

THE BLUE OCEAN STRATEGY TO PREVENT PREGNANCIES STUDENTS IN CHACHOENGSAO PROVINCE, THAILAND

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ABSTRACT

The objectives of this research were to study the level of knowledge and understanding of the causes and methods of prevention the unplanned pregnancy of students in Chachoengsao Province; and to develop and study the results of the use of learning process model with the Blue Ocean Strategy to prevent unplanned pregnancies before, after the experiment and follow-up in Phase 1. The population was 85,955 students in Chachoengsao Province and the sample group was divided into two groups: by purposive sampling using Krejcie and Morgan's Table, the first group of 384 students to answer the questionnaires "Knowledge and Understanding of the causes and methods of prevention the unplanned pregnancy" and the second group of 30 students including pregnant students, the students who used to be pregnant, and concerned persons. The collected data and information from the first stage were used to be the guidelines focusing on developing three domain: cognitive domain, affective domain and behavioral domain. Nine experimental groups chosen interviews were Grade 4–12 students, six people per group, and one experimental group in each level, three females and three males, totaling 54 students. Grade 4–6 students were from Wat Bang Phra School, and Grade 7–12 students were from Benchamaracharungsarit School. The learning process model with the Blue Ocean Strategy was used for six times, from one hour and a half to two hours per time. The embedded design: embedded experimental model was conducted. The data was analyzed by non-parametric statistics. The results of this research were:

1. In overall, Grade 4 – 12 students in Chachoengsao had knowledge and understanding of causes and prevention of unplanned pregnancy at a high level, and also high in all aspects of behavior, cognitive domain affective domain behavioral domain

2. Six procedures of learning process model with the Blue Ocean Strategy are: 1) The Strategic Canvas 2) The Four Actions Framework, 3) Focusing on the Big Picture, 4) Visual Awakening, 5) Visual Strategy Fair and 6) Building Execution into Strategy. Each procedure has three stages: initial stage, working stage, and final stage, to prevent unplanned student pregnancy, loving yourself, bringing your life to a point where it is really worth living, having your life goal, realizing the value of your life, and initiating new things.

3. The level of unplanned pregnancy prevention of Grade 4–12 students in Chachoengsao after the experiment was higher than before the experiment at 0.05 with statistical significance. The level of unplanned pregnancy prevention after the experiment and the follow up period was not different.

Keywords: Blue Ocean Strategy, Prevention of Student Pregnancy, Chachoengsao province

INTRODUCTION

Adolescent pregnancy was increasing causing the persons involved to call a meeting. IN 2016, The Subcommittee for Preventing and Solving Adolescent Pregnancy at provincial

level prepared a strategy manual National Adolescent Pregnancy Prevention and Solution 2017-2026 under the Pregnancy Act to solve the problem of adolescent pregnancy. In 2015, the situation of pregnancy among students in Chachoengsao province for ages 10-14 years old, found 17 live births. In 2016, 19 live births and in 2017, 18 live births in the population of women aged 15-19 years old, the situation of student pregnancy in Chachoengsao in 2015, 694 live births, in 2016, 658 live births, and in 2017, 654 live births were found among 20,992 women aged 15-19 years old, representing 31.15 percent per female population aged 15-19 years old of 1,000 people. For the adolescent pregnancy found that the number of 141 people, representing 14.67% of all adolescent mothers who give birth or abortion, and 40.09% who received birth control services after childbirth, or miscarriages before discharge from the hospital, and 80.36 of these are postpartum contraception or miscarriages by means of contraception before discharge from the hospital (Chachoengsao Provincial Public Health Office, 2017). Adolescent unwanted pregnancy is a public health problem due to the lack of maturity in self-care during pregnancy and delivery, If these problems are allowed to occur without preventive measures, they will have a negative impact. If these problems occurred without preventive measures, they will have a negative impact on society in the future which which be difficult to resolve. The problem of pregnancy in adolescents is a serious social problem that is reflected in the facts of the said problem. The incidence of childbirth among students around the world aged 15-19 years old was reported, with an average of 65 cases per 1,000 women of the same age. In Thailand statistics on children and youth of unwanted pregnancy that indicates the seriousness of the problem (Poonkham, Prompraphat, PaisarnAchaphong & Sarakkarorn, 2010). From the age survey when having sex for the first time of all Thai students found that the trend is steadily declining. At present, it was found that the students started having sex for the first time; aged 13-15 years old and still found that they were not ready to have sexual intercourse. 50% do not use condoms which was consistent with studies of factors resulting in the pregnancy of students. It was found that most pregnancies were due to the irregular or lack of use of contraceptive methods due to lack of knowledge, a misconception that the use of condom interferes with sexual pleasure, and having sex only once will result in conception. In addition, free sex is not tied to more modern people is another important cause. According to the global survey of sexual behavior, people today have an average number of sexual partners of 10.5. Only 1 in 4 men, in average, have one sexual partner. Men have more sexual partners than women on average 12.4 while women have 7.2 (World Health Organization, 2011).

Student Pregnancy Situation

School age is the age that has the most physical, mental and affective changes and the most important change for adolescents in the body caused by the sex hormone system in the body. The female adolescents can get pregnant and give birth. Curiosity and sex values have changed from the past. Adolescents have sex at a younger age. This can lead to other problems such as sexually transmitted diseases, AIDS, premature pregnancy, and the problem of illegal abortion (World Health Organization, 2017). It is reported the global average live birth rate among 15-19-year-old mothers in 2015 was 44.1 percent of the 1,000 women of the same age group. The maternity rate in Thai adolescents aged 15-19 years old per 1,000 female population of the same age group in 2011-2014 was 53.04 percent, 53.04, 51.2 and 47.9 percent, respectively (Ministry of Public Health, Office of Policy and Strategy, 2016). The birth data in 2014 showed that adolescents aged 10-14 had a total of 3,213 births. Teenagers aged 15-19 had a total of 112,277 births and had adolescent births aged 15-19, accounted for 12.5 percent among adolescents aged 10-14 years, accounting for 0.1 percent (Ministry of Public Health, Office of Policy and Strategy, 2015), which indicates that adolescents have a high rate of pregnancy. The causes and contributing factors of pregnancy in adolescence caused by family conditions, including poor family relationships, and broken families, the rate of teen sex is high. Currently due to changes in society, culture, beliefs and values, education

