

Grade 6, Theme Three

Family Letter

Dear Family,

We are ready to begin Theme Three of *Fully Alive*, our Family Life program. Because the partnership of home, church, and school is so important, this letter is written to let you know what we talk about in class and to offer some ideas for your involvement. For more information, please go to www.acbo.on.ca.

About Theme Three

Theme Three of *Fully Alive* is called “Created Sexual: Male and Female.” God made us male and female, and all of God’s creation is good. In earlier grades, this theme was presented through a continuing story that emphasized God’s plan for new life as the result of the love of mothers and fathers. In later grades, the message is unchanged, but the approach is more direct. As students enter puberty, they need to know about the changes they will experience and about the responsibilities of being created male and female and following God’s plan for them.

In Theme Three we will

- explore some of the ways in which we learn about sexuality and develop our ideas about what it means to be male or female.
- review the main features of adult female and male fertility.
- learn about the first minutes and days of a new human life, the development of the new life during each trimester of a pregnancy, and the baby’s birth.
- discuss some physical, emotional, and social changes related to puberty.
- examine how both heredity and environment influence our development as persons, and learn about the choices we can make as we develop.

Looking Ahead

The only new term in Grade 6 related to the male and female reproductive system and fertility is *menopause*. Other new terms related to fetal development, pregnancy, and birth include *nucleus*, *membrane*, *DNA*, *chromosome*, *gene*, *zygote*, *embryo*, *fetus*, *trimester*, and *labour*. These terms are used to explain the process through which two life-giving cells, the sperm and ovum, unite and exchange genetic information, the development of new life during nine months of pregnancy, and the birth of the baby.

This theme also introduces in a more direct way our calling to be loving and life-giving according to our state of life. Only married people are meant to express their sexuality in an intimate physical relationship. Attraction between the sexes, which begins at puberty and for

many people leads to marriage, is also discussed briefly at this grade level. These are topics that are developed more fully in Grades 7 and 8.

Working together at school and at home

- At school, the students will be completing and bringing home several sheets about human fertility, the development of a new life in the uterus, and the changes of puberty. On some of these sheets, there is a section for any questions the students still have about these topics. Be sure to ask your child about questions he or she may have. Some children are uncomfortable asking questions at school and prefer to ask at home. You will find detailed information about the topics in this theme in the Online Family Edition of *Fully Alive* (www.acbo.on.ca).
- The students will be discussing some important ideas about sexuality, which you may want to find an opportunity to discuss with your child. These ideas include: sexuality is not just about bodies or body parts, but also about persons who are created by God as males and females. A Christian view of sexuality is that men and women are meant to respect and support each other, not use each other in casual sexual relationships.
- Media are a significant influence on growing children's understanding of sexuality. Many parents find it helpful to join their children in watching television shows and movies and discuss the messages that are promoted about sexuality and relationships between males and females.
- All children need adequate preparation for the physical changes of puberty, but they can be reluctant to discuss this. It's often best to look for opportunities that come up naturally, rather than trying to have one long discussion. You will find detailed information about puberty in the Online Edition of *Fully Alive*.
- We will also be discussing the emotional and social changes that come with puberty, including moodiness, irritability, a desire for more privacy, and the growing importance of friendship. It's important to talk about some of these changes with your child and how they can be handled in a way that respects all members of the family. It's helpful to let your child know that it takes time to adjust to a new stage of life, not just for children, but also for parents.

If you have any questions or would like more information about Theme Three, please contact me.

Theme Three Topics

In Grade 6, Theme Three is developed through six topics. The opening topic provides an opportunity for the students to look at the many influences on their understanding of what it means to be created male or female. In Topic 2, they review what they learned in Grade 5 about human fertility, and consider this potential in the context of the gift of sexuality, sexual attraction, and marriage. The next two topics provide an account of the first days of a new human life; a basic explanation of the genetic contribution of both parents; a detailed description of the

development of the new life during pregnancy; and information about the process of labour and birth. In Topic 5 the students review physical development during puberty, including the development of fertility, and explore some of the emotional and social changes that are part of adolescence. In the final topic, the students examine the influence of heredity and environment on who they are and how they will continued to grow and meet the challenges of being life-giving and loving males and females.

Talking to Children about Sexuality

Before children begin school, they often ask their parents about where babies come from and about the differences between the bodies of boys and girls. These are natural questions and parents are the best people to answer them. No one else has such a special relationship with the child or knows the child as well as parents.

Sexuality — God made us male and female and his creation is good. We are made to be images of God’s love and this includes our bodies. In marriage, one of the ways we express this love is through our bodies, in sexual intercourse. This special expression of love creates a deep bond between husband and wife. Through sexual intercourse, they can share in God’s creation of new life and welcome new children into their families.

