Abstract. This study focuses on evaluation of high school students’ opinions on their future plans through examining their decision-making self-efficacy. The purpose is to make secondary education clearer and more effective to the students as well as to the administrators. The high school students from public and private sectors are evaluated on career awareness through an evaluation of their future plans, attitudes, and current opinions on exploring careers and acquire basic knowledge and skills that can foster confidence in making job-oriented decisions after high school graduation. The study shows the needs for professional training as a part of Thailand’s school curricula where the current job demand is the key factor in creation of outlines for Career Training courses.

Introduction
This study’s ultimate goal is to measure the students’ education and career trends and perceptions. By assessing self-efficacy of high school students, one can increase their career self-awareness whether or not they score high in the test. Nowadays, administrators increase their awareness in students’ self-belief factors that are crucial in the development of a holistic person. Knowing oneself, acknowledging norms and believing in performing actions that are aligned with those norms, is an important attribute for one entering into adulthood. Most of the recent findings show that policy makers should measure local student perceptions focusing on the societal trends on a national or worldwide scale. By satisfying the school-career transition process’s needs, educators can dramatically change the schooling system culture, bringing it up to a maximum satisfaction for the students as for themselves.

Background
The Department of Non-Formal Education was established in the Ministry of Education on March 24, 1979. The Department was firmly upgraded from “Adult Education “which may be drawn back to the period of the late 1930’s when the government began to realize a need for other types of education with the aim to improve the literacy rate of Thai people. At that time, the literacy rate of those who were 20 years and older was 32 percent (www.moe.go.th, August 2007).

Non-formal education programs and activities provided by the Department of Non-formal Education can be categorized into three main areas: basic education, vocational education and skills training, as well as information services.

Secondary education in Thailand is divided into two three-year phases and is designed to provide students with knowledge and working skills suitable for their ages, needs, interests and aptitudes. Flexibility is allowed so as to make career training relevant to local conditions and requirements. Students who have completed the lower level of secondary education and wish to continue their studies may do so at the upper secondary level or at vocational schools or other specialized institutions.

The secondary curriculum was revised in 1990, with more periods for optional studies, including foreign languages and career-oriented subjects. Many thematic projects have been launched since, including projects on secondary schools for the promotion of quality of life and society, on the development of school environment, on the promotion of entrepreneurial competencies and activities, on the establishment of school-based sports centers, and on the setting up of special science schools.

Vocational education was adapted since there is a necessity to adapt the educational system to the development and labor needs of the country. Various types of specialized courses and training programs are offered and administered by the Department of Vocational Education and the Rajamangala Institutes of Technology. There are two programs to suit the student’s academic background. One is a three year Lower Certificate Courses program which entails an additional two years that become equal to a diploma level of
vocational studies. Also, one can enroll in a degree course at the Rajamangala Institutes of Technology or certain vocational institutes attached to the Ministry of University Affairs. (Ministry of Education of Thailand, 2004)

According to H. E. Mr. Chaturon Chaisang, Minister of Education, Thailand, “The Year 2006 has been proclaimed as the Year of Teaching and Learning Reform in Thailand which aims to reform teaching and learning methodologies to achieve another level of quality in education. Our objectives are to possess critical thinking and problem solving skills as well as to inculcate moral, ethical, and religious values in Thai children. Key measures include revision of curricula and pedagogical methods, intensive and specific retraining of teachers on new ways of classroom management, as well as upgrading vocational educational standards which aim to increase the number of vocational students to serve the expansion of industrial and community needs.” (Chaisang, 2006)

In many communities, transition programs are a part of major school reform. The literature taken as a whole indicates that school-to-work transition cannot be accomplished as an activity separate from the school reform movement. It is a vital component in any effective change of any educational system.

**Theory and Practice**

The idea to measure self-efficacy expectations was proposed by Bandura (1977). It refers to a person’s beliefs concerning his/her ability to successfully perform a given task or behavior. They were formulated by Bandura (1977) to be the major constructs of behavior and behavior change. Bandura specified four sources of information for self-efficacy expectations through which we can study and modify the latter. These sources of information include: 1) performance accomplishments, that is, experiences of successfully performing the behaviors in question; 2) vicarious learning or modeling; 3) verbal persuasion, for example, encouragement and support from others; and 4) emotional arousal, that is, anxiety, in connection with the behavior.