level or socio-economic status, drinking alcohol or drug abuse, lack of knowledge about the prevention of pregnancy or failure of various birth control methods, rape by family or other individuals; and the first time of women have their first menstruation causing early ovulation, so she can get pregnant from a young age. Teen pregnancy affects both the adolescent itself and the child born such as the growth of the body, risk of complications including malnutrition, anemia, and high blood pressure combined with pregnancy, contracting during pregnancy, especially sexually transmitted diseases. The baby's head is out of proportion with the pelvic cavity, postpartum hemorrhage, etc. (Sansiriphan N., 2012). Moreover, there is a social impact, including the need for teen mothers to drop out of school, loss of opportunity to study at a higher level which correlates with future career opportunities. The effects on the fetus include fetal death, low birth weight, and slow development. Father and mother have stress and arguing over caused the family problems. Some people decide to have an abortion, etc. As a result, there are ongoing problems, both in the public health field, which have to lose budget for quality of life of mother and child after birth, including the problem of abandoning children to be a burden for the family, and a psychological problem of the family and the child is born. Prevention of teen pregnancy in Thailand has many forms: family based which is the function of the family (Pongsomboon & Jampasak, 2015). The family must provide love, time, attention and continuity, and provide a good example. Being an advisor in all matters, teach children life skills to build life immunity. School base which is a function of the school. The school must set a good example, strengthen counseling skills, screening at risk groups, teach focusing on risk groups apart from the training courses, care, care, love, time for teaching, immunization, life, life skills, take care of the environment within the school, school media, free time arrangement, organize student activities. Moreover, there is a policy on handling child problems. A community-based is a function of the community concerned. The community must be involved in caring, narrowing, training and supervising dormitory regulations, social rules according to their roles and functions, and the majority of adolescent pregnancy prevention studies refer to sex education and Sexuality Education (Jirawatkul, Ruengkolakit, Chongudomkarn, Saengcharoen, Anusornteerakun, Wattanakulkiet, Sornchai, Rujiraprasert, Muangpil & Kotnara, 2013). In addition, quasi-experimental studies have been conducted on the effectiveness of preventive sex education programs towards sexual risk behavior among Mathayomsuksa 2 students, Nakhon Pathom Province (Bualoy, Therawiwat, Vathanasornborn & Immanee, 2014). There are other participational studies which use a model for activities that educate sex education and enhance life skills, such as the development of preventive forms of adolescent pregnancy of Thai Women using School-Based (Chaikiwatana, Phowatana, Lampun & Jiraphongsuwan, 2013), and the development of preventive and corrective action models of premature pregnancy among adolescents in Kamphaeng Phet Province (Ratta, Arunwong & Nithakorn, 2015), however, at present, the best course of action to address pregnancy problems cannot be concluded in Teenagers in Thailand. Therefore, to be comprehensive and keep pace with the constantly evolving knowledge and to integrate it into a more systematic manner, which will be useful in its concrete application.

This research is an extension of research on the study of the effects of using mechanical learning processes of the blue ocean campaign for the prevention of unwanted pregnancy among undergraduate students. In 2015 (Sirathatnararajana, Lueaiklang, Prayai, 2018) studied pregnancy from primary and secondary levels and developed a learning process model of the Blue Ocean Strategy that focuses on students to increase the level of knowledge, understanding, prevention of unwanted pregnancy among undergraduates. It was found that undergraduate students, before and after the experiment, there was a statistically significant difference at the 0.05 level, with a higher mean after the experiment than before, and the follow-up period showed no difference. Factors affecting the unwanted pregnancy of students were friendship between the opposite sex, friendship between juniors and seniors, bad relationships in the family, and a group of friends from high school. The experimental group had goals in life, self-esteem, self - respect and awareness raising between the opposite sex,

heterosexual friendships, friendship between juniors and seniors, relationships in the family, university and friends from high school.

In this research, the researchers applied the process of the Blue Ocean Strategy to prevent pregnancy of *dynamic* students. There are three domain of pregnancy prevention changes: cognitive domain, affective domain, and behavioral domain. To find a strategy or new methods to enable students to innovate, pioneer, create new boundaries and needs, create value-innovative ways (Kim & Mauborgne, 2005) together of students to prevent students from becoming pregnant in school. In thinking to prevent pregnancy of the dynamic students for the Thailand case tend to be more increased, respectively. Maternal maternity rate at for those less than 20 years old that were born in public hospitals during the year 2004-2009 in 2009, increased to 16%, and the lowest age to give birth was only 10 years old. Because these were not ready and young, they lacked the maturity to give birth and deal with life problems that arise. Illegal abortion is also an option for solving the problem of pregnancy. At the same time, it reflects the barriers to accessible reproductive health services available, quality and safety in Thailand (World Health Organization, 2011). This research paper will present 1) the results of the study of the cognitive level of causes and guidelines for the prevention of unplanned pregnancy of students in Chachoengsao Province 2) Model of learning process with the Blue Ocean Strategy for preventing unplanned pregnancy of students in Chachoengsao Province and 3) the effect of using the learning process with Blue Ocean Strategy to prevent unplanned pregnancy pregnancies before, after the experiment and follow-up to determine the blue ocean strategy to prevent pregnancy of students in Chachoengsao Province. Thailand

LITERATURE REVIEW

The Blue Ocean strategy (BOS)

A process or method of thinking, learning for the prevention of *dynamic* student pregnancy through the process of Blue Ocean Strategy is the strategic canvas, the four actions framework, focus on the big picture, visual strategy fair, and build execution into strategy, aiming to change the 3 domain of pregnancy prevention behavior, namely the cognitive domain, affective domain and behavioral domain to find a strategy or new methods to enable students to innovate, pioneer, create new horizons and needs, create a new way, share value innovation for prevention of unwanted pregnancy (Kim & Mauborene, 2005).

