

The Integrated Education Curriculum Reformation and the Permanency in Career Development in the Field of Information Technology

Thitirath Cheowsuwan, Ph.D.

School of Information and Communication
Technology, University of Phayao
E-mail : thitirath.ch@up.ac.th

Pornthep Rojanavas, Ph.D.

School of Information and Communication
Technology, University of Phayao
E-mail : pornthep.ro@up.ac.th

Worrakit Sanpote

School of Information and Communication
Technology, University of Phayao
E-mail : worrakit.sa@up.ac.th

Abstract

In the area of Northern Thailand, there were no qualified graduates to serve the required fields of IT labor markets since the graduates tend to choose the popular fields of studies rather than what the labor markets have been expected. Since Thailand will be entering in to the ASEAN markets in 2015, there is a crucial need to reform educational administration in order to engage the graduates to have the passions in studying in accordance with the required fields of labor markets which would lead to the permanence of their careers. The educational reformation will cover 5 provinces in the Northern regions by engaging both government and private sectors and analyze their needs to develop qualified curriculum which will be able to produce graduates that can serve the demands of labor markets. The reformed curriculum was conducted in 26 institutes along with the education of the new curriculum was given to the teachers in the sampled institutes. The results indicated that the curriculum that best match the needs of the labor markets of the communities were software development curriculum, mixed-media production, and computer graphics and animation production. The reformed curriculum educated to the sampled groups of teachers

indicated that their skills have been improved up to 69.6%, the performances of the graduates have been increased up to 45.3% while the happiness in the study of the reformed curriculum was as high as 86%.

Keywords : Education Curriculum Reformation, Career Development

Introduction

If Thailand is benchmarked against neighboring (ASEAN) countries such as Burma, Vietnam or Laos Republic, quality of Thai education at all levels is much better. The number of government-supported students coming to get qualifications in Thailand from these countries is increasing, particularly in higher education. However, if compared to other countries in Asia, such as Singapore, Malaysia or Hong Kong, Thai education is considerably behind (ACA, 2013). A skills mismatch is being created in Thailand whereby many skilled workers entering the workforce do not possess the skills needed by industry. This, consequently, compels companies to hire foreign experts to fill positions essential for economic development, particularly jobs relating to science and technology. The unemployment rate among native workers with high levels of skills and education thereby increases alongside the increased employment of low-skilled migrants (Jerrold and Aphichat, 2011). The middle and small size schools in the Northern regions of Thailand still enable to produce qualified high school graduates to enter the exact standard measurements of the universities. Instead, the graduates were accepted due to the levels of the scores that they could be produced.

As a result, the students can study only what the scores indicated not what they were mastered at and not what they have the passions to study. The result of the research on the efficiency of teacher

utilization (ONEC, 1997) revealed that the workload of teacher on the average was below the standard criteria. The effect was resulted in the lack of continual qualified and skilled graduates that would match the needs of labor markets. The tendencies of lacking qualified and skilled graduates are continually increasing especially in the field of Information Technology which can be concluded that most of the graduates that pursue this field of study were not ready to enter the ASEAN markets in 2015. However, given current public perceptions of “educational success” in terms of being admitted to a highly selective public universities, the test does provide a reliable standardized proxy for assessing regional and local disparities in educational opportunity and related life chances. The disparities documented here clearly reflect the tendency to migrate to more urbanized, modern areas with “better” schools to improve educational and life chances (Gerald, 1999).

The projects of integrated education curriculum reformation and the permanency in career development in the field of information technology for ASEAN Regions were supported by Office of Thai Higher Education Commission. This projects aims. The learning area of occupations and technology is aimed at learners’ holistic development with a view to enabling them to acquire knowledge, capacity and essential skills required for work. Learners will thus efficiently see the prospects of their future careers and further

education (Ministry of Education, 2008) and to develop permanent careers for the graduates by putting the students to study in the fields that they prefer and that would be suitable for their expertise. Before entering high schools, the proficiency tests will be conducted to the high school students as the guide to put the students to enter the right fields at the university level by emphasizing on the practical skills, the integration of the ground works that go along with 7 businesses. The researcher divides the studies into 3 phases; the curriculum development and the educational management for high school level phase, the integrated and career development phase, and the business and industrial entering phase. There is an expectation that it will be useful for the student permanently and they can pass on their knowledge to other people as well. Moreover, not only the self created knowledge is made by the student, this knowledge can be the base of student to extend the new knowledge continuously (Thisana Khaemane, 2007)

Objectives

1. To analyze and design curriculum and integrated teaching development which would be in accordance with the national curriculum reformation project 2012
2. To develop educational reformation towards the high school and university educations in the areas of curriculum and skill development of the students.
3. To integrate and develop career proficiencies by integrating Information Technology along with the studies of the business in various occupations in order to promote the graduates to enter the right businesses and industries.