The concept of self-efficacy expectations provided the basis for development of CDMSE (Taylor & Betz, 1983). The framework for deciding how to define and operationalize the skills required in career decision-making was taken from Crites’ (1978) model of career maturity (Taylor & Betz, 1983). Crites (1978) hypothesized that “good” career decisions will be facilitated by competence with respect to five career choice processes and by mature versus immature attitudes regarding the career choice process. Because self-efficacy theory is defined in relationship to competence in specific behavioral domains, Crite’s five career choice competencies were used to define the domain of interest, that of competent career decision-making (Taylor & Betz, 1983). These five competencies and, subsequently, the subscales of the CDMSE, were: 1) accurate self-appraisal, 2) gathering occupational information, 3) goal selection, 4) making plans for the future, and 5) problem solving. Fouad and Smith, (1996) adapted the CDSF for use with middle school students. Twelve items were selected to keep the conceptual meaning of the scale. Some of the items were adapted to be understandable to students in 7th and 8th grades and ranging in age from 12 to 15.

As far as construct validity of the CDMSES is concerned, consistent reporting of the relationships between respondents’ age, academic success, and gender are lacking in the literature. The latest research conducted with Chinese high school students revealed that gender was unrelated to career decision self-efficacy (Hampton, 2006) although a few studies (Taylor & Betz, 1983) have shown the absence of sex differences in CDM self-efficacy. First identified and studied by Taylor and Betz (1983) and then later supported by Taylor & Popma (1990), results revealed a lack of sex differences in CDM self-efficacy. However, Bright (1996) included gender as a potentially influential variable on the CDMSE of undergraduate students. Differences between genders are obviously significant in self-efficacy for traditionally male and female occupations (Betz & Hackett, 1981). Women choose a more traditionally female career because of the perceived difficulty in combining a nontraditionally female career with the responsibilities of home and family (Stickel & Bonett, 1991).

An empirical research study has been conducted to investigate career awareness among adolescents with a permanent hearing loss in Australia (Punch, 2005). The short form of the CDMSES was used successfully signifying the key factors that influence the career development of that population. The sample group was taken among year 10, 11 and 12 classes in the Australian states of Queensland and New South Wales.

A study on cross-cultural equivalence of the Career Decision-Making Self-Efficacy Scale – Short Form among Australian and South African high school students proves that the CDMSES-SF does not assume cultural equivalence and despite the subscale reliabilities (Creed, 2003). The study was able to
confirm that the CDMSES-SF has high internal reliability when used with high school age students across two national samples. The internal reliabilities using the full 25 items were both higher than .90. The results of exploratory factor analyses indicated that the CDMSES-SF cannot be utilized as a multifactor scale, relying on the results from Australian and South African high school students, although this last recommendation needs to be tested across other cultures (Creed, 1999).

Lent et al. (1994) proposed a hypothesis that gender and race differences arise largely through unequal access to opportunities, supports, and socialization processes. In another study of Creed (2003), three hundred and sixty-seven secondary school students from year levels 8–12 using CDMSES-SF, it was found that age, gender, career decidedness (certainty), work commitment and career decidedness (indecision) were the main predictors of career maturity knowledge (Creed & Patton, 2003).

Most research has shown that use of multiple regression analysis did not find that gender was a significant predictor of CDMSE. There is a need to further examine relationships between CDMSES scores and other variables related to career development such as age and gender. As many items in the CDMSES had high loading on several factors (Taylor & Betz, 1983) the authors later developed a short form of the CDMSES (CDMSES-SF), which contained 25 items that were taken from the original CDMSES.

Findings
The data in this study was collected from 722 respondents from the sampled private and public secondary schools. A significant relationship was found between school type and gender (F=4.806, p<0.05) in career decision-making self-efficacy as well as a relationship between grade level and school type (F=5.773, p<0.01).

Based on the high school students subscale mean scores on the CDMSE-12 items, the students in this study possess a favorable level of CDMSE. This finding indicates that the high school students in this study have level of confidence in their abilities to make career decisions where they feel very good about making these types of decisions (Betz et al., 1996).

Private school students’ Career Decision Making self-beliefs were not significantly different from their public school counterparts even though on four of five of the subscales measured on the CDMSE-12 item indicating a greater level of career decision-making self-efficacy for public school than private. Only problem solving had a greater result for private school students but still no significance was found.

Females scored higher than males on four of five of the subscales measured on the CDMSE-12 item indicating a greater level of career decision-making self-efficacy for females than males though the differences between females and males were not significant.

Recommendations
School administrators and policy makers should make themselves more aware of how the career decision making develops in young adolescents, what are essential factors that contribute to career decision making and what steps must be done to facilitate the career development among students that are about to leave the secondary school and make their first decision towards future career.

When viewing Career decision making of young Thai adolescents through the lens of CDMSE there are certain points the researcher considers addressing:
- The need of gradual career development in school;
- The need of improving student problem solving skills in public schools;
- The need of improving goal setting skill among male adolescents;
- The relationship between gender and grade level in Career decision Making;
- Gathering occupational information among high school students;
- Goal selection of students from various grade levels.

References


Punch, J., *Career development of adolescents who are hard of hearing: career maturity, career decision making and career barriers among high students in regular classes*, July 2005, web search findings of Griffith University, Gold Coast, Australia.