Model the learning process of the Blue Ocean Strategy to prevent unplanned pregnancy refers to the learning process, methodology, learning process of students to prevent unplanned pregnancy in Chachoengsao province through the process. The Blue Ocean Strategy is drawing on a strategic canvas, analyzing the four actions frameworks, focusing on the big picture, visual strategy fair, with the basic skills of integrated group counseling. It focuses on talking to students about self-disclosure to the appropriate level, interacting with groups by expressing thoughts and feelings, asking questions and expressing interest. It emphasizes the importance of building trust in a profound, constructive interaction, expresses honesty, empathy, respect, positive regard and acceptance, spontaneity active listening, understanding things where students speak and understand their affective s and feelings and sensitivity. Every activity is aimed at improving the spituallity and mind (Corey, Corey & Corey, 2012). It may help you doing new things that are different from the original one you haven't tried before, loving onerself and his or her surroundings, having physical, spiritual energy in life and making a flag for clear goals in life. We must try to develop ourselves to be different, to draw out our potential clearly, to create new demands in life, always by using new innovations, that is, easy to do, but it has great value as a new watershed which can be compared with the blue ocean. Each activity is like giving vaccines to students. The key to Blue Ocean Strategy is self-love and leading *self-life* to a good point by doing new things with value, not getting pregnant in school age. It does not focus on not having girlfriend, but on loving yourself, bringing your life to a wholesome point. The interview was used individually in the group. There were 54 people,

divided into 3 groups, 6 people each. There are three stages: the steps leading into the activity, the execution and conclusion stages with 6 activities, 1.30 – 2 hours each, twice a week, consisting of drawing on a strategic canvas, analysis of the four actions framework, visual awakening, visual strategy fair and build execution into strategy (Kim & Mauborgne, 2005).

Research Conceptual Framework

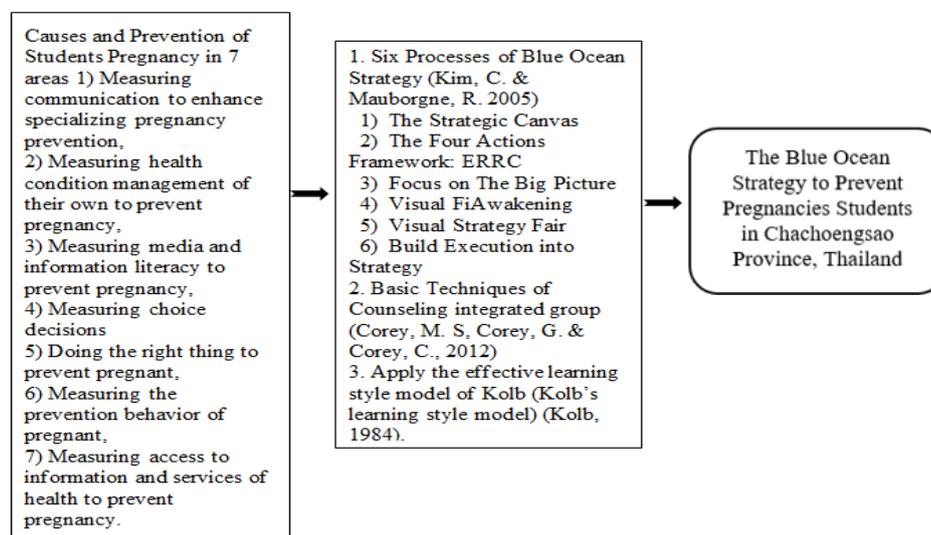


FIGURE 1
RESEARCH CONCEPTUAL FRAMEWORK

Research Methods

The research uses a mixed research model between qualitative and quantitative research, with a certificate of ethical consideration in human research from Chachoengsao Provincial Public Health Office, Project Code PH_CCO_REC 02/2019 dated on October 16, 2018 by the research is divided into 2 phases as follows:

Phase I to analyze the cognitive level of cause and prevention of unplanned pregnancy of students in Chachoengsao province to lead the creation of a learning process model with the Blue Ocean Strategy for prevention of unplanned pregnancy in the experimental group.

Quantitative data collection was from students in Chachoengsao Province Grade 4 to Grade 12 with the age of 10 to 18 years old by using the assessment form on “Knowledge and Understanding of Causes and Prevention of Unplanned Pregnancy” by using purposive sampling from the Office of Primary Education District 1 under the Office of Primary Education District 2 and the Office of Secondary Education Region 6, 35,955 people (Chachoengsao Provincial Education Office on June 10, 2017). A sample of 384 people (using the schedule of Krejcie and Morgan (Krejcie & Morgan, 1970).

Qualitative data collection was used in the development of a learning process model with the Blue Ocean Strategy to prevent unplanned pregnancy of students in Chachoengsao Province in Phase 2 by informal interview. The informal interview is a discussion with, issues set in advance. It has a casual atmosphere without strict procedures and answering questions. Interviews will be with pregnant or previously pregnant students and persons involved in the duties associated with pregnant students or who have been pregnant, of 30 people classified as follows: 1) pregnant or previously pregnant students and boyfriends 2) class teacher, guidance teacher 3) person who works on giving birth at a hospital 4) parents and 5) school administrators. A group example is selected by interviewing a guidance teacher, parent network, and the class teacher.

Phase 2 to develop and test the learning process model with the Blue Ocean Strategy to prevent unplanned pregnancy of students in Chachoengsao Province by constructing and experimenting with 9 groups of experiments without control group, each level of one experimental group (Grade 4-6 and Grade 7-12) were male and female students in the study, Chachoengsao Province, totaling 54 people, 18 students in grades 4-6 from Wat Bang Phra School and 36 students in grades 7-12 from Benjamaracharangsarit School, divided into 9 groups, 6 students per class, 1 experimental group without control group. There are 3 steps to proceed: the steps leading into the activity, the execution and conclusion stages using the embedded design: embedded experimental model, which is the study of qualitative data within the experimental quantitative research method. The researcher will use the quality conducted by informal interviews with the experimental group after each experiment. Pre and post-experiment evaluation and follow-up of the interview questionnaire were performed by examining the tool quality of 7 experts, and was carried out with a Content Validity Index (CVI) assessment form on Knowledge and Understanding of Causes and Prevention of Unplanned Pregnancy: BOSPPregS 2017 IN SCHOOL (I)".

Research Results

1. The analytical results of the study the level of knowledge and understanding of the causes and guidelines for the prevention of unplanned pregnancy of students in Chachoengsao province Grade 4-6 and Grade 7-12 that they have knowledge, understanding the causes to prevent unplanned pregnancy at high levels in all aspects.

