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A Model Sex/Health Education Curriculum for Middle-Level Students in Taiwan

Shih-Wei Cheng

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ABSTRACT

A MODEL SEX/HEALTH EDUCATION CURRICULUM FOR MIDDLE-LEVEL STUDENTS IN TAIWAN

By

Shih-Wei Cheng

June, 2002

The purpose of this project was to develop a model sex/health education curriculum for middle-level students in Taiwan. To accomplish the purpose, a review of related literature was conducted. Additionally, related information/materials from selected sources was obtained and analyzed.

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CHAPTER ONE

BACKGROUND OF THE PROJECT

Introduction

Kids need the right information to help protect themselves. The US has more than double the teenage pregnancy rate of any western industrialized country with more than a million teenagers becoming pregnant each year. Teenagers have the highest rates of sexually transmitted diseases (STDs) of any age group, with one in four young people contracting an STD by the age of 21. STDs, including HIV, can damage teenagers' health and reproductive ability. There is still no cure for AIDS. HIV infection is increasing most rapidly among young people. One in four new infections in the US occurs in people younger than 22. In 1994, 417 new AIDS cases were diagnosed among 13-19 year olds, and 2,684 new cases among 20-24 year olds. Since infection may occur up to ten years before an AIDS diagnosis, most of those people were infected with HIV either as adolescents or pre-adolescents. (Rosenberg, et al, 1994, page 48).

In the above statement, Rosenberg has emphasized the need for young people to be aware of the responsibility which may accompany teen age pregnancy, of the dangers of sexually transmitted diseases (STD's), and the most possess knowledge are

understand of the dangers of HIV and AIDS. This kind of information is essential if adolescent and pre-adolescents are going to be able to protect themselves from these potentialities and dangers.

Ubell (1995) contended that knowledge alone was not enough to change behaviors about sex. Programs that rely mainly on conveying information about sexual or moral precepts, how the body's sexual system functions, and what teens should and should not do, have failed. However, programs focused on helping teenagers to change their behavior through the use of role-playing, games, and exercises that strengthen social skills-have shown signs of success.

According to Ehrhardt (1993), there has been much controversy in the United States about sex education. Precisely which message should be given to children has hampered sex education programs in schools. Too often, statements of values (e.g. "my children should not have sex outside of marriage") has been wrapped up in misstatements of fact (e.g. "sex education doesn't work anyway"). Should we do everything possible to suppress teenage sexual behavior, or should we acknowledge that many teens have become sexually active and prepare them against the negative consequences? Such emotional arguments can get in the way of an unbiased assessment of the effects of sex education.

Purpose of the Project

The purpose of this project was to develop a model sex/health education curriculum for middle-level school students in Taiwan. To accomplish this purpose, a review of related literature was conducted. Additionally, related information/materials from selected sources was obtained and analyzed.

Limitations of the Project

For purposes of this study, it was necessary to establish the following limitations:

1. Scope: The model curriculum was designed for use in a selected middle-level in Taiwan.
2. Target Population: The model curriculum was designed for use in grades 6 through 8 in a selected middle-level school in Taiwan.
3. Research: The preponderance of research and literature reviewed for purposes of this project was limited to the past eight (8) years.

Definition of Terms

Significant terms used in the context of this project have been defined as follows:

1. ACTIS- Acronym for AIDS Clinical Trials Information Service. (Nation's Health, 1996).

2. AIDS- Acquired Immune Deficiency Syndrome. Acquired, you have received it, not inherited it. Immune deals with the body's defense system. Deficiency is a decreased defense capability. Syndrome is an observable set of clinical diagnosis. AIDS is a fatal communicable disease with no effective treatment or known cure. AIDS is the final stage of infection cause by the human immunodeficiency virus (HIV). (Bronson-Merki, Mhary, and Merki, Don,1996).
3. CDC-Center for Disease Control and Prevention (CDC) is part of the United States Department of Health and Human Service. The CDC gathers statistics regarding disease throughout the world. (Bronson-Merki, Mhary, and Merki, Don,1996).
4. EALR-Refers to Washington State Essential Academic Learning Requirement.
5. HIV- Human Immunodeficiency Virus. Human refers to a virus whose host is a person. Immunodeficiency refers to a decreasing immune function in a person. Virus is an obligate parasite, which infects and destroys human cells. The virus that attacks the body's immune system and leads to AIDS. (Bronson-Merki, Mhary, and Merki, Don,1996).
6. HIV/AIDS-Acronym for Human Immunodeficiency Virus/ Acquired Immuno Deficiency Syndrome. (Pruitt, B.E., Teer Crumpler, Kathy, and Prothrow-Stith, Deborah, 1997).

7. IDU-intravenous Drug User. (King County Departy Department of Health, 1998).
8. STD- Sexually Transmitted Disease. (King County Departy Department of Health, 1998).
9. VCR-Video Cassette Recorder. (Morris, 1992).
10. WHO- Acronym for World Health Organization. (Timberlake, 1996).

CHAPTER TWO
REVIEW OF RELATED LITERATURE AND
INFORMATION OBTAINED FROM SELECTED SOURCES

Introduction

The review of research and literature summarized in Chapter Two has been organized to address:

1. Recent Research on Human Sexuality
 - a. The Stages of Sexual Development
 - b. Puberty
 - c. Human Reproduction and Development
2. Sexually Transmitted Diseases –HIV/AIDS
3. A Summary of Selected, Washington State Health/Sex Education Model Curricula
 - a. KNOW: HIV/STD Prevention Curriculum
 - b. Washington State Essential Academic Learning Requirements (EALR's)
4. An Analysis of Information/Materials of Obtained from Selected Sources
5. Summary

Data current primary within the past five (5) years were identified through Education Resources Information Centers (ERIC) and Internet computer searches. Additionally, related information/materials from selected sources was obtained and analyzed.

