. Each person is unique, but a variety of unique people within a group is needed in order to have diversity.
- Diversity of human characteristics is sometimes genetically determined. These characteristics can also be influenced by a person's environment (exposure to certain foods or chemicals) and/or personal choices such as exercise.

# Activity #3: Common vs. Normal

Ask students what they think 'normal' means. Using the Additional Information below and a drawing of a simple bell curve (see example) discuss how we are all both similar and unique at the same time.

## **Teacher Prompt:**

• "You will be hearing me use the word 'common' more than the word 'normal'. Let's all practice using the word 'common' more often, even when we are not in puberty classes."



## **Teacher Prompts:**

- "Every character trait found in humans could be plotted onto a bell curve graph. Common characteristics that we see in many people are found in the middle of a bell curve. Less common (more unique) traits are further out from the centre of the curve."
- "In a bell curve that describes height, for example, there would be a small number of people on the 'very short' end of the graph, and also a small number of people on the 'very tall' end. The centre of the graph would represent many people who are 'average' height."
- "All locations on the graph are perfectly okay, although some are less common."

- 'Normal' often means something that fits into what is expected, 'standard', or common.
- In our society, stating that something is 'abnormal' is used as a negative judgment when someone is seen as being 'different'.

# Activity #4: Gender and Sex: What's the difference?

#### **Teacher Prompts:**

- "Today we're going to be talking about the words 'gender' and 'sex'. Looking at this
  picture (show baby picture from Appendix F), what can you tell me about this baby?"
  (Students may say that baby is a 'boy' or 'girl' based on physical appearance. Ask
  them to explain why they came to those conclusions.)
- "What some of you are trying to guess is this baby's 'sex'. You can't tell by a person's hair, size, and so on. How can you tell? (Response may be: 'look at the private parts'.)"
- "By looking at what we call **genitals** (the sex organs between the legs) we can usually tell what the sex of the baby is."



## **Teacher Prompts:**

• "When a baby is born, the health care provider looks at the baby's genitals and

decides the sex of the baby. If the baby has a vulva (some people say vagina – we will talk more about that later), they will say that the baby is female. If the baby has a penis, they will say it's male. This is the sex of the baby. The baby's *gender* is often assumed based on their sex. Usually the family will raise the baby as a boy or a girl. But gender is more of an *internal* sense of being a boy or a girl and it may or may not match the genitals."

- "There is a range of what genitals can look like, and sometimes the nurse, midwife, or doctor looks at the genitals and is unsure about whether the baby is male or female. In Canada the medical staff or family will choose whether the baby will be male or female."
- "For most people, their sex (based on the genitals) and their gender (based on their understanding of themselves) match. Often a baby with a penis grows up and feels that he is a boy who then becomes a man, and the baby with a vagina/vulva grows up and feels that she is a girl who becomes a woman."
- "Sometimes as a child grows up, they may feel that their sex (based on their genitals) and their gender (based on the feelings in their heart and head) do not match. For example, they may know that they have a male body but they *feel* that they are a girl and then a woman. Or they know that they have a female body but they *feel* that they are a boy and then a man. Or they may feel like both a boy and a girl, or like neither."
- "What is important to know about gender is that it is more about how people *feel* than what their body looks like."
- "Just like with all other ways that we are diverse (like the variations in our height or the timing of when we start puberty), people often worry about being different. Why do you think that is?" (Students may suggest things like teasing or being left out.)
- "In order to really support each other and make sure school is a safe and comfortable place for all of us, let's celebrate all of the ways we are alike *and* all of the ways we are different or diverse."
- "In a school where we celebrate our differences, how would we treat each other?" (Be sure discussion includes: standing up for each other and making sure that everyone is included.)

## **Additional Information for Activity #4**

• Many children go through different stages of gender development. Some children may be considered **gender-independent** or **gender-creative** because how their gender is assigned does not match up to how they feel or express themselves. This is natural and healthy for children, some of whom may grow up to become