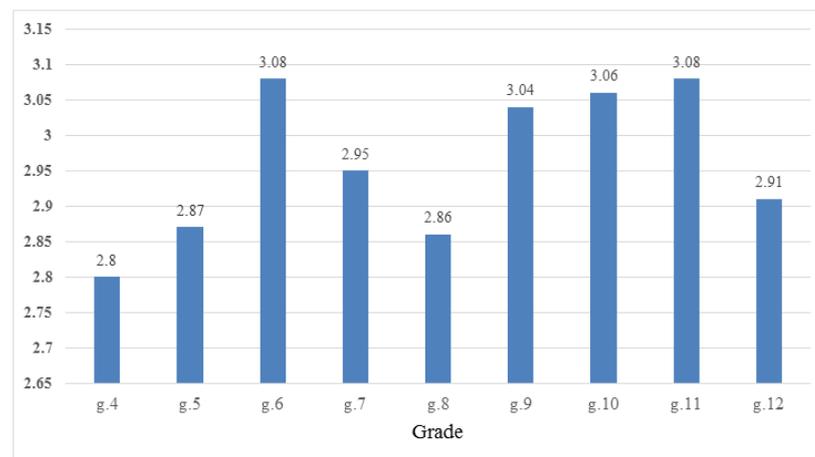


FIGURE 1
SHOWS THE MEAN OF COGNITIVE LEVEL OF CAUSES AND APPROACHES TO PREVENT UNPLANNED PREGNANCY OF STUDENTS IN CHACHOENGSAO GRADE 4-6 AND GRADE 7-12 (N=384)

From Figure 1, it was found that the cognitive level of the cause and the prevention of unplanned pregnancy of students in Chachoengsao overall behavior was at a high level. When considered individually, it was found that every grade was at a high level sorted from the highest to the least, namely, grade 9, grade 11, and grade 4, respectively, but the least was grade 4 as detailed in Figures 2 and 3 below.

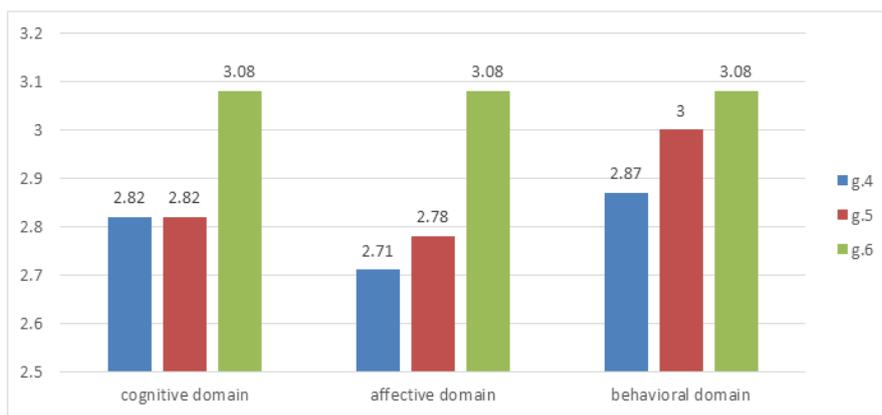


FIGURE 2
SHOWS THE COGNITIVE LEVEL TO PREVENT UNPLANNED PREGNANCY OF STUDENTS IN CHACHOENGSAO GRADE 4-6

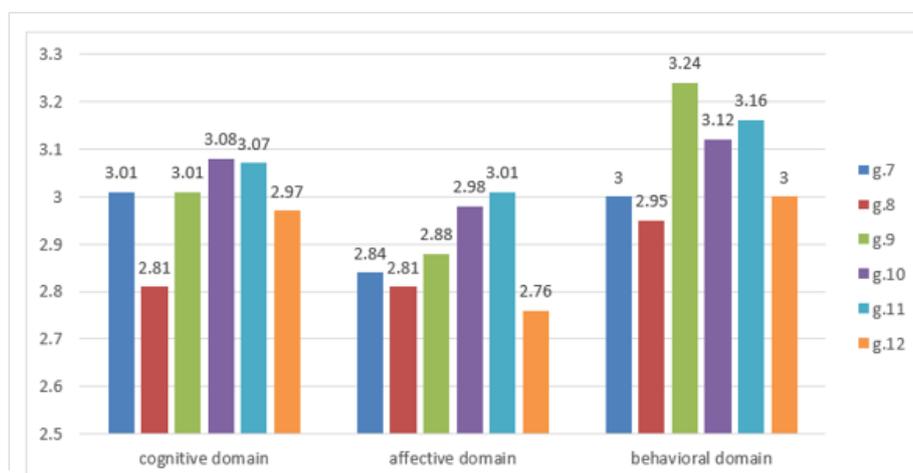


FIGURE 3
SHOWS THE COGNITIVE LEVEL TO PREVENT UNPLANNED PREGNANCY OF STUDENTS IN CHACHOENGSAO GRADE 7-12

Results of Learning Process Model Development with The Blue Ocean Strategy for Prevention of Pregnancy of Students in Chachoengsao Province are summarized as follows:

1. Application of the Blue Ocean strategy (BOS) (Kin & Mauborgne, 2005) with the data obtained from the collection of Phase I research data as a framework and guideline to develop a learning process model to prevent unplanned pregnancy of the students in Chachoengsao province consisted of 6 steps, all activities aimed at modifying the mind, changing the old life style, step out to do something new and different from the old one with a value that has never been tried before, love yourself and your surroundings to have physical, spiritual energy in life, setting a flag for life with clear goals in life and try to develop oneself to bring out self-potential clearly, always create new demands in life by using new innovations, which are simple but very valuable which compare it with the beautiful blue ocean. Organizing each activity is like vaccinating the hearts of the students, the focus of the Blue Ocean Strategy is to love yourself, bring your life to a wholesome point, do something new and different and valuable, not being pregnant during school age, do not emphasize that you must not have a girlfriend, but focus on loving oneself, bringing one's life to a wholesome point. The important criteria are set for maximum efficiency, dynamic. There is a change in the prevention of the

three domain of pregnancy are cognitive domain, affective domain and behavioral domain. Find new strategies as follows:

Draw on the Strategic Canvas: It is to draw clear goals in life and extremely love yourself which is an important strategy in the beginning. It is the first vaccine that focuses on the imagination and draw your own life with love, concentration, and reflect on your own life, visualize your future life clearly in life goals in 2 years, 4 years, 10 years or more do not emphasize that you must not have a girlfriend, but focus on loving oneself leading life to a good point, realize what you are doing today, make some adjustments to your traditional life, step out to do something new (the blue ocean) that are different and worthwhile that you have never tried before in order to reach your dream goal.