Recent Research on Human Sexuality

The Stages of Sexual Development

According to Kirby (1994), all children evolve through developmental stages as they grow to adulthood. There are physical stages - crawling, walking, and intellectual stages. Children also go through stages of sexual development. Each of these stages represents a set of physical attributes and feelings related to sex, characteristic of children at different ages. General information descriptive of the stages of sexual development have been paraphrased below:

- **0-5 Years:** Children begin exploring their world at this age level. Children learn that touching feels good and they begin to explore their bodies. They begin to understand the differences between the sexes and learn sex roles. At this stage children are curious, accepting, and straightforward when it comes to sex. It is best for parents to answer child's questions when asked, whenever possible.
- **5-10 Years:** Children at this stage may think in terms of "good" and "bad" parts of

their bodies and, they become aware of bodily functions and their link to sex.

Children are very same-sex oriented, they may have some discomfort or fear about discussing sex, and they can be very sensitive to sex as well as other "feelings" topics. Masturbation and exploration are common at this age. The outward attitude in this stage is, "Sex is Yucky!" Children may appear to be unconcerned with sex but actually, they are quite interested in the subject. There is often a good deal of sex-related information exchanged among peers. Adults should avoid using slang about homosexuality, body parts, and sexual functions and, should make sure children at this age have complete information about puberty by the end of this stage. Be open and honest without being pushy. Brief discussions about sex are best at this stage.

- **10-14 Years:** This stage marks the beginning of puberty (usually around age 11 for girls and age 12 for boys). Children are often confused and/or frightened about body changes, and may be unaware of or uncomfortable with social/sexual roles. They are easily influenced by peers and the media, and may often hesitate to seek assistance. Their ideas about themselves and their futures are incomplete as their development allows them to focus only on the present. Because it is hard for children at this age to see the causes and effects of their behavior, there are rising rates of sexual activity, pregnancy, AIDS, and other sexually transmitted diseases.

- **14 Years and Over:** At this stage, children are emotionally and socially becoming adults. However, they may be easily influenced by media and peer messages and pressures. At this time they are forming their identities and self-concepts. Children at this stage will be uncertain and confused by sex. They often feel that sex is a part of the adult world or part of the identity for which they are searching. They are very dualistic in their thinking; that is, everything must be good or bad, black or white. Their ability to think clearly and keep themselves in control may also be underdeveloped. Their decision-making and value judgment skills need practice. At this stage, children may become defensive when they feel confronted or threatened.

Puberty

Robert (1998) has described puberty as a time of many dramatic for both young girls and boys Robert's explanations of the natural of these changes have been paraphrased below.

Puberty in Girls:

A girl's body starts changing after about age 8. Many girls worry that they are not developing fast enough, or are concerned if they develop before their friends do. Some girls begin puberty early, and some later. Most changes during puberty are caused by chemicals called "hormones" that the body starts to produce. The main

female hormones are estrogen and progesterone. Breasts begin to grow when a girl is between 9 and 13 and many girls become concerned about their size and shape. One breast may grow more quickly than the other; however, they will be about the same size when they finished growing. Pubic and underarm hair will begin to grow next.

Menstrual periods usually started between the ages of 11 and 15; however, these periods can begin as early as 9 and as late as 17. The menstrual period, which occurs about once a month, readies a woman for pregnancy. The lining of the womb, or uterus, starts to thicken. About two weeks later, one of the ovaries releases an egg, or ovum. If sperm from a man's body does not join with the egg, it is not fertilized and the thick lining of the uterus is not needed. In about another two weeks, the woman body rids itself of this lining through the vagina.

Many women experience discomfort and cramps during their menstrual periods. Exercise, a heating pad, hot water bottle, and or a pain reliever can help. Menstrual periods usually last between 3 and 7 days, but may be longer or shorter, and bleeding may be heavier in some months than in others. After awhile, most women find that their periods become more regular, and occur about every 21 to 35 days, or 3 to 5 weeks. If a woman has intercourse and then misses her period, she may be pregnant. If a male's sperm joins with an egg a pregnancy begins, and the fertilized egg attaches itself to the thick lining of the uterus and starts to grow. Female hormones also cause

a woman's vagina to produce a discharge or mucus. This does not normally hurt, or itch, or smell bad. Pimples or acne can become a common problem during the puberty in girls. Suggestions for remedies include washing with plain soap, not eating foods with lots of fat, not using skin moisturizers or lotions with benzyl peroxide which can be purchased without a prescription.. Body odor may be caused by perspiration.

Regular washing or use of deodorants is recommended. (Robert)

Puberty in Boys:

A boy's body begins changing when he is between 11 and 20 years of age. Many boys worry that they are not developing fast enough. Some boys begin puberty early, and some later. Most male changes of puberty are caused by the male hormone testosterone which the body begins to produce. Testosterone is made in the testicles. The testicles are inside a sac or bag below the penis, called the scrotum. As the amount of testosterone increases, the scrotum gets darker and the penis and testicles start to grow. Pubic hair, and underarm and facial hair also begin to grow during this period. The voice gets deeper, and sometimes may crack or break. In the throat, the larynx grows bigger. Some boys swell a little under their nipples, but this usually goes away. The testicles start to produce sperm and this will continue for the rest of a man's life. Sperm are released in a white fluid called "semen". Sometimes semen is released from the penis during sleep. This is called a "wet dream", and it is normal and

harmless. An erection may occur at unexpected times and, although normal, this can be embarrassing. Pimples or acne can become a common problem during puberty in boys. Suggestions for remedies include washing with plain soap, avoiding foods with lots of fat, and using lotions with benzyl peroxide. Body odor may be caused by perspiration. Regular washing or use of deodorant is recommended. (Robert, 1998)

Human Reproduction and Development

Kirby (1997), explained how human reproduction employs internal fertilization, and depends on the integrated action of hormones, the nervous system, and the reproductive system. Gonads are sex organs that produce gametes. Male gonads are the testes which produce sperm and male sex hormones. Female gonads are the ovaries which produce eggs (ova) and female sex hormones. Kirby's further descriptions of human reproduction and development have been paraphrased as below.