Research Methodology

1. To conducted by the evaluation of curriculum using the questionnaire to assess the aspects: The skills developments were taught to the teachers at 26 sampling schools and the basic foundation development in educational reformation to be ready for newly curriculum for the student sampling 26 schools.
2. The need for curriculum implementation by researching the needs to improve the curriculum from teachers and students using the forms or requests indicating the needs to improve the curriculum.
3. The statistics used for data analysis included percentage, mean and standard deviation.
4. Analyzing related data including government educational policies, core foundation of ASEAN economy, technological tendencies, and the needs of local or community labor markets.
5. Researching towards the needs of educational curriculum reformation in 26 schools in 5 provinces in the Northern part of Thailand including Phrae Province, Nan Province, Phayao Province, Chiang Rai Province and Uttaradit Province by setting small group conferences for 5 times and by gathering those small group conference data to be adapted along with the 2 set up conferences with related communities.
6. Reforming Educational Curriculum ;
Phase 1: Conduct media and Information Technology curriculum reformation development at the sampling schools and conduct proficiency test evaluation. The stimulate positive inspiration to study in the new curriculum reformation and initiate insight understanding towards the motto of happy work leads to happy life. And Conduct media

and Information Technology curriculum reformation development along with the study of general scopes of the benefits in using Information Technologies to support in businesses and industries.

Phase 2: Implement and develop career practical skills on Information Technology careers and the careers involved such as enterprise and freelance employees.

Phase 3: Put the graduates into businesses and industries as to provoke them to be ready to become practical business owners who would be able to build effective business networks.

The results were the reformed media and curriculum as well as qualified graduates on Information Technology Specialists who are ready to enter to labor markets. Widening participation, student engagement and retention, lifelong learning and employability are key agendas driving institutions to enhance the learner experience and place the learner at the center of the curriculum design process.



Figure 1 The Curriculum Design Process. Adapted from JISC Curriculum Design & Delivery

Research Findings

The findings indicated that the educational schools and the communities in the 5 provincial cities in the Northern part of Thailand need to have educational curriculum reformation towards the Information Technology industries. The qualified graduates must be able to serve both domestic and ASEAN labor markets especially in the fields of software development, mixed-media production, and computer graphics and animation production. The mentioned curriculum will be integrated along with 7 groups of careers which are agricultural and natural resources profession, industrial profession, sciences for life profession, food industrial profession, research- innovation- and knowledge superiority profession, management and administration profession, and creative profession.

The reformed educational curriculum can be described as follows; The integration of the reformed curriculum which derived from various sectors including university educational academics professors, and honoraries from related business and industrial sectors agreed that the reformed curriculum are suitable, the course instructions use active learning, problem-based, and inquiry-based approaches (Kulthida, 2013) and can be put into practice in accordance with the National Educational Reformation Curriculum. School administrators, lecturers, student development officers, and organizations related to students' professional development. They must understand and place importance on it as a component in students' quality development (Rockman, 2004).

The skills developments were taught to the teachers at 26 sampling schools. The pre knowledge evaluation indicated that 18.5% of the sampling groups were skillful and mastered with the

reformed curriculum teaching, 54% were at the adaptable level, and 27.5% were at the basic levels and such group needed immediate improvement. After participated in the knowledge implementation development programs on Information Technologies, the results indicated that 69.9% were skillful and mastered with the reformed curriculum teaching, 24% were at the adaptable level, and 6.4% were at the basic levels and such group needed immediate improvement. It can be concluded that the reformed curriculum can greatly improve teachers' teaching skills as indicated as follows;

The indication measurement in studying and in conducting careers pointed out that most students in 5 provinces in the Northern part of Thailand were most skillful at the mixed media production follow by computer graphics and animation production, and other related skills accordingly.