Sexuality, of course, is not just about bodies, male and female reproduction, or how babies are born. It is mainly about people, who are male and female. Parents teach their children a great deal about what it means to be men and women. It isn’t something parents talk about, or at least not often, but something that they do and are. The way a person feels about herself as a woman and the way a person feels about himself as a man are communicated to children. When parents respect each other, and the work that each parent does, children are learning about sexuality. When children see parents co-operating, helping each other, speaking lovingly to each other, and touching each other affectionately, they are learning very important lessons about sexuality.

Talking about sexuality — Most parents want to talk about sexuality with their children, but many find it difficult. They feel shy because of a natural sense of modesty and because they are somewhat unsure of what to say. It’s important to realize that the exact words you use don’t matter. What matters is letting children know that you are happy to answer their questions.

Many parents have found that it is easier to communicate with children who are approaching or in early puberty when natural opportunities come up rather than sitting down to have a “big” talk. For example, a television program that involves a conflict about appropriate dress for 11 or

12 year-old girls; a complaint by a child that he or she is the smallest person in the class; a child's mention of gossip among girls about having boyfriends. All of these situations are opportunities to talk about growing up, which can lead to a discussion of sexuality.

Part of a discussion of growing up and sexuality should be the development that happens during puberty. The physical changes of puberty are introduced and explained in the *Fully Alive* school program in Grades 5 and 6. Information about puberty is also included in this Online Family Edition for Grade 6 at the end of Topic 5 in this theme. If you have not yet talked to your child about these physical changes, you will find information and suggestions in this material that may be helpful. All children should be aware that their bodies will change in a special way as they approach adolescence, and that it is normal for these changes to begin at different times for different people. In general, girls begin to develop from one year to two years earlier than boys. If your child is showing signs of physical maturation, you will want to prepare her or him with more specific information.

Protecting children from abuse — Another important reason for talking to children about sexuality is the important responsibility parents have to protect their children from sexual abuse. All children need to know that, with a few exceptions (for example, if the doctor needs to examine them), no one is allowed to look at or touch the private parts of their bodies. They should also be told that they should not look at or touch the private parts of another person's body, even if that person asks or tells them to. They should say no and tell you right away. It's important to let children know that if someone touches them in a way that makes them uncomfortable or behaves in a way that worries or frightens them, they can always talk to you and you will know what to do.

Exposure to adult sexual content in the media — In our society, it is very difficult to shield children, even when they are young, from explicit information about sexuality. Television, the internet, popular music, movies, and newspapers all contribute to the situation. Despite the best efforts of parents, children are be exposed to ideas about sexuality that are not Christian. They will also hear about topics such as abortion, pornography, or gay marriage, and are likely to have questions about these issues. Parents can, however, try to limit what children see and hear by carefully monitoring the media to which they are exposed, and by providing clear rules for using the internet.

Encouraging children to talk about sexuality — As children begin to develop during puberty,

they are often very hesitant to talk to their parents, especially about topics they have heard about, but don't understand. The reason for their hesitation could be a natural tendency to be more private as they develop; not knowing how to start a conversation; or because they are concerned that parents will be shocked or even angry if they want to talk about topics related to sexuality.

It can be helpful if parents let their children know that they are happy to discuss any questions or concerns their children have. If your child raises a controversial topic, you may want to give a brief answer and say you will provide more information when he or she is a little older. If your child asks a question that you don't know the answer to, just say so. You can always ask someone else or look it up and then provide an answer. Children don't need experts. They need parents who care and are willing to talk and listen.

Topic 1 — Learning About Sexuality

Sexuality is a fundamental component of personality, one of its modes of being, of manifestation, of communicating with others, of expressing and of living human love.

Educational Guidance in Human Love, Congregation for Catholic Education

Summary

This topic helps the students to appreciate the gift of sexuality and deepen their understanding of this gift. The teacher and students explore the many influences on people's understanding of what it means to be created sexual. The students also discuss God's plan for sexuality and the importance of developing Christian attitudes as persons who have been created male and female.

Main Ideas

- We learn about being male and female from all our experiences with our family members and friends and from what parents and teachers have explained to us.
- Sexuality is not just about bodies or body parts; it is about persons who are created by God as males and females.
- A Christian view of sexuality is that men and women are meant to respect and support each other, not use each other in casual sexual relationships.
- We show respect for sexuality by the way we speak and by avoiding rude language or teasing people about their bodies.

Family Participation

- An important idea in this topic is that God created us male and female and has a plan for how the gift of sexuality is to be expressed. The students learned that men and women are meant to respect and support each other, not to use each other in casual relationships. They also learned that sexually intimate relationships outside of marriage are wrong.

These are important matters to discuss with your child, especially since this view of sexuality is very different from what is promoted in our society and reflected in our media. When the opportunity arises, you might explain that sexual intercourse is intended to be a total gift of oneself, not for a period of time, but forever. Only when people are married can they give themselves to each other completely and with trust in the future.