Analysis the Four Actions Framework: It focuses on the goals that I dreamed about in the past with the key strategy which is loving yourself, bring your life to a wholesome point, significantly different from the original, not being pregnant in school age along with asking oneself 4 questions, can be the second vaccine which is eliminate, reduce, raise, create *grid* with consciousness all around, prudently, deepen by using concentration of love for oneself in refinement the mind that leads to the change of traditional life in order to step out to do something new and different from the original, which is something that I have never tried before with a feeling of love and appreciate yourself and your surroundings today, focus on looking ahead to the future, the past was an experience, have a self-forgiving in order to have physical, spiritual energy in life, focus on the goals you dreamed of in the past, loving yourself brings your life to a wholesome point, not being pregnant in school, put a flag in life with a clear life goal as follow: 1) What can students cut for their dream life goals? 2) What can students reduce for their dream life goals? 3) What levels can students raise for their dream life goals? 4) What can students create something new that never created first for the purpose of life?

Focusing on the big picture: It is a process of raising awareness in the focus on the goals that I had dreamed of in the past by providing experience by role-playing with materials that will allow virtual situations in a role on "pregnant female students" "male students raising baby dolls" "male students and female students feeding baby dolls" "male and female students do the routine while she got pregnant". It is the third vaccine that reflects the whole mindset that feels about the change to the body, mind, lifestyle, walking, sitting, feeling of a friend, feelings of parents, teachers, relatives, people in the community, going out from home. This role-playing scenario makes students realize their dream goals. At the heart of the Blue Ocean Strategy is to love yourself, bring your life to a wholesome point, doing new things, significantly different from the original, and aiming not to get pregnant during school age.

Visual awakening: It is to raise awareness following the past activities. The students concluded by focusing the real situation to see what will happen in the future. It is the fourth vaccine to travel to the heart of the Blue Ocean Strategy which is loving yourself, bringing your life to the wholesome, doing new things, significantly different from the original, and aiming not to get pregnant during school age, during the journey to the goal you dreamed of, it may be easy or difficult. It is easy because we don't really travel to the real ocean, but the students traveled through their minds, "their own dream goals."

Visual Strategy Fair: It is the search for new value innovation that may be its own system, model, or method by exchanging communication to see clear pictures. It is the fifth vaccine that has been presented as a way to lead to a dreamed goal on the basis of love which brings one life to a wholesome point, do something new, different from the original value, do not get pregnant in school age. It is an idea that searches for "Value Innovation" with daily self-asked questions of how students will live, "to be" or "the best" for today and in the future?

Build Execution into Strategy: It is to bring new valuable innovation that have been brought into use. It is the sixth vaccine that students create guidelines, perhaps a process, a method for reforming the campaign to create a new student culture of self-love, take care of both self body and mind, believe in virgin that will lead to the goals that you dreamed of on the basis of self-love leading one's life to a wholesome point, doing something new, meaningfully

different from the old one, not being pregnant in school age through the process is participation in this whole process, students create their own ideas, students explain that all of this will make the student step towards the goals that have been set, students have clear expectations that lead their lives toward their dreamed goals on the basis of love one life to a good point, do something new, different from the original value, do not get pregnant in school age, and focusing on create an attitude of trust and dignity in life.

Determine the scope for modeling the learning process with the Blue Ocean Strategy for prevention the students were pregnant with 3 domain: 1) cognitive domain, 2) affective domain, 3) behavioral domain.

A process activity 1 time, 1.30 – 2 hours each time (Corey, Carey & Corey, 2012) for group activities towards affective and mental and psychological aspects. There should be a long enough time for the student to have unity build, trust, and do activities together efficiently, take time to organize 6 activities as a continuous activity (6 doses of vaccines) starting from activities 1-6, doing activities twice a week for 3 consecutive weeks. Each time at least 1 day to give students time to review themselves by adjusting the activity content according to the physical, social, and intellectual development of each group of students as appropriate with snacks and milk to give the body and mind ready to start activities.

Use the student size criteria for the activity (Corey, Corey & Corey, 2012). The most effective student size should be 6-8 students in this research. The same proportion of males and females are required because males and females are important.

An individual interview was conducted by the research team in collaboration with the student's guidance teacher or class teacher. The director of the school agreed and allowed the activities to be carried out in the school by facilitating the allocation of student time to participate. In the selection of students using the interview criteria for selection, students need to be willing to participate in learning activities by using the learning process model with the Blue Ocean Strategy to prevent unplanned pregnancy students during the study, and the permission of the parents to plan the pick-up and drop students. After that, students will make an appointment to attend the meeting to clarify the details about the experimental participation.

In all effective activities, the researcher should apply the initial counseling skills to the integrated group, to focus on talking to students about appropriate level of self-expression, interacting with group by expressing thoughts and feelings, asking and expressing interest, emphasize the importance of creating trust in the group, to create deep, constructive interactions, to show sincerity, deep understanding, mutual respect, care and positive acceptance, pay attention, and listen carefully to what students say, and understand what students are saying as well as understand the affective s and feeling, get the main idea, and listen carefully to the students who may be sensitive (Corey, Corey & Corey, 2012). Encourage students to feel good about themselves, reduce anxiety by encouraging and creating good communication and atmosphere, communicate for building rapport, focus on behavior, not personality (Thompson, 2003).

Lay down rules and regulations to maintain confidentiality, do not take what is said and done outside the group, to ensure safety, collaborate in the courage to express thoughts, feelings, and behaviors openly, encourage each student to express their feelings and expectations, and to be open to questions at all times.

In this research, proceeding to get permission on ethics of research studies in humans from the health office Chachoengsao Province and take into account important human rights standards (World Health Organization, 2006), student pregnancy and important standards in accordance with important human rights standards.

Choose concepts, theories and techniques for creating the model on student's pregnancy prevention evaluation form which is applied the concept of 3 principles 1) Rapid Estimate of Adolescent Literacy in Medicine (REALMTeen), EHealth Literacy Scale (EHEALS) 2) The Chinese version of The Test of Functional Health Literacy in Adolescent (CS-TOFHLAD) 3) Test of Functional Health. Literacy in Adults shortened (S-TOFHLA) (Jirawatkul, Ruengkolakit, Changudomkarn, Saengcharoen, Anusorteerakun, Wattanakulkiet,

Somchai, Rujiraprasert, Muangpil & Kotnara, 2013): namely, 1) measure communication to enhance the pregnancy prevention expertise 2) measure the management of clinical conditions. Self-health to prevent pregnancy, 3) measure knowledge, media and information to prevent pregnancy, 4) measure choice decisions, 5) correct practices to prevent pregnancy, 6) measure pregnancy prevention behaviors, and 7) measure access to health information and services to prevent pregnancy.