**trans**\* and some of whom may not. This is independent from their sexual orientation.

- The term **cis** is used when a person does not change or does not want to change their gender or sex. The male feels like a boy or man, and the female feels like a girl or woman.
- The term trans\* is used when a person does change or wants to change their gender or sex. This may include transsexuals who see themselves as a sex other than what they were assigned at birth and who may want to change their physical body through hormones or surgeries. Trans\* people's gender is other than what was assumed at birth, and **genderqueer** people see themselves as a combination of both masculine and feminine or neither.
- The term Two-Spirit is an English term coined to reflect specific cultural words used by First Nations and other indigenous peoples for those in their cultures who are gay or lesbian, are trans\*, or have multiple gender identities. Historically, Two-Spirit persons were spiritual leaders and healers and were revered by their community.
- The term **intersex** is used when people are born with sex characteristics (including hormones, chromosomes, genitals, reproductive organs, or secondary sex characteristics) that are not clearly male or female. In the past, the term used was 'hermaphrodite', which is incorrect and prejudiced. Some people may identify as an intersex person and others may identify as a man or woman with an intersex condition.
- For some people, understanding their sexual identity can be a confusing time and support from appropriate services can be beneficial. Some school boards and teachers' unions have support groups or educational resources.

# Activity #5: Emotional and Social Changes

Referring to the Additional Information below, discuss changes that occur at puberty (other than physical changes).

## **Teacher prompts:**

- "Keeping people's names private, think of someone who is a few years older than you."
- "Along with the body changes you can see, they probably have had some changes in their feelings/emotions and behavior while they are growing older."

<sup>&</sup>lt;sup>5</sup> Toronto District School Board, Gender Based Violence Prevention. (2014). Definitions. Retrieved from http://www.tdsb.on.ca/AboutUs/Innovation/GenderBasedViolencePrevention/LinksandResources.aspx

- "What changes have you noticed in the person's life?"
- "Are there mood changes?"
- "Do they want to spend more or less time with family?"
- "Do they have more responsibilities, such as chores and/or babysitting, than they did a couple of years ago?"

- Mood swings, wanting to spend less time with family and more time with friends, and spending more time on appearance are all common aspects of this life stage.
- Emotions are influenced by physical factors such as hormones, sleep, food, exercise, and computer/TV time. Other important influences are interactions with others, communication, and life experiences.
- Development of good communication, social skills, and coping skills contribute to building robust mental health and resiliency.
- Being able to name and discuss feelings, hopes, and worries that come with this stage of life can help children with stress and poor self-esteem.
- Students need to know that conflict at home, as well as changes in friendships and in attitude, are part of growing up and becoming independent.
- Positive self-esteem includes having a healthy view of yourself, a sense of selfworth, a positive outlook, and feeling satisfied with yourself most of the time.

# **Activity #6: Body Changes**

#### **Teacher prompts:**

- "Remember that we talked about hormones affecting our bodies and how we all have all three reproductive hormones – therefore, many of the changes during puberty happen to all people, regardless of sex or gender."
- "These changes may take place over many years."
- "What body changes at puberty do you know about?"

Display the felt models (see Suggested Materials list).

While discussing body changes that occur at puberty, add pieces to the felt models

when speaking about each physical change.

(Alternative to felt models: As a class, write out a list of the physical changes on the board. Emphasize the changes that are common to both males and females.)

## **Teacher prompts:**

- "When puberty begins, oil glands in your skin become more active. Sometimes this oil builds up under the skin and forms a small red spot called a pimple or zit. Pimples can appear anywhere, but often show up on the face, back, neck, and shoulders."
- "Deepening voice is another sign of puberty for everyone, although often more noticeable in males. When the larynx (voice box) grows, the voice gets deeper. It is sometimes seen as a bump in the throat, occasionally called an Adam's Apple."
- "Breasts grow during puberty in females and in many males. It starts with the area under the nipple, one breast at a time. People often notice swelling and tenderness. Many people feel like their breasts grow at uneven rates – this is common. For boys, the changes are temporary, often lasting a year or two."
- "The genitals grow just as your whole body grows in puberty. Genetics are the main factor in how your body will end up looking, although surgical procedures can affect appearance as well." (The felt model kit contains both circumcised and uncircumcised penises.) "On a male, when the foreskin of the penis is removed during a surgical procedure, we call this circumcision. This is usually done shortly after birth for religious, family, or cultural reasons. Whether circumcised or not, a penis works in the same way."
- "Not all female genitals look the same either."
- "Shoulders broaden for everyone during puberty, but is often more noticeable in males."
- "Hips broaden during puberty, especially in females."
- "Another common sign of puberty is hair beginning to grow in new places, like underarms and around the genitals (**pubic hair**). Depending on genetics, hair may also begin to grow thicker or darker on the arms, legs, upper lip, chin, and chest."

Also discuss changes that cannot be seen on the felt models.

## **Teacher Prompts:**

 "The body has a growth spurt during puberty. Generally, this starts earlier for females."