The Male Reproductive System: Testes are suspended outside the abdominal cavity by the scrotum, a pouch of skin that keeps the testes close or far from the body at an optimal temperature for sperm development. Seminiferous tubules are inside each testis, where sperm are produced by meiosis. About 250 meters (850 feet) of tubules are packed into each testis. Spermatocytes inside the tubules divide by meiosis to produce spermatids that in turn develop into mature sperm.

Male Sex Hormones: The anterior pituitary produces follicle-stimulating hormones (FSH) and luteinizing hormones (LH). Action of LH is controlled by the gonadotropin-releasing hormone (GnRH). LH stimulates cells in the seminiferous tubules to secrete testosterone, which influences in sperm production and male secondary sex characteristics.

Sexual Structures: Sperm pass through the vas deferens and connect to a short ejaculatory duct that connects to the urethra. The urethra passes through the penis and opens to the outside. Secretions from the seminal vesicles add fructose and prostaglandins to sperm as they pass. The prostate gland secretes a milky alkaline fluid. The bulbourethral gland secretes a mucus-like fluid that provides lubrication for intercourse. Sperm and secretions make up semen.

The Female Reproductive System: The ovary contains many follicles composed of a developing egg surrounded by an outer layer of follicle cells. Each egg begins oogenesis as a primary oocyte. At birth, each female carries a lifetime supply of developing oocytes. A developing egg (secondary oocyte) is released each month from puberty until menopause, a total of 400-500 eggs.

Ovarian Cycles: After puberty the ovary cycles between a follicular phase (maturing follicles) and a luteal phase (presence of the corpus luteum). These cyclic phases are interrupted only by pregnancy and continue until menopause, when

reproductive capability ends. The ovarian cycle lasts usually 28 days. During the first phase, the oocyte matures within a follicle. At midpoint of the cycle, the oocyte is released from the ovary in a process known as ovulation. Following ovulation the follicle forms a corpus luteum which synthesizes and prepares hormones to prepare the uterus for pregnancy. The secondary oocyte passes into the oviduct (fallopian tube or uterine tube). The oviduct is connected to the uterus. The uterus has an inner layer, the endometrium, in which a fertilized egg implants. At the lower end of the uterus the cervix connects the uterus to the vagina. The vagina receives the penis during intercourse and serves as the birth canal.

External Genitals: The female external genitals are collectively known as the vulva. The labia minora is a thin membrane of folded skin just outside the vaginal opening. The labia majora cover and protect the genital area. A clitoris, important in arousal, is a short shaft with a sensitive tip covered by a fold of skin.

Hormones and Female Cycles: The ovarian cycle is hormonally regulated in two phases. The follicle secretes estrogen before ovulation; the corpus luteum secretes both estrogen and progesterone after ovulation. Hormones from the hypothalamus and anterior pituitary control the ovarian cycle. The ovarian cycle covers events in the ovary; the menstrual cycle occurs in the uterus. Menstrual cycles vary from between 15 and 31 days. The first day of the cycle is the first day of blood flow (day 0) known

as menstruation. During menstruation the uterine lining is broken down and shed as menstrual flow. FSH and LH are secreted on day 0, beginning both the menstrual cycle and the ovarian cycle. Both FSH and LH stimulate the maturation of a single follicle in one of the ovaries and the secretion of estrogen. Rising levels of estrogen in the blood trigger secretion of LH, which stimulates follicle maturation and ovulation (day 14, or midcycle). LH stimulates the remaining follicle cells to form the corpus luteum, which produces both estrogen and progesterone.

Sexually Transmitted Diseases – HIV/AIDS

Former Washington State Superintendent of Public Instruction Judith Billings (1997), emphasized the extreme importance of HIV/AIDS education for our young children. Essentially the HIV/AIDS curriculum has become a life and death subject matter that needs to be addressed with the utmost care. Students need to be confronted with the facts of what will happen if they make certain unhealthy choices in life. As stated by Billings:

“Nothing brings home the importance of an issue like having it. I know very personally and keenly that HIV/AIDS is no respecter of persons, a wily adversary that will not give up easily. And, as with so many urgent matters affecting young people, education is the answer to preventing its spread. By

remaining unshakable in our determination to educate, we can stop the virus dead in its tracks with this generation.”

According to Ellis (1997), HIV/AIDS is impacting into every segment of our population, and is including our most valuable asset, our children. In addressing the urgent need to educate our young, this authority has joined forces with the Gary Indiana City schools to develop a HIV/AIDS education program. Ellis concluded that HIV/AIDS has become a worldwide problem and no one is immune to its effects. There is a need to make the latest HIV/AIDS statistics and information available to our young, so they can help others and themselves stay healthy and stay alive.

AIDS has become the leading cause of death of all Americans, ages 25-44, and the sixth leading cause of death of Americans, age 14-24. these statistics infer that the HIV virus was contracted primarily during the adolescent years. Ubell,1995).

According to the Center for Disease Control and prevention, (CDC), (1997), as many as half the estimated 40,000 to 80,000 new HIV cases each year occur in people under 25. key, and DeNoon (1997) reported that in spite of the fact that teens are groeing up in an era when AIDS prevention message are all around them, on billboards and television and in the school, young people believe in their own invincibility.

According to Christopher, (1997), “There are too many kids that are hard headed, nonchalant, and not willing to accept what’s going on.”