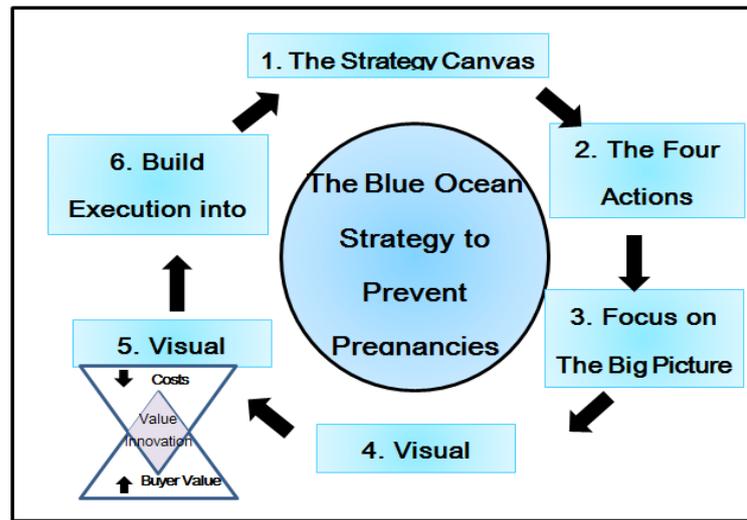


FIGURE 4
SHOWS THE BLUE OCEAN STRATEGY APPLICATION CYCLE LEARNING
PROCESS TO PREVENT UNPLANNED PREGNANCY

Retrieved from: **The Blue Ocean Strategy Concept from Kim & Mauborgne (2005)**

The Results of Learning Process Model with Blue Ocean Strategy to Prevent Unplanned Pregnancy of the Pre-Experiment, Post Experiment, and Follow-Up Experiments, were as Follows:

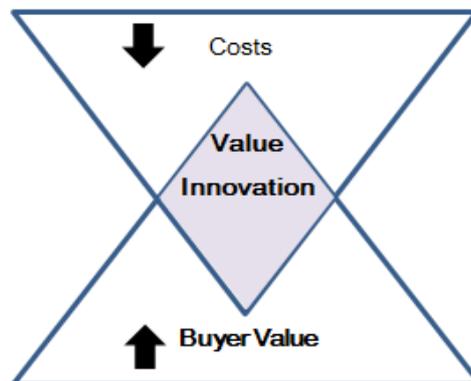


FIGURE 5
THE BLUE OCEAN STRATEGY CONCEPT

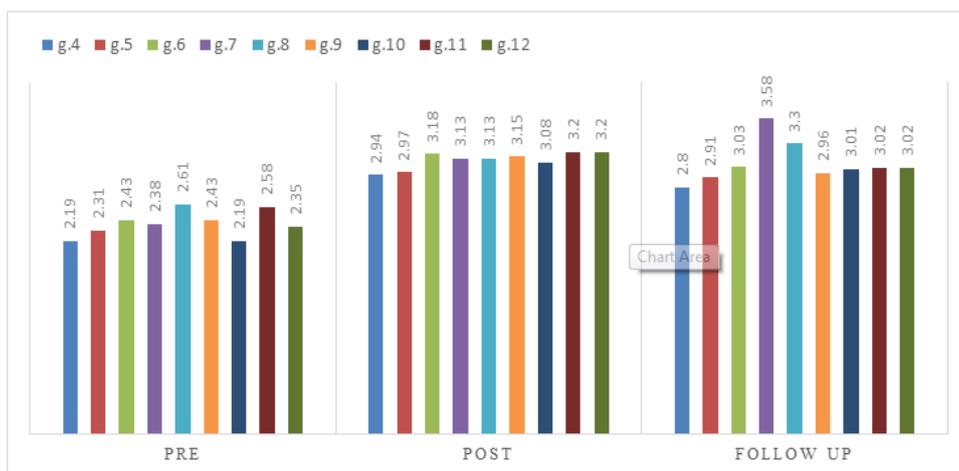


FIGURE 6
THE RESULTS OF LEARNING PROCESS MODEL WITH BLUE OCEAN STRATEGY TO PREVENT UNPLANNED PREGNANCY IN CHACHOENGSAO, GRADE 4-12

Table 1
THE COMPARISON SHOWS THE RESULTS OF THE USE OF THE LEARNING PROCESS MODEL WITH THE BLUE OCEAN STRATEGY PRE-EXPERIMENT, POST-EXPERIMENT, AND FOLLOW UP OF GRADE 4 - 12.

Experiment	\bar{X}	Pre	Post	Follow Up
		2.39	3.1	3.09
Pre- experiment	2.39		-.704*	-.679*
Post- experiment	3.09			0.024
Follow Up	3.07			

From Table 2, it was found that grade 4-12 students had prevention of unplanned pregnancy after the experiment significantly higher than before the experiment at 0.05 with statistical significance and the level of unplanned pregnancy prevention between after the experiment and the follow up period were not different.

DISCUSSIONS

The research team has divided the research results into 3 items according to the research objectives as follows:

1. A study of the level of knowledge and understanding of the causes and guidelines for the prevention of students’ unplanned pregnancy in Chachoengsao Province are summarized as follows: I

The situation of student pregnancy in Chachoengsao province for age 10-14 years in 2017 found that 18 live births, and in the female population aged 15-19 years old, 654 live births were found in the population of 15-19 years old women totaling 20,992. The number of people accounted for 31.15 percent of the 1,000 women aged 15-19 years. There were 141 people, representing 14.67 percent of all adolescent mothers who gave birth or miscarriages. Adolescents who received birth control services after 40.09 miscarriages or miscarriages before leaving the hospital, and of these are contraceptives after giving birth or miscarriage Semi-permanent contraception before leaving the hospital 80.36% (Chachoengsao Province Public Health, 2017) indicates a trend from a sample of 384 students in Chachoengsao Province, Grade 1, 2, 3, 4, 5 and 6, 11.50%, 11.70, 12.50, 11.70, 13.20 and 11.20 had overall

levels of cognition causes and prevention of unplanned pregnancy at a high level that is behavioral, cognitive and affective protection, respectively. As for each class level, it was found to be at every high level ranked from the highest to the lowest as follows: Grade 12, Grade 11, and Grade 10, respectively. The lowest average level was Grade 4, which reflected the research results that getting pregnancy was started from the Secondary level; therefore, it aims to adjust the attitude to a new perspective, rethink something new about the child pregnancy of both male and female gender. "What will teenage mother problems be in the future?" is not as important as Thai society will eliminate the problem and move forward to the exact direction. The problem is not only the end of the birth of children, but also the cause of the public health problems that research has shown that (Kalkaew, 5, 2004) almost half of the women, who abort in Thailand, are under aged 20 years old and 30% are illegal abortions among students. 24% of the students who abort is in school age and many students were harmed by complications from abortion.