- In class, the students discussed the importance of showing respect for sexuality by refraining from making rude comments or teasing people about their bodies. At this age, when children are beginning the changes of puberty, they are especially sensitive about their appearance and often quite self-conscious. It's important also to encourage this kind of respect in the family. A certain amount of teasing is normal among brothers and sisters, but should not include negative comments about a person's body.

- At the end of this topic, the students said a prayer, "The Gift of Sexuality." You will find this prayer in the section, *Fully Alive* Grade 6 Prayers.

- At the end of Theme Three you will find a list of words that have been introduced in this theme, beginning in Grade 1. This vocabulary list also includes any new terms that are introduced in Grade 6. The *Fully Alive* Teacher Guide includes this list and teachers are given the option of duplicating it for the students. The students are not expected to memorize these terms, but to have some familiarity with them and their meaning. You may find it useful as a reference for yourself as you discuss this theme with your child.

Topic 2 — Love and Life

Love, and only love, is the primary goal of sexuality, but sexual love by its specific nature is a fruitful love that demands its fulfillment not merely in orgasm, not even in the exclusive relation of man and woman, but in the creative sharing of that love with new persons and the future.

Sex and Gender, Benedict M. Ashley

Summary

This topic helps the students grow in their understanding of sexuality as both loving and life-giving. The teacher and students examine the choices people have as they mature and review the life-giving aspect of the gift of sexuality — female and male fertility.

Main Ideas

- Attraction between the sexes begins at puberty and for many people leads eventually to marriage.
- We are all called to be loving and life-giving, but only married people are meant to express their sexuality in an intimate physical relationship.
- Sexual intercourse is a sign of the loving and life-giving relationship of husband and wife.
- Together, men and woman have the physical capacity to give life, a capacity we call fertility.

Family Participation

- In class, the students discussed some of the important decisions people make when they become adults — to marry, to become a priest or a religious sister or brother, or to remain a single person. They explored some of the questions men and women have to consider before making the decision to marry. When the opportunity arises, you could ask about this discussion. What does your child think people have to consider before they make a decision that involves their future lives?
- Adult female and male fertility was introduced in Grade 5 and is reviewed in this topic. The main points in this review are:
 - > Females have a fertility cycle of about three to five weeks (about once a month) during which they are fertile for only a short period of time. The main events of this cycle are: the building a thick lining in the uterus, the release of an ovum (egg) into the fallopian tube, and the shedding of the lining (menstruation) if no new life is conceived.
 - > Males are continuously fertile after their bodies have begun to produce sperm cells. This happens sometime after puberty.
 - > Sexual intercourse is a sign of the deep love between a husband and wife and has the potential to create new human life. This is a huge responsibility, for this new life, made in God's image, is a living person who needs the love and care of a mother and father.
- This review of female and male fertility provides an opportunity to talk about the fact that our bodies are ready for parenthood long before we are fully mature as persons. A Christian view of

sexuality always includes personal responsibility and moral standards. Well before children have to face decisions about sexual intimacy in their own lives, they need to hear the message that sexual intercourse belongs only in a relationship of committed and faithful married love. It is a profoundly intimate and personal act that has the potential to create new life.

Topic 3 — A New and Unique Human Life

The same act of love which unites man and woman is the means by which a new person, a child, is created. The child expands and fulfills the love of the man and woman through whom God loves the new life into being.

Curriculum Guidelines for Family Life Education, Ontario Conference of Catholic Bishops

Summary

This topic builds on the previous one and helps the students understand how a new human life receives genetic information from both the mother and the father. The teacher and students explore the first moments and days of a new human life, which is created when the two life-giving cells, the sperm and ovum, unite and exchange genetic information.

Main Ideas

- Each cell of the human body has a nucleus, which is a rounded structure that acts as a command centre for the cell. Inside the nucleus of the sperm and ovum is the information to create a unique human being.
- The information in the nucleus of cells is contained in its DNA. DNA is made up of two long, twisted strands that are connected by shorter pieces. The short connecting pieces carry coded information.
- Chromosomes are bundles of DNA. Each cell has 46 chromosomes, which are organized in 23 pairs, but there is one big exception. The ovum and sperm cells have only half of these 23 pairs. A new human life receives half of its chromosomes from the mother, and half from the father.
- Once the sperm and ovum have united and become a single cell, conception has taken place. Within a short time, the single cell divides into two cells, then four, and so on. As each division happens, the DNA from the mother and father, now joined together, duplicates itself.