Barth, (1988), has credited local schools for assuming responsibility for teaching students the facts about AIDS. AIDS education of younger children should have broader goals than teaching about "safe sex." Said Barth: "Many teachers have tiptoed around the issue of how to use a condom, with only 37 percent of health education teachers offering instruction and 15.2 percent of other teachers talking about it.

As reported by Katz, (1997), "Although most school systems provide some AIDS education, many prohibit discussion of sexual intercourse, homosexuality, and condom use." Katz stated, "We are offering abstinence as an option, but that's not the realistic option. We're hampered by the religious and political obstruction to the idea that kids have sex" Mustafa (1997), reported, "It's hard to tell teenagers about abstinence. If they've been having sex for years, they're going to stop now?" Bennett (1987) reported that the following basic assumptions should be made when teachers prepare lessons on AIDS:

1. Children do want to learn, generally.
2. Children do want to learn about their bodies.
3. Children do want to learn about health risks and health management.
4. Children do want to learn about AIDS.
5. Finally, children do want to learn how to protect themselves from AIDS and

other disease.

The overall focus of AIDS education should be:

1. to help children develop clear standards of right and wrong,
2. to set a good example,
3. to help children resist social pressures to engage in dangerous activities, and
4. to instruct children about AIDS.

Firshein (1996) cited a 1996 federal report of United States HIV prevention education programs which concluded that improved in-service training is needed for educators. The CDC's first comprehensive assessment of school-based HIV prevention education programs examined five components in place as of 1994. Of the school districts that required HIV prevention education, only 61% provided in-service training. In addition, only about a third of all teachers surveyed received training during the two years preceding the CDC survey. This authority suggested that although that percentage is significantly higher than for teachers who received training on other health-education topics, the CDC says this number needs to grow to ensure educators are keeping up with new methods to assist youth in preventing HIV infection.

Bentrup, and Reinzo, (1990), explained how cooperative learning has become an increasingly popular instructional method that calls for students of varying achievement levels to work in small groups toward a common goal. Cooperative learning is an effective method for dissemination of HIV information to high school students, who are at risk for HIV infection. According to the United States Public Health Service, "Every junior and senior high school student in the United States should receive accurate, timely education about sexually transmitted diseases." The CDC, the President's Domestic Policy Council, and the Institute of Medicine/National Academy of Sciences have also supported school based education to prevent HIV transmission and infection. The National Science Teachers Association (NSTA), in partnership with Abbott Laboratories, has announced a new educational program entitled, The Science of HIV. This high school science curriculum package teaches students about the science behind HIV and AIDS. "It's critical that we teach students about the science of HIV, and America's science classrooms are the perfect place to start," said Gerald Wheeler, NSTA. A recent tracking report by the CDC found that new AIDS cases among 13 to 25 year olds infected through sex and drug needles has increased 20 percent between 1990 and 1995. By teaching the science of HIV and AIDS, students can better understand how this disease is prevented and treated.

“Abbott (1997) concluded Education is the missing link in stopping the spread of AIDS.”

In January 1996, Judith A. Billings, Washington State Superintendent of Public Instruction, revealed she had contracted AIDS. Ms. Billings was one of twelve women in the world who had contracted the HIV virus, via a virtually unheard method of transmission of bodily fluid, through artificial insemination using donor sperm. After becoming pregnant twice, Ms. Billings miscarried on both occasions. Ms. Billings reported she would not run for Congress as she had planned to write a book about her life and to become an active spokeswoman on AIDS issues. The former State Superintendent of Public instruction has already visited school assemblies to talk about AIDS, to share her experiences, and to help raise funds for the Northwest AIDS Foundation in Seattle. Ms. Billings said she would like to remain in the public eye because her position would allow her to educate people about AIDS, which has become reality in our educational setting, Bruder (1995) identified the following “universal precautions” for infection control when working with young children, particularly in special education setting: washing hands frequently; use of gloves and bleach for cleanup of significant blood; washing of toys and surfaces with bleach after sessions; prevent spread of runny noses and other incidental infections; and systematically dispose of waste materials. Said Bruder: “We now have to assume that

all people we come in contact have the virus, and use universal precautions with all bodily fluids, especially working in the school setting as a teacher and coach.”

**A Summary of Selected. Washington State
Health/Sex Education Model Curricula**

As explained by the Washington State commission on Student Learning

(WSCSL, 1995) today’s children are growing up and dramatic changing world. For example, the Human Immunodeficiency Virus (HIV) has had a dramatic world wide impact. In spite of intensive medical and scientific research efforts to find a cure and/or a vaccine for HIV infection, education remains the only available means to stem the spread of this disease. The WSCSL has emphasized that an understanding of good health, fitness, and sex education concepts and practices is essential for all students. As stated by WSCSL authorities:

Teaching our students good health and safety principles can lead to lifetime of healthy practices resulting in more productive, active, and successful lives. (p.126)

To provide a leadership and expertise for educating students in the areas of HIV education, the 1988 Washington State Legislature recognized the unique position of schools with the passage of the AIDS Omnibus Act. This Act mandated AIDS prevention education yearly for all common school

students in Grades 5-12. School districts were given several options for selecting their HIV/AIDS prevention program, including:

1. Adopting the state model KNOW-HIV/STD Prevention Curriculum developed by the Office of Superintendent of Public Instruction (OSPI).
2. Adopting a program that has been listed as a model curriculum previously approved for medical accuracy by the Washington State Department of Health (DOH) Office on HIV/AIDS.
3. Developing a district curriculum that must be submitted to the DOH Office on HIV/AIDS to be certified for medical accuracy.

