Self-Directed Learning Readiness of College Students in Thailand

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Self-directed learning originated in the field of adult education and has been referred to as self-direction in learning, self-instructed learning, autonomous learning, self-planned learning, self-regulated learning, self-managed learning, self-education, and independent learning (Hiemstra, 2004). The most cited definition of self-directed learning is by Knowles (1975) who defined self-directed learning as a learning process in which learners take the initial responsibility for their learning by diagnosing their own needs, setting goals, identifying learning resources, choosing appropriate strategies, and evaluating learning outcomes. More recently, Guglielmino (2008) explicated self-directed learning in terms of context, activation, and universality. She argued that self-directed learning is an innate, basic, and natural characteristic of human beings when encountering challenges, and this characteristic varies on the continuum, depending on situations.

The importance of self-directed learning has been discussed over four decades. In 1975, Knowles predicted self-directed learning as a means of survival for individuals and the human race living in a new world. Several decades later, Guglielmino (2008) described self-directed learning as an effective mode of learning for individuals to possess in the information age since it encompasses the capacity to cope with constant changes. To elaborate, the high speed of information changes in our society requires individuals to learn throughout their lives and to direct themselves in acquiring information and knowledge to be able to survive and compete with others (Guglielmino, 2008).

Apart from its importance for survival and competition in general, self-directed learning is also viewed as an effective mode of learning for college students in particular since college learning requires that learners be self-directed. College students need to be active in their own learning and able to conduct such learning at any time and any place (Cohen, 2012). Specifically, students in colleges of education, who will likely become teachers, need to possess the quality of self-directed learning since knowledge in the field is constantly changing. Johnson (2009) called for second language teacher professional development to prepare teachers of tomorrow to be self-directed, collaborative, and explorative.

As self-directed learning is vital in today’s world, educational institutions are expected to take into consideration learners’ individual differences in order
to encourage them to direct their own learning. Guglielmino (2008) said that several countries have included self-directed learning as an educational goal or mission statement. As is the case in other countries around the world, the need for self-directed learners in Thailand is reflected in the national reform of education legislation (Moungmee, 2007). For example, the 2010 National Education Act aims to foster in learners the ability to take control over their learning. Students at all levels are expected to acquire a thirst for knowledge, and they receive support in order to develop continuously as lifelong learners, taking into consideration that learners are capable of self-development (Ministry of Education, 2008).

In order to facilitate students’ self-directed learning, it is critical to assess students’ readiness (Klunklin, Viseskul, Sripusanapan, & Turale, 2010). This is because self-directed learning is not for all students, and it may cause anxiety and frustration in some students (Yuan, Williams, Fang, & Pang, 2012). Self-directed learning readiness is the degree to which an individual possesses attitudes, abilities, and personality characteristics necessary for self-directed learning (Wiley, 1983). Guglielmino (1977) argued that self-directed learning readiness consisted of eight dimensions. These dimensions include: openness to learning, self-concept as an effective learner, initiative and independence in learning, informed acceptance of responsibility, love of learning, creativity, positive orientation to the future, and the ability to use basic study and problem-solving skills. These eight dimensions became widely used as a theoretical framework to examine self-directed learning readiness.

In the landscape of research on self-directed learning readiness of college students, researchers have focused primarily on nursing students (Esterhuizen, 2007; Klunklin et al., 2010; Kocaman, Dicle, & Ugur, 2009; Smedley, 2007; Yuan et al., 2012) and engineering students (Litzinger, Wise, & Lee, 2005). These studies attempted to investigate levels of self-directed learning readiness and compare this readiness across years of education and gender. These studies yielded consistent results that self-directed learning readiness differed significantly across years of education, but no significant difference was found across genders.

In the context of Thailand, Klunklin et al. (2010) investigated the level of self-directed learning readiness of nursing students in a university and compared this readiness across years of education. They pointed out that nursing students possessed a moderate to high level of readiness for self-directed learning and this readiness differed across years of education. Few studies in the Thai context have focused on students in colleges of education, which typically have the mission to produce quality teachers who possess the attitude, ability, and skill to strive for knowledge and self-development. These students need to be ready to learn and keep up with the technological as well as educational advancements necessary for self-improvement (Muongmee, 2007).

As a result, it is important to investigate self-directed learning readiness of college students in colleges
of education because previous studies in other countries and disciplines may not be applicable in the Thai context, due to differences in learner characteristics. Additionally, previous studies have not taken into consideration differences in students’ majors. It is important to understand self-directed learning readiness in relation to majors so that instructors can maximize learning opportunity and create educational climates that will foster students’ learning, tailored to students’ maturity and disciplines (Klunklin et al., 2010).