- For the first few days after conception, the new human life, which is now a cluster of cells, moves through the fallopian tube and into the uterus. At about the 7th day after conception, the cluster of cells settles into the wall of the uterus, which is prepared with a thick lining.
- One of the 23 pairs of chromosomes is a pair of sex chromosomes. A female has two X chromosomes. A male has a Y chromosome from his father and an X from his mother. The father determines the sex of the new life. Since only one of his sex chromosomes is in the sperm cell, it may be a Y or an X. If it is a Y, a male child will develop. If it is an X, a female child will develop.

Family Participation

- Most children are fascinated by the complexity of the process through which a new and unique human life is created. There are a number of websites and books for children about basic genetics. If your child has a particular interest in scientific information, you may want to explore some of these resources.
- An optional student activity for this topic is to work in small groups and research some of the physical characteristics that are inherited from mothers and fathers — hair colour, curly or straight hair, dimples, and cleft chin. If your child is interested, you could encourage him or her to learn more about dominant and recessive genes and their relationship to inherited traits.

Topic 4 — Development and Birth

I am not yet born; provide me

With water to dandle me, grass to grow for me,

trees to talk to me, sky to sing to me...

Prayer before Birth, Louis MacNeice

Summary

This topic helps the students learn more about fetal development during the nine months of pregnancy, and the process of birth. The teacher and students examine aspects of the baby's size, appearance, and development inside the uterus, and discuss the process of labour that leads to the birth of the baby.

Main Ideas

- A normal pregnancy lasts about nine months. Each three-month period of the pregnancy is called a *trimester*. During these trimesters, the various body systems develop, the baby gains height and weight, and, at the end of the last trimester, is ready to be born.
- The process of labour happens in three stages. The first stage begins with contractions of the uterus, which push the baby's head against the cervix until it opens. In the second stage, the baby moves into the birth canal, and the mother pushes the baby out. In the last stage, the contractions of the uterus push out the placenta.
- The gift of new life is an event to be celebrated and appreciated.

Family Participation

- From an early age, children are fascinated by the development of the baby in the uterus. You might ask about what your child learned in this topic. What was especially interesting?
- Children often have questions about the birth of a baby. In particular, they wonder if the process is painful. In class, the students discussed the stages of labour. They learned that it is hard work and that the contractions of the uterus are painful, but at the end of the process there is the marvelous gift of a new human life.
- At the end of this topic, the students said a prayer together, "The Goodness of Life." You will find this prayer in the section *Fully Alive* Grade 6 prayers.

Topic 5 — Many Changes

*Children fret, teenagers worry. Children fret about what they can and cannot have,
where they can and cannot go. Teenagers worry about themselves,
what they will look like once they pass through puberty, about the future. ...
Puberty presents teenagers with a series of unknown changes,
and each one constitutes a peril of puberty.*

All Grown Up and No Place to Go, David Elkind

Summary

This topic helps the students understand more about the physical, emotional, and social changes of puberty. The teacher and students review the range of time during which males and females do through the physical changes of puberty and how the reproductive system develops during

this time. They also discuss the effects of physical changes on the whole person — moods, friendships, family relationships — and the need for patience and time to reach full maturity.

Main Ideas

- The life-stage of adolescence begins with the physical changes of puberty. There is a wide range of times at which these physical changes occur. Some people begin to develop quite early, others quite late. Both are normal. In general, girls begin to develop about a year to two years before boys.
- Sexual maturity is not the same thing as full maturity. Other aspects of the person — intellectual, social, emotional, and spiritual — still need time to develop and mature.
- Moodiness, a desire for more privacy, being uncommunicative at times, and some relationship difficulties with family members and friends are not uncommon during this stage of development.

Family Participation

- The physical changes of puberty were presented for the first time in the Grade 5 *Fully Alive* school program and are now reviewed in Grade 6. It is an important topic for parents to talk about with their children. By age 10 or 11, a number of girls begin to show the first signs of puberty. For a smaller number of girls, it can be even earlier. Boys tend to develop from a year to two years later. Information about these physical changes is included at the end of this topic in the section, *The Physical Changes Of Puberty*. The material in this section is for your use and may give you some ideas about what you would like to say. There are also a number of books on puberty, both for parents and for children, that you may find helpful. You will want to be sure that these resources reflect your values.
- Puberty also involves social and emotional changes. You will find information about some of these changes at the end of this topic in the section, *Other Changes of Puberty*.
- Information about preparing girls for menstruation is also included at the end of this topic in the section, *Preparing Girls for Menstruation*. Although the average age for first menstruation is 12, this event can occur at age 10 or 11 or, rarely, even earlier. It is essential for girls to understand what will happen and to be reassured that this event is a sign of their development and will not create a major disruption in the regular activities of their daily lives.
- It can be helpful for parents to reassure children that growing up is not something that happens overnight. Some children are not eager to grow up and can be alarmed by a lot of discussion of

the changes of puberty and the life stage of adolescence. They need to know that they won't suddenly have to abandon their childhood. Other children are in a big hurry to be grown up, and need encouragement to be patient and to give themselves time to develop and mature.