KNOW: HIV/STD Prevention Curriculum, Grades 5 and 6

According to Dr. Terry Bergeson (1998), State Superintendent of Public Instruction, the KNOW model Human Immunodeficiency Virus/Sexually Transmitted Disease (HIV/STD) prevention curriculum guide has been designed to meet the requirements of the AIDS Omnibus Act and requirements for instruction about sexually transmitted diseases. This curriculum guide has provided information about certain diseases and how our bodies work to prevent and attack illness. An effective HIV/STD prevention program must go beyond increasing student knowledge and aim

toward impacting health behaviors. It is recognized that effective HIV/STD prevention education must be a part of a comprehensive health education program. This model curriculum has been reviewed by the Washington State Department of Health Office on HIV/AIDS and approved for medical accuracy as required by Washington State law.

Dr. Bergeson further recommend that the selection or development of a program for HIV/STD prevention must include consideration of the emotional and developmental age of students to whom it is presented. The following is a presentation of student developmental characteristics and corresponding appropriate approaches to HIV/STD education as presented in the KNOW curriculum, which was adapted from Criteria for Evaluating an AIDS Curriculum with permission from the National Coalition of Advocates for Students:

Developmental Characteristics of Students in Grades 6-9:

Students are likely to be:

- Engaged in a search for identity (including sexual identity), asking “who am I? Am I normal?” and very centered on self.
- Influenced by peer attitudes.
- Concerned about and experimenting with relationship between boys and girls.

- Concerned about the confusing sexual feelings many of them will have experienced.
- Worried about the changes in their bodies.
- Able to understand that behavior has consequences, but may not believe the consequences could happen to them.
- Fearful of asking questions about sex which might make them appear uninformed.

Approaches to HIV Education for Grades 6-12

The primary goal is to teach students to protect themselves and others from infection with the Human immunodeficiency Virus (HIV).

- Students should learn information on HIV disease process, transmission, and prevention.
- HIV/AIDS issues should be made as real as possible without overly frightening students. Movies about or classroom visits from people with HIV/AIDS have helped students in some schools overcome their denial of the disease and give HIV a human face.
- The focus should be on healthy behaviors rather than on the medical aspects of the disease.

- Students should examine and affirm their own values.
- Students should rehearse making responsible decisions about sex, including responses to risky situations.
- Students should know they have a right to abstain from sexual intercourse or to postpone becoming sexually active. They should be helped to develop the skills to assert this right.
- Students should know that forced sex is never justified or legal.
- It must not be assumed that all students will choose abstinence.
- Information about HIV should be presented in the context of other STDs.
- It is important to be honest and to provide information in a straightforward manner. Be explicit. Use simple, clear words. Explain in detail. Use examples.
- Sexual vocabulary may be connected with slang, if necessary, to be certain students understand the lesson.
- It is important to be non-threatening and to work toward alleviating anxiety.
- Students should be given the opportunity to ask questions anonymously.

- Students must know where in their community they may go for information and resources for sexual health.
- Discussion of dating relationships can provide opportunities to teach decision-making skills. Students should be helped to think through how to make responsible decisions about sex before questions arise in a dating context.

Teaching about HIV/STDs is often enhanced by:

- Movies and other visual aids.
- Role-plays and other participatory exercises.
- Same-sex groupings (to encourage more candid discussion) followed by sharing in a mixed-sex group (to increase comfort level in discussing sexual subjects with members of the opposite sex).
- Involvement of students in planning and teaching— let young people speak the message to each other whenever possible.
- Peer education programs which can provide a venue to continue risk prevention messages beyond the classroom

-

AIDS education should also include:

- Discussion of critical social issues raised by the AIDS epidemic, such as protecting the public health without endangering individual liberties.
- Resources to help students find answers to detailed medical questions.
- Skills that will enable them to continue to evaluate the AIDS crisis.

Washington State Essential Academic Learning Requirements (EALR's)

The Washington State Office of Superintendent of Public Instruction (OSPI), under the leadership Dr. Terry Bergeson, has mandated higher educational standards for all students in the form of four (4) Essential Academic Learning Requirements (EALRs). Goal 2 specifically addresses the need for students to know and apply the following concepts principles, and skills necessary for safe and healthy living, and in turn, for successful learning.

1. The student acquires the knowledge and skills necessary to maintain an active life: movement, physical fitness, and nutrition.

To meet this standard, the student will:

1.1) Develop fundamental physical skills and progress to complex

movement activities as physically able

1.2) Incorporate rules and safety procedures into physical activities.

1.3) Understand the concepts of health-related physical fitness and
develop and monitor progress on personal fitness goals.

1.4) Understand the relationship of nutrition and food nutrients to
physical performance and body composition.

2. The student acquires the knowledge and skills necessary to maintain a healthy life: Recognize patterns of growth and development, reduce health risks, and live safely.

To meet this standard, the student will:

2.1) Recognize patterns of growth and development.

2.2) Understand the concept of control and prevention of disease.

2.3) Acquire skills to live safely and reduce health risks.

3. The student analyzes and evaluates the impact of real-life influences on health.

To meet this standard, the student will:

3.1) Understand how environmental factors affect one's health.

3.2) Gather and analyze health information.

3.3) Use social skills to promote health and safety in a variety of situations.

3.4) Understand how emotions influence decision making.

4. The student effectively analyzes health and safety information to develop health and fitness plans based on life goals.

To meet this standard, the student will:

4.1) Analyze health and safety information.