A study in vocational education students in Chiang Rai found that (Staysaard, 5, 2007) of the total 153 pregnancies, 90% of these students chose to have an abortion (Jirawatkul, Ruengkolakit, Chongudomkarn, Saengcharoen, Anusomteerakun, Wattanakulkiat, Sorchai, Rujiraprasert, Muangplli & Kotnara, 2013), intended that more than 90 percent of students were unintentional pregnant and about 70% choose to purchase the abortion pill for themselves (self-prescribed aborticide) as a suppository, tablets, water pills to drive menstruation or to receive services from illegal abortion clinics. This is because this group of students does not want to quit their studies (Muenklewkavichit, 2008) and do not want parents to know that she is pregnant. Psychologists analyze how vulnerable it is to the mind for students' pregnancy as with any other problems such as domestic violence, divorced family, homeless life, loss of important people in life, sexual abuse, abandoned by family or loved ones, Neonatal health risks to death fetal and newborn children from students who are pregnant; in addition, to the inability to access the treatment of adolescent mothers which man transparent poses a high risk of HIV transmission from mother to child, impact of various domain of student pregnancy, pregnancy in young people, especially under the age of 17 years old, there is an incidence of complications which leads to disability or mortality among pregnant women is high (World Health Organization, 2011).

Research was synthesized systematically about guidelines for the prevention of teenage pregnancy in Thailand (Konta, Choteamnuay, Prasittichok & Intamas, 2019), in cases of teenage pregnancy prevention and the effectiveness of guidelines for teenage pregnancy prevention in Thailand. Research was conducted by compiling research reports published in reliable academic databases from 2011-2016. Tools used in the systematic review included research screening form, research quality evaluation form, and the data extraction record form. The data was synthesized by analyzing general characteristics using descriptive statistics, classifying patterns of teenage pregnancy prevention and the effectiveness of using the teen pregnancy prevention model using the content brief. From this systematic review of research, it was found that there were 7 researches that could be analyzed and synthesized. There were 7 forms teenage pregnancy prevention in Thailand included; 1) the program to promote safe sexual intercourse, 2) health education program by applying motivation theory for disease prevention and social support, 3) unwanted pregnancy prevention program in teenage pregnancy, 4) empowerment training for student leaders on safe sexual behaviors and preventing unwanted pregnancy, 5) teenage pregnancy prevention pattern, 6) pattern of preventive action and premature pregnancy problems solving, and 7) pregnancy prevention pattern of early Thai female adolescents using the school as a base regarding the effectiveness of guidelines for preventing teenage pregnancy. The systematic review was found that knowledge, attitude and counseling skills, the belief about safe sex, preventing of sexually transmitted diseases and unwanted pregnancy and level of motivation to prevent risky sex behaviors after using teenage pregnancy prevention patterns were higher but there were 2 studies that had been formulated to prevent teen pregnancy but did not measure the effectiveness of the model.

Ministry of Public Health, Ministry of Education and private organizations (Health Education Division, Department of Health Service Support, 2013) drives schools to have a comprehensive sexuality education curriculum by integrating with all relevant departments, planning and adapting about learning where students can take leave when the pregnancy is about to be delivered and continue to study after giving birth. Based on past literature reviews, the components of health literacy, cognitive skills for reading and use of health information (Sukrat, 2014) are the implementation of cognitive skills in context of health and prevention of premature pregnancy applied by thinking, examining with rationality, credibility, legitimacy, rights and duties, and a good culture of society to solve problems, reduce risks and improve quality of life, health information communication skills, access skill, decision skill, self-management skill, media literacy skill, health literacy according to Nutbeam concept in 2008 (Nutbeam, 2008) is basic health literacy, interactional milestones and health literacy. Judgment stage can solve the problem by preventing pregnancy. The national campaign is another matter that reflects the lack of a key host on which agency should direct public communications to prevent and rectify pregnancy in students. Several organizations have been promoting campaigns such as the Ministry of Social Development and Human Security's "Stop Teen Mom: stop unplanned pregnancy in Students". Economic capital will be more effective towards the community and the country as a whole more than the individual, having to pay more for health care and support children born to pregnant students (Manowan, 2010), indicated that the average male adolescent had sex for the first time, average age 15 years old, the lowest was 9, the highest was 19 years old, while the female had sex at the first time, average age 16 years old, minimum 9 years, maximum 19 years when having unprotected sex. Moreover, adolescents have a value that being together before marriage as normal, having sex as a show of love for each other, not a detriment, causing an unplanned pregnancy tendency increase more, not ready for raising children; as a result, part of the need to terminate the pregnancy or when the child is born, anemia may occur due to the body's mother which is not ready.

Development of a learning process model with the Blue Ocean Strategy for students' pregnancy prevention in Chachoengsao Province can be summarized as follows:

Activity design on "A learning process model with the Blue Ocean Strategy to prevent unplanned students' pregnancy in Chachoengsao Province" takes into account important standards according to human rights principles, encourage learning activities based on individual differences, both in thinking, analyzing, problem solving, decision making, and creating knowledge from thinking process, analyzing the learners and content to organize the learning process in each experimental domain, to study the results of the learning process with the Blue Ocean Strategy for preventing unplanned pregnancies of students in Chachoengsao Province, before the experiment, after the experiment, and the follow-up of the sample group of 9 experimental groups in developing a learning process model to prevent unplanned pregnancy of students in Chachoengsao Province consisted of 6 times. The whole activities focus on changing minds and traditional life, step out to do something new, different from the original that you have never tried before, love yourself and your surroundings to have physical, spiritual energy in life, set up a life flag with clear life goals, try to develop oneself to be different, bring out one's potential, always create new demands in life by using new innovations, which are simple but very valuable. It is like new waters, which can be compared with the beautiful blue ocean, and each activity is like giving students a mental vaccination. The essence of the process of the Blue Ocean Strategy is to love yourself and bring your life to the wholesome point, make something new and different, not being pregnant during school age, do not emphasize that you must not have a girlfriend, but focus on loving oneself, bringing one's life to a wholesome point with the important criteria are set for maximum efficiency and dynamic. There is a change in the prevention of pregnancy in all three domain is the cognitive domain, affective domain and behavioral domain to find new strategies, and from the study of (Kritsanaphan, 2014) studied on "Prevention and correction guidelines