An important idea in this topic about the changes of puberty is that being sexually mature by age 16 or 17 is not the same thing as being a mature adult. Other aspects of the person also have to develop — the mind, the emotions, relationships with others, and the person's spiritual life.

- The onset of puberty, which marks the beginning of the early stage of adolescence, can be stressful. It takes time and patience for both children and parents to navigate the years from age 10 to age 16. It is normal for children in the early stage of puberty to want more independence and privacy, become more involved in their friendships, feel self-conscious, wonder if they are normal, be somewhat moody, and test limits. They need adults in their lives, especially parents, but also other adults like teachers or coaches, who believe in them, listen to them, discipline them fairly, have clear expectations for them, give them more responsibilities, and encourage them to pursue their interests.

The Physical Changes of Puberty

- Built into each person's body is a special "time-clock" for puberty. A gland inside the brain called the *pituitary gland* controls this biological clock. The pituitary gland releases chemical messengers called *hormones* into the bloodstream. Certain hormones carry messages from the pituitary gland to the ovaries in girls and the testicles in boys. These messages tell the ovaries and the testicles to produce their own hormones. Only then do the bodies of boys and girls begin to develop the physical characteristics of adult men and women.
- This chart shows the physical changes of puberty for boys, and the average age (mean age) at which the changes occur. As you can see there is a wide range of ages for each of these changes.

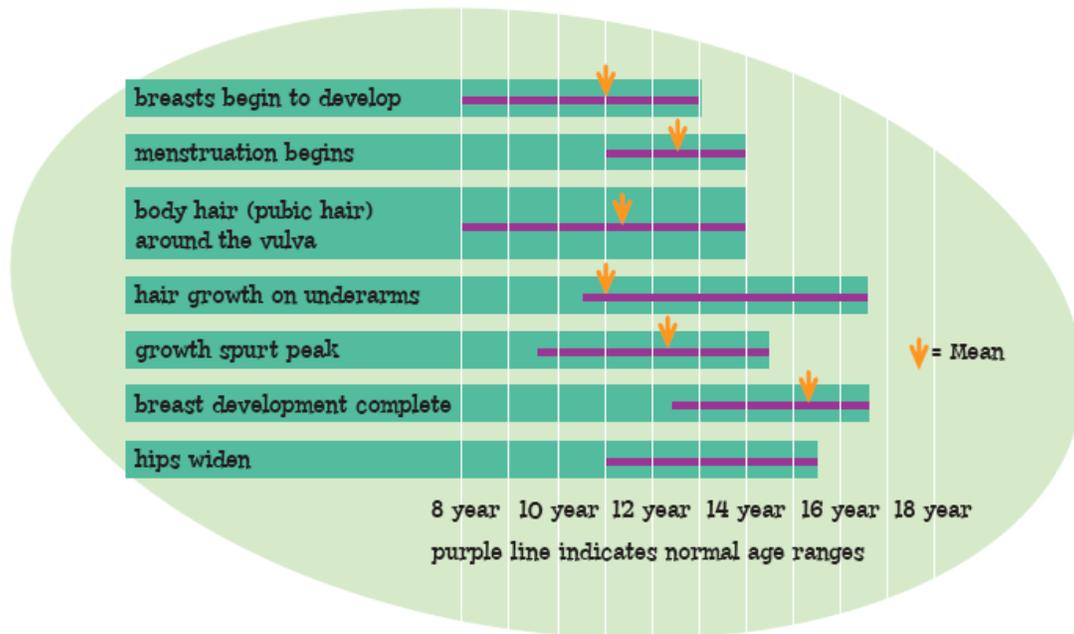
Puberty: When Male Sexual Characteristics Develop



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- Most boys show some signs of puberty by age 13 or 14. But it could be a few years earlier or a few years later. Once puberty has begun, it usually takes about 4 or 5 years for the body to complete the physical changes from boyhood to manhood. Even when males are fully grown, there are differences among them. Some men are taller and heavier than others. Some have thicker beards and more body hair than others.
- Some time after a boy's appearance has begun to change, the testicles begin to produce sperm cells and special fluids that nourish and protect the sperm cells. The mixture of sperm and these fluids is called *semen*. There are special storage areas in the male body for the sperm cells, and at times these areas become too full. When this happens, the body expels semen through the penis. This process of clearing out extra sperm begins a number of years after puberty begins. It can happen so gradually that it may not be noticed, but sometimes it happens all at once, usually when the body is at rest. This is called a *nocturnal emission* because the semen leaves the body while it is at rest during the night. This is a natural body process that is a sign of male fertility.
- This chart shows the physical changes of puberty for girls, and the average (mean) age at which these changes occur. As you can see there is a wide range of ages for each change.