4.2) Develop a health and fitness plan and a monitoring system

An Analysis of Information/Materials
Obtained from Selected Sources

For purposes of comparison and contrast, the writer (Shih-Wei Cheng) visited five schools in Kittitas County, Washington, and interviewed six (6) secondary-level teachers/university professors concerning to their instructional practices in health/sex education. Visitations included:

- Kittitas Elementary and Middle School, Kittitas Washington
- Thorp Elementary and Middle School, Thorp Washington
- Walter Strom Middle School, Cle Elem, Washington
- Morgan Middle School, Ellensburg Washington
- Central Washington University, Ellensburg Washington

An analysis of information obtained from middle-level teachers interviewed

revealed that five (5) characteristics were generally common to all instructional practices with regard to health/sex education. These were:

1. Letters to Parents: All parents of middle-level students receive an announcement letter from the instructor before teaching the topic of sex. Parents have a right to excuse their child from attending class while the instructor is teaching the sex-related curriculum.
2. State and District Rules: The instructor needs to follow State and District guidelines when teaching the sex education curriculum. Teachers should avoid sensitive topics such as condom use, birth control, and abortion.
3. Activities: Instructors tend to use different activities such as role play and “question box” to help students get involved in topics concerned with sex education. For example, these activities can help students understand more about the body system and how to protect themselves from risk.
4. Supportive Materials: Teachers use films, posters, or illustrations to help student learning. For example, students can create posters and slogans to reinforce important concepts.
5. Guest Speakers: Instructors often invite doctors or nurses to make classroom prestations.
- 6.

Summary

The research and literature summarized in Chapter Two supported the following themes:

1. Each stage of a child's sexual development is characterized by a set of physical attributes and feelings related to sex.
2. The HIV/AIDS curriculum has become a life and death subject matter that needs to be addressed with the utmost care. Students need to be confronted with the facts of what will happen if they make unhealthy choices in life.
3. To provide leadership and expertise for educating students in area of HIV/AIDS, health/sex education, and fitness, the Washington State Legislature has mandated that all school districts adopt model curricula for instructional purposes.
4. An analysis of information/materials obtained from selected sources revealed that five (5) characteristics were found to be generally common in all secondary-level health/sex education instructional practices with regard to health/sex education. These included: Letters to parents; following state and district rules about sex education; appropriate age-level activities; supportive materials; and, guest speakers.

CHAPTER THREE

PROCEDURES OF THE PROJECT

Introduction

The purpose of this project was to develop a model sex/health education curriculum for middle middle-level students in Taiwan. To accomplish the purpose, a review of related literature was conducted. Additionally, related information/materials from selected sources was obtained and analyzed.

Chapter 3 contains background information describing:

1. Need for the Project
2. Development of Support for the Project
3. Procedures of the Project
4. Planned Implementation and Assessment of the Project

Need for the Project

The need for the project was influenced by the following considerations:

1. The writer (Cheng Shih-Wei) completed a Bachelor of Fine Arts (BFA) degree from Central Washington University in 2001. This educational background in the United States increased the writer's awareness of the importance of sex education for this modern generation, especially for young

people entering puberty. Undergraduate studies also heightened the writer's interest concerning the need to develop a model sex education curriculum for middle-level students in Taiwan.

2. The current worldwide HIV/AIDS epidemic has confirmed the need for increased student awareness and education related to health/sex education.
3. The review of related literature conducted for purposes of this project confirmed the importance of health/sex education as an essential part of a comprehensive education for all youth.
4. Undertaking this project coincided with the writer's graduate studies in Educational Administration at Central Washington University.

Development of Support for the Project

This project has evolved over a period of many years. While still in high school in Taiwan, based on the encouragement of family and friends to the determination was made pursue admittance to a college/university in the U.S.. The writer enrolled in general education courses at Yakima Valley Community College (YVCC) from 1997 to 1999. At YVCC the writer become interested in the subject of health/sex education and aware that this subject while taught in American secondary schools, was not taught in Taiwan. After completing an Associate of Arts degree at Yakima Valley

Community College in 1999, the writer enrolled at Central Washington University and completed a BFA degree in 2001. In 1995, the writer had been referred to Dr. Gregory Chan, Vice President for Academic Affairs at Central Washington University, who encouraged the writer to complete a BFA degree at CWU and, to subsequently enter the graduate program in Educational Administration. During the 2000-2001 school year, after completing the English Second Language (ESL) program and completing course work in English Language Studies, the writer was admitted to graduate school at CWU. While enrolled in EDF 510, Educational Research and Development, the researcher identified the topic which become the subject of this project. To assist the writer with the design and development of a model sex education curriculum for middle-level school students in Taiwan, the following school district employees individually and collectively provided the encouragement deemed to undertake this project while contributing their expertise.

Kittitas School District

Mr. Jerry Harding – Superintendent of Schools

Kittitas Elementary and Middle Schools:

Doug Maynard/6-12 Principal

Tim Clark/ Physical Ed. Teacher

Thorp School District

Dr. Virginia Erion - Superintendent of Schools

Thorp Elementary and Middle Schools:

Carol Miller

Cle Elum-Roslyn School District

Walter Strom Middle School and Cle Elem-Roslyn elementary School

Mrs. Michele Wadeikis-Principal

Steve Sherrill/Physical Ed. Teacher

Ellensburg School District

Morgan Middle High School

Mr. Gary Ristine-Principal

Central Washington University

Dr. Ken Briggs-Professor;Health Education

Procedures of the Project

To obtain background information essential for developing a model sex education curriculum for middle-level students in Taiwan, an Educational Resources Information Center (ERIC) and Internet computer searches were conducted. These investigations provided essential research and information related to human sexuality,

and existing Sex Education Programs, and basic resource documents. Additionally, related information from selected sources was obtained and analyzed.

Planned Implementation and Assessment of the Project

Implementation of the model sex education curriculum has been tentatively scheduled for 2002, following the writer's completion of graduate studies at CWU and his return to Taiwan. The model curriculum may be subsequently modified, based on input and advice received from professional colleagues in the Republic of China. Further modification and assessment of the model curriculum will occur after middle-level students have worked with and used the curriculum throughout the 2002-2003 school year. Ongoing revision will be made annually based on feedback from students, teachers, and administrations.