The basic foundation development in educational reformation to be ready for newly reformed educational curriculum of National Reformation Project for the sampling 26 schools can be concluded that 22% of the sampling groups were skillful, 14.5% were at the adaptable level, and 63.5% were at the basic levels and

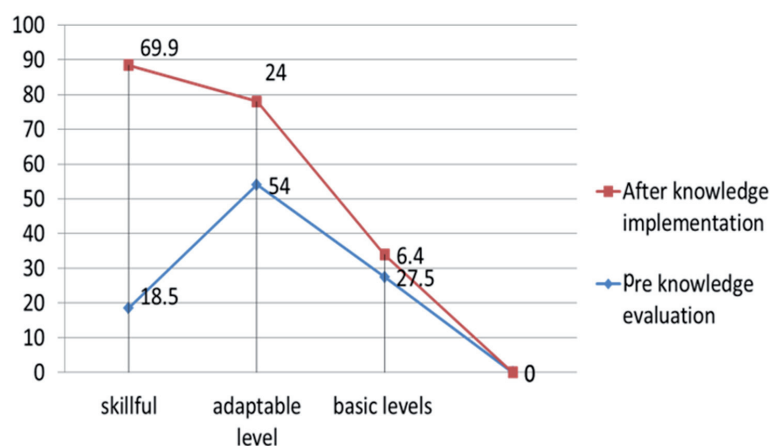


Figure 2 Graph of Teacher Skills Developments

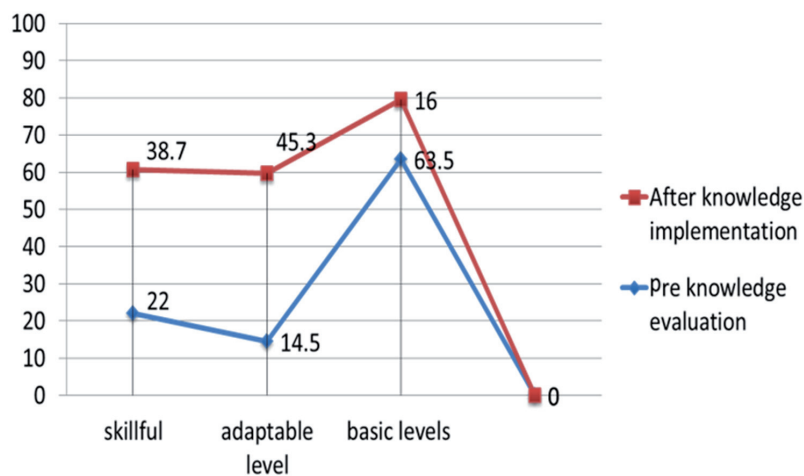


Figure 3 Graph of Student Skills Developments

such group needed immediate improvement. After conducting the reformed educational curriculum, the abilities in increasing study skills were gradually higher which resulted in 38.7% of the sampling groups were skillful, 45.3% were at the adaptable level, and 16% were at the basic levels.

Discussion

The reformed educational curriculum was conducted only some parts not the entire educational systems. The research was done in accordance with the curriculum educational evaluation in 8 basic educational groups which emphasized on the moral buildings (Ministry of Education, 2008). The innovative educational reformation curriculum still not ignore the core basis but adding Information Technological skills into the curriculum as to produce qualified graduates to work skillfully in their preference careers that would also match the labor market demands.

The normal hours of studies were 25 hours per week. However, some schools which were mastered at some particular skills were adding extra hours of 1 – 1.5 hours per week into their educational curriculum. The invented reformed educational curriculum did not add more extra hours and did not affect the study hours of the students.

The reasons to conduct the innovative reformed educational curriculum in the Northern part of Thailand was that it was found out that comparing with other regions of Thailand, most students in the Northern part of Thailand were more initiative, more artistic, and more focus. The findings indicated that their happiness in studying and their educational performances were increasing respectively since they were able to learn in the fields of their preferences. However, the research could not put

the conclusion that this reformed curriculum would be able to use in every regions in Thailand as this has to depend on specified personal preferences of the research groups in particular regions.

The reformed educational curriculum enabled the students to study in the fields of their preferences which lead to happiness in the studies. As a consequent, students would able to gain high educational scores which would lead to the happiness and permanency in their careers.

Conclusion

There should be constant educational reform curriculum development since the Information Technology improvement changes rapidly along with highly innovative era.

There should be the setting towards the students' educational performances emphasizing on career along with curriculum performances.

The use of the reform educational curriculum should be conducted along with the readiness as well as other related factors of each individual school including the skills of the teachers, the readiness in the providing infrastructures, and the commitments of the administrative management leaders.

The evaluation divided into 3 phases was good; however too long evaluation period can be resulted in uncertainties in the evaluation. Therefore, there should be the policies in evaluation reformed educational curriculum set up by the top level of administrators of each schools in order to make it proficient in controlling the ongoing projects.

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