Puberty: When Female Sexual Characteristics Develop



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- Most girls show some signs of puberty by age 11 or 12. But it could be a few years earlier or a few years later. Once puberty has begun, it usually takes 4 or 5 years for the body to complete the physical changes.
- These physical changes begin at different times. One girl may notice the earliest changes of puberty at age 9 or 10. Another girl may be 15 or 16 before her body begins to take on the appearance of a woman's body. Even when females are fully developed, there are differences among them. Some women are taller and heavier than others. Some have wider hips and larger breasts than others.
- Sometime after a girl's appearance begins to change, she menstruates for the first time. This happens to most girls when they are between eleven and thirteen years old, but it could be one or two years earlier or later. This first menstruation is an important sign that her body is maturing. Menstruation is often called a period, because it is something that happens about once a month for a period of about three to seven days. When girls first menstruate, however, their cycles are not like those of adult women. Instead of a monthly cycle, it may be a number of months between their periods.

Other Changes of Puberty

The emotional and social changes of puberty are many but are less predictable than the physical changes. Moodiness, anxiety, embarrassment, and irritability are all normal signs of adolescence, and are in part caused by the changing levels of hormones in the bloodstream. Usually, however, the way a boy or girl handles the changes of puberty is in line with his or her development up to the time of puberty. For example, easygoing children tend to remain easygoing; difficult children often are difficult adolescents.

Self-consciousness, especially about the body, is very common during early adolescence. It takes time to get used to a changing body. Young adolescents are easily embarrassed, especially by any comments about their appearance. This sensitivity can make it difficult for parents to know what to say and what not to say. Tactfulness from adults is especially important during this stage of life.

Relationships with parents are more uneven than they were during the childhood years. It is normal, especially at the beginning of adolescence, for young people to complain about family rules and to want more independence and privacy. This can be difficult for parents, particularly since children also tend to be more critical of their parents and more argumentative as they develop. Parents need a sense of humour and of perspective during the early years of adolescence. It is also important for them to give young people as much responsibility and freedom as they prove they can handle. Most families go through a few uneven years, but serious problems are not inevitable.

Friends are extremely important to young people, especially at the beginning of adolescence. The experience of being left out or of losing a friend is very painful. This may not seem like a large problem to an adult, but to a young adolescent it can be a major upset. Parents cannot solve friendship problems for their children but they can listen and offer suggestions. It is also normal during adolescence for both males and females to have very strong feelings for people of the same sex. This might be an older student or a teacher whom they admire. Young people may be concerned that this means they are homosexual, but this is not something that they are likely to talk about with anyone. It is helpful if parents have talked about homosexuality, and mentioned the concerns that young people sometimes have and how normal adolescent “crushes” are.

Puberty is a time of extraordinary change. It is, therefore, a time of vulnerability. Young

adolescents need parents who believe in them, who challenge them, and who provide clear guidelines for them. They also need sympathetic listeners who can remember the time in their lives when they felt overwhelmed by their feelings and their changing bodies.

Preparing Girls for Menstruation

- Breast development generally precedes menstruation by one to two years as does the beginning of the growth spurt. Sometime before first menstruation, some girls notice a periodic discharge on their underwear. Since they may be concerned by this and think that something is wrong with them, it is important to reassure them that this is a normal part of development. It is something that all women experience and there is no need for them to be worried or embarrassed. This is normal and is caused by the hormones produced by the ovaries.
- As you explain menstruation it's a good idea to mention that when girls first begin to menstruate, their periods are often quite irregular. They may have their first period, and then not menstruate again for several months. For many girls it takes a number of years before a regular pattern of menstruating is established.
- Most often, girls' concerns about menstruation include whether it hurts, the amount of blood that is involved, and how quickly a period starts. You will want to reassure your daughter that there's no reason for menstruation to interfere with any of her activities. The amount of blood that is lost is actually quite small. Explain that periods normally start very slowly with a few drops of blood, which she will notice on her underwear, and that other people will not know that she has started menstruating. Sometimes girls are surprised or worried because the colour of the blood is brown. You might mention that this is what happens when blood is exposed to the air and dries.
- You need to explain that often there is mild discomfort at the beginning of a period, which is caused by contractions of the uterus, and this is not anything to worry about. Although a few girls have very painful menstrual cycles, it is not a good idea to mention this since it is the exception rather than the rule.
- Girls need information about caring for themselves during menstruation. At some point, you should explain how sanitary pads are worn. Many girls eventually use tampons, but generally not until a few years after they have started menstruating. They may have questions about tampons, however, and you could explain how they are used. Often, mothers feel that girls who have just started menstruating are too young to use tampons and the majority of younger girls are not

anxious to use them. Girls who are involved in sports such as gymnastics and swimming, however, can find it embarrassing to wear pads and may want to discuss using tampons with their mothers.