CHAPTER FOUR

The Project

The model sex/health education curriculum and instructional program designed for middle-level students in Taiwan, which was the subject of this project, has been presented in Chapter Four, in five (5) units, including:

Unit One- An Introduction to Sex Education

Unit Two- The Human Body (Male)

Unit Three- The Human Body (Female)

Unit Four- Puberty

Unit Five- STD HIV/AIDS

**A MODEL SEX/HEALTH EDUCATION
CURRICULUM FOR MIDDLE-LEVEL
STUDENTS IN TAIWAN**

**Shih-Wei Cheng
Central Washington University
July, 2002**

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Unit One

An Introduction to Sex/Health Education

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UNIT ONE
AN INTRODUCTION TO SEX/HEALTH EDUCATION

Unit Overview

Unit One is design to create an appropriate mindset for the sex/health education program. The teacher provides a brief overview of the program, and students list and discuss things they may find difficult to talk about with regard to human sexuality.

Teacher and students problem-solve ways to overcome some of these difficulties while establishing ground rules for the class. Students also learn about the importance of self-esteem and attitudes for enhancing personal well-being.

Student Learning Objectives

Student will be able to...

- List barriers to talking about sexuality in the classroom and generate ideas and procedures to help overcome those barriers or difficulties.
- Describe the importance of self-esteem in their lives.
- Review and discuss selected mental sets, and/or attitudinal affirmations that enhance self-concept and well-being.

Learning Activities

Activities will be consistent with unit student learning objectives, and will include:

-- On the board write, "Things about Sex That May be Difficult to Talk About in the Classroom." Ask students to brainstorm a list of things about human sexuality that might be difficult to talk about sex in the classroom (e.g., difficulty finding or saying the right words; having boys and girls together; having the teacher in the room; dealing with laughing at or feeling embarrassed about sex).

-- Suggestion: The teacher may wish to divide the class into small groups of 3-4 students to generate a list. This is a good way to build trust and to increase participation. If cooperative groups are used, each member of the group should be given a role that can include:

- Facilitator: Leads the discussion.
- Recorder: Writes down the group's key ideas.
- Timekeeper: Participates but also watches the time to make sure the group finishes on time.
- Reporter: Reports back to the whole class.

Teaching Strategies

Strategies may include:

- Teacher-directed discussions
- Cooperative learning groups
- Question and answer drills
- Suggestion box

Instructional Materials

Resources may include:

- KNOW-HIV/AIDS Prevention Curriculum
- Washington State EALR's

Assessment

Multiple strategies may include:

- Written exams/quizzes
- Group discussions
- Research papers
- Individual/group research projects

UNIT TWO

The Male Human Body

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UNIT TWO

The Male Human Body

Unit Overview

In Unit Two, students discuss the changes that occur in male during puberty. They learn and identify male reproductive anatomy and physiology by taking lecture notes, engaging in classroom discussion, and labeling parts of the male reproductive system on a handout. (Page P-24)

Student Learning Objectives

Students will be able to...

--Share their experiences interviewing an adult family member and recognize that adolescence is a tumultuous period involving change in many important areas of their lives.

-identify and label the parts of the male reproductive system. (Page P-25)

Learning Activities

Activities will be consistent with unit student learning objectives, and will

Include:

--Teacher-led review and discussion of external changes boys go through as they become men. Place the "From Child to Adult" transparencies (Pages P26,27) can be used to help students note such changes as: Height and weight; growth of body

hair (facial, underarm, chest, and pubic); development of muscle; broadening of shoulders; and increase in size of sex organs.

--Discussion of dating relationships can also provide opportunities to teach decision-making skills.

Teaching Strategies

Strategies may include:

- Lecture, discussion use of cooperative learning teams, and appropriate movies and other visual aids.
- Role-playing and other participatory exercises.
- To increase comfort/levels same-sex students groupings should precede and a mixed-sex group discussion/activities.
- Involve of students in planning and teaching-- let students speak the message to each other whenever possible.
- Discussion of critical social issues raised by the AIDS epidemic, such as protecting the public health without endangering individual liberties.
- Organizing small groups to identify/list sexual vocabulary connected with slang.

Teachers should review vocabulary terms used for class discussion in

advance to assure a non-threatening and less anxiety producing atmosphere.

-Suggestion box; this activity can provide student opportunities to ask question
anonymously.

Instructional Materials

Resources may include:

- KNOW-HIV/AIDS Prevention Curriculum
- Washington State EALR's

Assessment

Multiple strategies may include:

- Written exams/quizzes
- Group discussions
- Research papers
- Individual/group research projects

UNIT THREE

The Female Human Body

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The Female Human Body

Unit Overview

Students discuss the changes that occur in females during puberty. They learn and identify female reproductive anatomy and physiology by taking lecture notes, engaging in classroom discussion and labeling parts of the female reproductive system on a handout. (Page P-28)

Student Learning Objectives

Student will be able to...

-identify and label the parts of the female reproductive system. (Page P-29)

Learning Activities

Activities will be consistent with unit student learning objectives and will

include:

--Ask students what external changes girls go through as they become women. Place from Child to Adult on the overhead projector. Allow only the male side of the transparency to be visible.

--Have students note the increase in height and weight, growth of body hair (underarm hair, pubic hair), the rounding of hips, breast development, the apocrine sweat glands beginning to function, skin changes, maturing of the reproductive system, and menstruation.

Teaching Strategies

Strategies may include:

-Lecture, discussion use of cooperative learning teams, and appropriate movies

and other visual aids.

-Role-playing and other participatory exercises.

-To increase comfort-levels, same-sex students groupings should precede

mixed-sex group discussion/activities.

-Involving students in planning and teaching-- let students speak the message to

each other whenever possible.