In the present study, we attempted to investigate levels of self-directed learning readiness of Thai college students and compare the readiness across years of education and majors. The results of this study could provide empirical evidence on Thai college students’ attitudes, abilities, and personality characteristics necessary for self-directed learning. In addition, the results of this study will add to the knowledge base available to Thai educators, who then can plan instruction tailored to students’ self-directed learning readiness. The following research questions guided our work:

1. What is the level of self-directed learning readiness among students in colleges of education in Thailand?
2. Is there a difference in self-directed learning readiness across years of education?
3. Is there a difference in self-directed learning readiness across majors?

Methods

Participants

The target population is students in colleges of education in the central and eastern part of Thailand. The estimated number of participants needed to conduct statistical tests with sufficient power is 148, calculated by using the G*Power Software (Erdfelder, Faul, & Buchner, 1996) with the small effect size of .25, statistical power of .7, and alpha level of .05. Participants were selected by using volunteer sampling and snowball sampling techniques. Email messages with the survey link were sent to the volunteer participants, who were asked to forward the message to other potential participants once they completed the survey. As a result, the response rate was difficult to obtain.

One hundred and fifty-six undergraduate students from colleges of education in Thailand participated in this study. Of these participants, 79 (50.6%) were females and 77 (49.4%) were males. Their ages ranged from 18 to 35 years with a mean age of 21.96 (SD = 2.38) years. Those who participated classified themselves as: third year (21.8%), fourth year (21.8%), first year (20.05%), second year (20.05%), and fifth year (11.5%). The participants’ discipline areas included: educational technology (36.5%), foreign language teaching (15.4%), science teaching (5.1%), Thai language teaching (1.9%), math education (1.9%), health and physical education (0.6%), early childhood education (0.6%), social studies (3.2%), and others (34.6%). The possible “others” disciplines include: educational communication, art education, and music education.
**Instrumentation**

The research instrument employed in the present study was the Self-Directed Learning Readiness Scale (SDLRS), originally developed by Guglielmino in 1977 and translated into multiple languages (Smedley, 2007). The SDLRS is a Likert-type scale, designed to examine self-directed learning readiness of adult learners. Khomson (1997) translated the SDLRS into the Thai language and used it with students in the high school level in Thailand. She reported that scores on the modified SDLRS had a reliability estimate of .87 (Pearson split half and Spearman-Brown correction).

In the present study, the Thai version of SDLRS by Khomson was modified, since the survey was used with a different population group. The modifications were made through several steps by using a collaborative approach with experts and a team member (Douglas & Craig, 2007). To begin with, the language appropriateness was evaluated by sending out Khomson’s survey to ten college students online, asking them to provide feedback. After that, the authors retranslated the survey by using an iterative translation approach (Douglas & Craig, 2007) to check the conceptual equivalence rather than the back translation method that focuses on the literal meaning. The iterative translation approach is a contemporary translation method that involves multiple viewpoints to check conceptual equivalence (Douglas & Craig, 2007). We each checked the translation and then discussed the accuracy of the translation, repeating this process multiple times until arriving at an agreement. After revisions, the survey was sent to three experts, who have experience in developing a survey and with the English language, in order to check the accuracy of the meaning.

The final version of the survey consisted of 56 items with a five-option Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The survey consisted of two sections. In the first section, the participants were asked to complete the 56 items on the survey, which examine complex attitudes, skills, and characteristics that comprise an individual’s current level of self-directed learning readiness. There are 16 negative items, or reversed items, and the other 40 items are positive. In the second section, the participants were asked to provide their demographic information including age, gender, majors, and years of education.

The questionnaire assessed the eight subscales as follows: openness to learning opportunities (7 items), self-concept as an effective learner (8 items), initiative and independence in learning (10 items), informed acceptance of responsibility for one’s own learning (5 items), love of learning (9 items), creativity (5 items), positive orientation to the future (6 items), and the ability to use basic study skills and problem-solving skills (6 items). The computed value of Cronbach’s coefficient alpha for the total scale was .85. The Cronbach’s alphas for each of the subscales were appropriate (> .75 except for the creativity subscale which had a Cronbach’s alpha of .39).