- Girls who are expecting their first period in the near future are often concerned that they will start when they are away from home. They may want to be prepared by carrying a mini-pad with them. They should also know that they can ask their teacher, the school nurse, or the secretary in the school office. All they have to say is, “I think I’ve just started my period and I don’t have anything with me.”
- It’s extremely important to present menstruation as a normal, healthy process. Girls may have heard menstruation described as the “curse” or that they cannot bathe, wash their hair, or participate in sports while they have their period. They should be reassured that menstruation is not an illness, but a normal part of life, and that they can engage in all of their regular activities.

Topic 6 — Looking Back, Looking Ahead

You have to do your own growing, no matter how tall your grandfather was.

Abraham Lincoln

Summary

This topic helps the students understand some of the ways in which heredity and environment influence human identity and development. The teacher and students discuss these influences and the students explore some of the choices they can make as they grow up.

Main Ideas

- Who we are and how we develop is influenced by our heredity and our environment.
- Heredity is all of the characteristics that are passed on by our birth parents, like eye colour and facial features.
- Environment is all the conditions of our lives that have an effect on us, like the food we eat, our neighbourhood, our parish, our activities, and television programs.
- We can’t change our heredity, but we can make choices about our environment.

Family Participation

- A suggested student activity for this topic is to respond to some questions about the choices they have for the future. The students were asked to look at five areas of their future development — physical, emotional, social, intellectual, spiritual — and consider what choices

they can make that will help them grow toward full maturity in these areas. You might ask about the choices for the future your child chose.

- In class, the students discussed the influence of heredity and the environment on person's identity. Inherited traits, like eye colour or height, do not change. The environment, however, which includes all of the conditions our lives (for example, relationships, food, activities, weather, media), is under our control to some extent.

This is an important idea for parents to discuss with children, who, at this age, often feel that there are very few choices they can make. Some of the choices the students discussed in class are to choose healthy food for their bodies; to nourish their minds with interesting ideas and topics; to spend time with people who really care about them; and to get involved in activities that help them develop their gifts. You can encourage your child to make these kind of positive choices, and to the years of adolescence, not as a period of waiting for adulthood, but as an opportunity to engage in life and to grow slowly, but actively, toward maturity.

- At the end of this topic, the student said the prayer, Love is Patient, which is a reflection on St. Paul's description of love in Corinthians 13:4-8. You will find this prayer in the section, *Fully Alive* Grade 6 Prayers.

Fully Alive Theme Three Glossary

Amniotic fluid: the liquid inside the amniotic sac that cushions and protects the fetus.

Amniotic sac: a thin membrane filled with amniotic fluid; the new human life develops inside the amniotic sac.

Birth canal: the passageway from the uterus to the outside of the female body, which includes the vagina and cervix; the term is used most often during the birth of a baby.

Caesarian section: an operation in which the baby is delivered through an incision made in the abdomen and uterus of the mother; usually performed because the baby is too large for the birth canal, or in the wrong position for a safe delivery.

Cell: tiny structure of living creatures, both plant and animal. The adult human body is made up of billions of cells.

Cell division: the process by which one cell multiplies to two, from two to four, from four to eight, and so on.

Cervical mucus: secretions from the cervix (the neck of the uterus), which are stimulated by hormones in preparation for ovulation, and assist the sperm to survive and reach the ovum.

Cervix: part of the female reproductive system; the neck or narrow, lower part of the uterus, leading to the vagina.

Chromosome: a threadlike chemical structure that carries the genes, which determine the characteristics that are inherited from the parents; 23 pairs (46) chromosomes are found in the nucleus of each cell of the body with the exception of the sperm and ovum, which have only 23.

Conception: the time of fertilization when a new human life begins, which occurs when the sperm and the ovum join together and form a single new cell.

Contraction: the process by which a muscle tightens and becomes thicker and shorter; during the birth of a baby, the uterus regularly tightens and relaxes over a period of time

in order to push the baby through the birth canal.

Cycle: a series of events that are continually repeated in the same order. The female reproductive cycle is sometimes described as a *menstrual cycle* or a *fertility cycle*, which refers to the building up of the lining in the uterus, the ripening of an ovum, ovulation, and menstruation if the ovum is not fertilized. In adult women a fertility cycle is completed every three to five weeks.

DNA (deoxyribonucleic acid): a long molecule that stores coded information for building living things.

Ejaculation: a series of muscular contractions by which semen leaves the male body through the penis.

Embryo: the term used for the new human life from the time of implantation in the wall of the uterus until the end of the second month of pregnancy.

Erection: the condition of the penis when its soft tissues are filled with blood, causing it to become larger and firm.