- "Body odour increases during puberty as the sweat glands begin to produce more sweat and it mixes with the bacteria found on the skin."
- "Puberty also triggers emotional changes we have discussed those earlier and we will continue to be discussing them throughout this unit."

- Most changes at puberty happen regardless of biological sex, including lower voice, increase in height and weight, growth of pubic and body hair, skin changes, the growth of the genitals and breast/chest changes (although temporary in males who develop breast tissue).
- Not everyone's genitals look the same diversity can be due to genetics, intersexuality, FGM (female genital mutilation), surgical procedures (e.g., circumcision), etc. (Please note: discussing FGM at these grade levels is not recommended. An acknowledgement that not all female genitals look the same should suffice.)
- When breasts begin to grow, a bra or undershirt can provide comfort and support.
- Pimples are caused by the increased amount of oil (sebum) that the skin produces starting in puberty; although washing with soap and water, eating well, and getting enough sleep can help the skin, sometimes it is not enough and special creams and medications are needed. A health care provider can help students determine if prescription medication would be helpful.
- Penises that are uncircumcised need to have the foreskin pulled back to clean the head of the penis.
- More details of the changes will be addressed in Lesson 5.

# Activity #7: What's Happening Inside?

Using the diagram and information below explain the internal anatomy of males and females (See diagrams provided in Appendix G).



## **Teacher Prompts:**

## Read the following statements while referring to diagrams like the ones above:

- "Internal reproductive organs include the ovaries in females and the testicles in males. These important organs are the same for everybody during the first six weeks of development as babies grow inside the uterus, regardless of whether you became female or male."
- "Sperm production (spermatogenesis) starts when a male is part way through puberty, after the growth spurt and growth of the genitals and pubic and underarm hair. It takes 70 days for each sperm to be created in the testicles, and once the process has started, millions of new sperm are produced daily."
- "Sperm, the male sex cell (made in the testicles) mixes with a whitish fluid (made in the prostate gland and seminal vesicle) that helps the fragile cells live and move. This fluid is called semen. The semen leaves the male's body through the urethra, but only when the penis has an erection; which means it is erect or firm."
- "Erections happen when extra blood fills the spongy tissue of the penis and makes it harder, larger, and stand out from the body. This happens throughout a male's lifetime from the time of birth."
- "It is common for males to wake up in the morning with an erection.
- "Semen (containing sperm) is **ejaculated** (ejected) from the penis generally at the same time a male has an **orgasm**. An orgasm is an intense, pleasurable whole body feeling that happens at the height of sexual excitement. People of all ages and genders may have orgasms."

- "The first time a male may notice he is producing semen is during a **nocturnal emission** (which means 'night time coming out') or **wet dream."**
- "While females do not make semen, they may have 'damp dreams' in their sleep when vaginal fluid is released. This may also occur during self-pleasuring, also called self-exploration or masturbation."
- Semen also leaves the body when the penis is rubbed or stimulated during selfpleasuring.
- "While self-pleasuring is possible at all ages, by all sexes and by all genders, ejaculation of semen in males will only happen after puberty."
- "Females are born with their lifetime supply of sex cells or immature ova in their ovaries. Once the hormone estrogen is produced at puberty, there is a message sent to the ovaries to ripen and release one ovum at a time. This is called ovulation and will happen about once a month."
- "Ovulation, menstruation, and reproduction will be discussed in the next lesson."

- Humans do not have a bone in the penis, despite the common slang misnomer 'boner.'
- Although the urethra in males carries both urine and semen out of the body, a special valve at the **bladder** ensures that only one fluid travels though the tube at a time.

# Wrap Up for Lesson 3

- Summarize what was discussed in this lesson and ask for any questions.
- Encourage students to share what they have learned with a trusted adult.
- Write the *Kids Help Phone* contact information on the board (1-800-668-6868, *www.kidshelpphone.ca*) and remind students that contacting *Kids Help Phone* is free, confidential, anonymous, and that it can be a safe place to discuss concerns.
- Discuss what will be talked about in Lesson 4: reproduction, ovulation, and menstruation
- Give students paper and ask for contributions to the question box.

• Distribute 'Exit Cards' and give students a few minutes to complete them and hand them in.

| Name                        | Lesson 3 Exit Card         |
|-----------------------------|----------------------------|
| What does diversity mean?   |                            |
| List two changes that happe | n to everybody at puberty. |

| Name  | Lesson 3 Exit Card |  |
|---|--------------------|--|
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