Problems of premature sexual intercourse and adolescent pregnancy in Kamphaeng Phet Province” and proposed guidelines the way to fix premature pregnancy is “requires the cooperation of all stakeholders including families, schools, communities and religions, various organizations should work together to solve problems in an integral way (Pholprasert, et al., 2011) All involved parties consist of education, public health and social sectors to develop protection styles and solved the problem of premature pregnancy of adolescents in Kamphaeng Phet province by searching for appropriate elements to define a cause-and-effect related practice, creating a clear working guideline that is relevant to problematic conditions and needs of adolescents, (Youkhong, Powwattana & Kaewpan, 2016). Teenage pregnancy results in higher medical complications as compared to other pregnancies. This quasi-experimental study aimed to examine evidence-based practice for teenage pregnancy prevention. The purposive sample of this study included 64 female teenage junior high school students in Prasat District, Surin Province who were equally divided into experimental and comparison groups. The experimental group received evidence-based practice in a teenage pregnancy prevention program covering the topics of attitude adjustment, educational activities and skill training for teenage pregnancy prevention. Activities of the program were four two-hour sessions for female adolescents on knowledge and attitude toward pregnancy prevention, self-efficacy toward pregnancy prevention, and pregnancy prevention behaviors. Duration of the program was 5 weeks (Kingmala, Rawiworrakul & Powwattana, 2015). The sample was 64 secondary school female students selected by simple random sampling, 32 for the experimental group receiving 3 sessions of the pregnancy prevention program and 32 for the comparison group. Self-administered questionnaires were employed to examine knowledge and attitude of pregnancy prevention in adolescent, self-efficacy toward adolescent pregnancy prevention, and pregnancy prevention behaviors.

Using the Blue Ocean Strategy Learning Process Model to Prevent Unplanned Pregnancy of the pre-experiment, post-experiment and follow-up experiments can be summarized as follows:

The experimental group for grade 4, grade 12, had the knowledge and understanding of the prevention of unplanned pregnancy. The post-experiment was significantly higher than the pre-test at the 0.05 level and the level of unplanned pregnancy prevention between after the experiment and the follow up period were not different which is in accordance with the expected hypothesis that the experimental group students had a level of cognition in preventing unplanned pregnancy after the experiment higher than before the experiment and after the experiment and follow-up, there were no differences in the level of knowledge and understanding of the prevention of adverse pregnancy. Organizing activities by using the learning process model with the Blue Ocean Strategy to prevent unplanned pregnancy of the students in the experimental group, the researcher team have studied and applied the concepts and tools of the Blue Ocean Strategy to be integrated with group activities for students, the learning process, roles of the organizers of the learning process, applying the concept of psychology, the study emphasized the results of the analysis of the cognitive level of cause and prevention of unplanned pregnancy of students in Chachoengsao province in the past, to design activities and content in each activity. The research team selected concepts, theories and techniques for creating the model. Organizing activities in this research process were 1 time, 1.30 hours each time, 2 hours (Corey, Corey & Corey, 2012). Organizing sensitive activities to the feeling, affective and mind, and that psychology, should have enough time to make students build trust, and do activities together efficiently, take time to organize 6 activities/process. It is a continuous activity (6 doses of mind vaccine) starting from activity 1-6, doing activities twice a week for 3 consecutive weeks. At least 1 day apart each time to give students time to review themselves. Then adjusting the content activities according to the physical, social, and intellectual development of each group of students as appropriate along with snacks and milk for students to provide the body and mind which are ready to begin every activity. After the activity, everyone is discussed. In organizing every effective activity, the research team applied the basic skills of integrated group counseling, focused on talking with

students about self-disclosure at the appropriate level. Interacting with groups by presenting thoughts and feelings, questions and expressions of interest, emphasize the importance of building trust in the group as it creates profound and creative interactions. The researchers required to express honesty, empathy, respect, positive regard and acceptance, spontaneity, active listening, pay attention and listen carefully, what students say with interest, understand what students are saying including understanding affective s and feelings, catch the main idea, and listen until the student has finished speaking, and sensitivity (Corey, Corey & Corey, 2012). The research team emphasizes on making students feel good about themselves (supporting), reduce anxiety by fostering good communication and a good atmosphere, communicate for building rapport (communicating to enhance relationships) focus on behavior, not personality (Thompson, 2003). The rules are to maintain confidentiality, not to reveal what is said and done, to ensure safety, to build cooperation in, courage students to express thoughts, feelings, and behaviors openly, encouraging each student to share their feelings and expectations for participating in the activity, and giving an opportunity to ask questions throughout the process of organizing activities.

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SUGGESTION

The research team has selected the "main substance" to prepare the manual and brochures for giving students a learning of knowledge that the students should know, Executive Functions have skills to apply of knowledge in the age of education learning reform Thailand in the era of Thailand 4.0 which is a technology era, creative and innovation, focusing on creating students to be able to think by themself, cognitive domain affective domain behavioral domain, focusing on searching for knowledge from multiple media formats, students-center, aimed at the learners to expand the learning scope in each subject according topPersonal interests and motivation combined with the discretion to enhance the contextual learning of the learners, leading to the more appropriate development of knowledge, skills, characteristics of learners to prevent unplanned pregnancy. Chachoengsao Provincial Education Office is in the main place to bring "Model of the learning process with the Blue Ocean Strategy to prevent unplanned pregnancy of students in Chachoengsao Provinc" to use with students to prevent unplanned pregnancy in school age in Chachoengsao Province, In using the learning process model with the Blue Ocean Strategy to prevent unplanned pregnancy of students should add and do activities in the building of self-esteem, then students can see their self-worth. The first mind vaccination activity is important to consider: Group students who started the orientation, building rapport and choosing groups with which students

are compatible, will help encourage resulting in better learning before taking strategic canvas painting and organizing activities, and many students from same group being close will help the group become intimate and open-minded, be ready to learn and change oneself and students' boyfriend or girlfriend in the same group activities will help they plan their life together.

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