Fallopian tube: part of the female reproductive system; two narrow tubes leading from the ovaries to the uterus, providing a passageway for the ova.

Female: the sex of a girl or woman.

Fetus: the term used for the new human life from the end of the second month of pregnancy until birth.

Fertility: the physical ability or power to procreate, to give life.

Fertilization: conception; the uniting of the sperm and the ovum to form a single new cell.

Gene: a tiny chemical structure carried on a chromosome by which characteristics are passed from parents to children.

Hormone: a chemical substance that is released by a gland in the body; hormones act as messengers to other organs in the body

Implantation: the attachment of the tiny zygote to the wall of the uterus; implantation

occurs from five to seven days after conception, and is usually completed by twelve days.

Labour: the time during which the child is born; labour occurs in three stages during which the baby, the amniotic sac, and the placenta are pushed out of the uterus through the birth canal.

Male: the sex of a boy or man.

Membrane: the thin covering of a cell.

Menopause: the end of menstruation, which usually happens when women are between the ages of fifty and fifty-five.

Menstruation: the shedding of the lining of the uterus; a small amount of blood, mucus, and cells from the lining of the uterus leaves the female body through the vagina; in adult women menstruation occurs once every three to five weeks if the ovum has not been fertilized.

Navel: the mark on the body (in the center of the abdomen) where the umbilical cord was attached; belly button.

Nocturnal emission: an ejaculation during sleep (sometimes called a “wet dream”); nocturnal emissions are the body’s way of making room for new sperm cells, and begin to happen to boys sometime after the testicles have begun to produce sperm cells.

Nucleus: the part of a cell that contains the chromosomes.

Organ: a part of the body that has a specific task, for example, the heart or the lungs.

Ova: the female reproductive cells produced by the ovaries; mature egg cells.

Ovaries: part of the female reproductive system; two small almond-shaped organs inside the abdomen on either side of the uterus; the ovaries ripen the egg cells and produce the female hormones.

Ovum: a female reproductive cell; a single mature egg cell.

Penis: part of the male reproductive system; a tube-shaped organ made of soft tissues that can fill with blood; at the end of the penis is the tiny opening of the urethra.

Period: a menstrual period, the time during which menstruation occurs, usually lasting from two to seven days.

Pituitary gland: an organ that releases hormones into the bloodstream: located inside the skull at the base of the brain; the pituitary is sometimes called the master gland of the body, and is responsible for the beginning of puberty.

Placenta: a large flat organ that develops during pregnancy and is attached to the wall of the uterus; the fetus is attached to the placenta by the umbilical cord and receives nourishment and oxygen and eliminates wastes through the placenta.

Procreation: the creation of a new human life; parents co-operate with God in the creation of a new life.

Puberty: the period of time during which the bodies of males and females develop and become fertile.

Reproductive system: the system of the body that allows people to have children (to procreate); the reproductive systems of males and females differ, and begin to mature at puberty.

Scrotum: part of the male reproductive system; the sac of skin behind the penis that holds the testicles outside the body.

Semen: the mixture of sperm cells and fluids that is ejaculated from the penis.

Sexual: having to do with sex or gender; being either male or female.

Sexual intercourse: an act which is intended to be a sign of the deep and committed love that exists between a husband and wife, and may result in the beginning of a new human life; during sexual intercourse the husband's penis fits inside the wife's vagina and at the time of ejaculation millions of sperm cells are released into the vagina and may travel into the uterus and fallopian tubes.

Sexuality: the maleness or femaleness of the whole person, body and spirit.

Sperm: the male reproductive cells produced by the testicles.

Testicles: part of the male reproductive system; two oval organs that are held outside

the body inside the scrotum; the testicles produce sperm cells and the hormone testosterone.

Trimester: a term used to describe a three-month stage in a pregnancy; there are three trimesters in a normal pregnancy.

Umbilical cord: the rope of tissue that connects the fetus to the placenta through which the fetus receives oxygen and nourishment and eliminates wastes.

Urethra: a narrow tube through which urine passes out of the body from the bladder; the urethra is part of the male reproductive system since it is also the passageway through which semen is ejaculated.

Uterus: part of the female reproductive system; a hollow muscular organ inside the lower abdomen; the uterus is shaped like an upside down pear and is the place where a new human life grows during pregnancy.

Vagina: part of the female reproductive system; the vagina is a muscular passageway which leads from the cervix (the bottom of the uterus) to the outside of the body. Together, the cervix and vagina are sometimes called the birth canal.

Vas deferens: part of the male reproductive system; two tubes that lead from tiny tubes inside the testicles, and move the sperm cells along inside the man's body.

Vulva: the term used for the external organs of the female reproductive system (the parts which cover the opening to the vagina).

Zygote: the term used for the new human life from conception until implantation.