-Discussion of critical social issues raised by the AIDS epidemic, such as

protecting the public health without endangering individual liberties.

-Organizing small groups to identify/list sexual vocabulary connected with slang.

Teachers should review vocabulary terms used for class discussion in

advance to assure a non-threatening and less anxiety producing

atmosphere.

-Suggestion box; this activity can provide student opportunities to ask questions

anonymously.

-Suggestion box; this activity can provide student opportunities to ask question
anonymously.

Instructional Materials

Resources may include:

- KNOW-HIV/AIDS Prevention Curriculum
- Washington State EARL's

Assessment

Multiple strategies may include:

- Written exams/quizzes
- Group discussions
- Research papers
- Individual/group research projects

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Puberty

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UNIT FOUR

Puberty

Unit Overview

Students are asked to consider adolescence as a personal yet universal transition between childhood and adulthood. Students discuss the physical and psychological changes that occur during puberty. They brainstorm strategies for coping with these trying and tumultuous times.

Student Learning Objectives

Students will be able to...

- Examine, analyze and discuss the changes that occur during adolescence.
- Generate a list of strategies for coping with personal difficulties.

Learning Activities

Activities will be consistent with unit student learning objectives and may include:

- Asking students to describe what the teen years are like. They may indicate that the teen years are wonderful, awful, fun, confusing, and that there are new kinds of freedom or no freedom at all. As students express their ideas, write key words, concepts and phrases on the board.
- State that being a teen can make the highs seem higher and the lows seem

lower. Ask students to explain why they think the teen years are both so wonderful and so awful. Generally, students will list a board range of reasons: reasons involving school, parents, decisions, boyfriends and girlfriends are common. You may want to comment briefly about each idea as it is expressed.

Teaching Strategies

Strategies may include:

- Teacher-directed discussion
- Cooperative learning groups
- Questions and Answers drills
- Suggestion box

Instructional Materials

- Jon Wiles and Joseph Bondi: Curriculum Development. A Guide to Practice
(Chapter 8, "Middle School Programs and Issues, The Middle School Student")
- KNOW-HIV/AIDS Prevention Curriculum
- Washington State EALR's

Assessment

Multiple strategies may include:

- Written exams/quizzes
- Group discussions
- Research papers
- Individual/group research projects

Unit Five

STD HIV/AIDS

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UNIT FIVE

STD HIV/AIDS

Unit Overview

In Unit Five students will learn about Acquired Immune Deficiency Syndrome

(AIDS), the Human Immunodeficiency Virus (HIV), that causes AIDS, and destroys

the body's immune system. Students will learn how HIV is spread through exposure

to infected body fluids, such as blood, semen, or vaginal fluids.

Student Learning Objectives

Students will be able to...

- Discuss and differentiate between true and false information about HIV/AIDS

- and between reliable and unreliable sources of information about HIV/AIDS.

- evaluate certain behaviors and accurately categorize them as being safe of

- riskily with regard to their resulting in possible infection with an HIV/AIDS.

Learning Activities

Activities will be consistent with unit student learning objectives.

Activities may include:

- Ask for volunteers to share with the class something they have heard about

- one of the STDs. Ask the class to think especially about the information

- they are receiving/hearing about HIV/AIDS, because it is one of the most

dangerous STDs. Students can provide in class any information they have received, even if they are unsure if it is true or false. Ask that each statement begin with "I heard..."

--Instruct the students, after each statement, to signal thumbs up if they believe the statement to be true, thumbs down if they believe it to be false, and cross arms if they are unsure.

--Discuss, clarify and/or correct each statement after signaling is complete.

--Ask students to name some reliable and unreliable sources of STD information and list these on the board.

Teaching Strategies

Strategies may include:

- Teacher-directed discussions
- Cooperative learning groups
- Question and Answer drills
- Suggestion box

Instructional Materials

Resources may include:

- KNOW-HIV/AIDS Prevention Curriculum
- Washington State EALR

Assessment

Multiple strategies may include:

- Written exams/quizzes
- Group discussions
- Research papers
- Individual/group research projects

Parts of the Male Reproductive System

Male Reproductive System

Key

From Child to Adult

Changes That Occur During Puberty

From Child to Adult

Changes That Occur During Puberty

Parts of the Female Reproductive System

Female Reproductive System

Key

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this project was to develop a model sex/health education curriculum for middle-level school students in Taiwan. To accomplish this purpose, a review of related literature was conducted. Additionally, related information/materials from selected sources was obtained and analyzed.

Conclusions

Conclusions reached as a result of this project were:

5. Each stage of a child's sexual development is characterized by a set of physical attributes and feelings related to sex.
6. The HIV/AIDS curriculum has become a life and death subject matter that needs to be addressed in schools with the utmost care. Students need to be confronted with the facts of what will happen if they make unhealthy choices in life.
7. An analysis of information/materials obtained from selected sources revealed that five (5) characteristics were found to be generally common in all secondary-level health/sex education instructional practices with

regard to health/sex education. These included: Letters to parents; following state and district rules about sex education; appropriate age-level activities; supportive materials; and, guest speakers.

Recommendations

As a result of this project, the following recommendations have been suggested:

1. A quality sex/health education curriculum for middle-level students should include instructional components concerned with the stages of sexual development, puberty, and human reproduction and development.
2. To help students to make critical life choices, they should be introduced to HIV/AIDS, "life and death" curricula while in middle school, if not earlier.
3. A well developed sex/health education curriculum for middle-level students should be characterized by: Letters to parents; following state and district rules about sex education; appropriate age-level activities; supportive materials; and, guest speakers.
4. Other educators seeking to develop a sex/health education curricula for middle-level students may wish to adapt and/or utilize the model curriculum developed for this project or, undertake further research on

this subject to meet their unique needs.

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