**Procedures**

An online survey program, Qualtrics, was used to collect the data for this study. The survey link was sent out
self-directed learning readiness, means and standard deviation were performed. Klunklin et al. (2012) provided criteria to interpret this readiness as follows: 4.50 – 5.00 (highest level), 3.50 – 4.49 (high level), 2.50 – 3.49 (moderate level), 1.50 – 2.49 (low level), and 1.00 – 1.49 (lowest level). Additionally, to compare the level of self-directed learning readiness across years of education and majors, one-way MANOVA was performed. Linear discriminant function analysis was conducted to see which subscales contribute to the difference.

**Ethical considerations**

The process for conducting the present study was approved by the Institutional Review Board (IRB). Participation in this study was voluntary. Prior to completing the survey, the participants read a consent form and granted permission to use their responses for research purposes. The risks in this study are no greater than other research studies in the educational setting. Confidentiality was protected, since no identification was employed. The participants were informed that they could withdraw from the study at any time without negative consequences. The data were analyzed and reported aggregately.

**Results**

Prior to data analyses, three assumptions of one-way MANOVA were examined. The first assumption of normality was met since histograms indicated that all eight subscales were normal. Also, skewness and kurtosis of all subscales were appropriate, ranging from +1 to −1. The second assumption of homogeneity of variances was met since the test of equal variances was not significant (years of education at .27 and majors at .15). The assumption of independence of observation was difficult to assess since the participants may have taken the survey at the same time. The results of level of self-directed learning readiness and comparisons of this readiness across years of education and majors are presented below.
Table 1
Means and standard deviations of eight dimensions of self-directed learning readiness

<table>
<thead>
<tr>
<th>Dimensions of self-directed learning readiness</th>
<th>M</th>
<th>SD</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive orientation to the future</td>
<td>4.02</td>
<td>.63</td>
<td>High</td>
</tr>
<tr>
<td>Informed acceptance of responsibility</td>
<td>4.01</td>
<td>.60</td>
<td>High</td>
</tr>
<tr>
<td>Love of learning</td>
<td>3.94</td>
<td>.51</td>
<td>High</td>
</tr>
<tr>
<td>Ability to use basic study and problem-solving skills</td>
<td>3.78</td>
<td>.58</td>
<td>High</td>
</tr>
<tr>
<td>Self-concept as an effective learner</td>
<td>3.66</td>
<td>.62</td>
<td>High</td>
</tr>
<tr>
<td>Initiative and independence in learning</td>
<td>3.53</td>
<td>.55</td>
<td>High</td>
</tr>
<tr>
<td>Creativity</td>
<td>3.41</td>
<td>.70</td>
<td>Moderate</td>
</tr>
<tr>
<td>Openness to learning</td>
<td>3.25</td>
<td>.79</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

Levels of self-directed learning readiness of college students in Thailand

Descriptive statistics of the eight subscales are presented in Table 1. Students in colleges of education in Thailand reported having self-directed learning readiness at the moderate level in two subscales: creativity (M = 3.41, SD = .70) and openness to learning (M = 3.25, SD = .79). The participants reported having the other six dimensions at the high level, (M = 3.53 – 4.02, SD = .51 – .63).

Comparison of self-directed learning readiness across years of education

To compare self-directed learning readiness across years of education, a one-way MANOVA was conducted. The omnibus MANOVAs showed that self-directed learning readiness differs across years of education, Wilks’ Lambda, F (32, 329.8) = 1.625, p = .02, $\eta^2 = .126$. According to Cohen (1988), the partial eta squared of .126 is considered a small effect size. To further investigate the resulting differences, linear discriminant functions were obtained. The discriminant ratio coefficient suggested that the three variables responsible for distinguishing self-directed learning readiness between years of education were: positive orientation to the future (p = .003, $\eta^2 = .150$), informed acceptance of responsibility (p = .008, $\eta^2 = .132$), and love of learning (p = .048, $\eta^2 = .094$).

Table 2 summarizes the differences across years of education.

Table 2
Self-directed learning readiness differences across years of education

<table>
<thead>
<tr>
<th>Dimensions of self-directed learning readiness</th>
<th>F</th>
<th>p-value</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive orientation to the future</td>
<td>4.229</td>
<td>.003*</td>
<td>.150</td>
</tr>
<tr>
<td>Informed acceptance of responsibility</td>
<td>3.661</td>
<td>.008*</td>
<td>.132</td>
</tr>
<tr>
<td>Love of learning</td>
<td>2.491</td>
<td>.048*</td>
<td>.094</td>
</tr>
<tr>
<td>Creativity</td>
<td>2.266</td>
<td>.068</td>
<td>.086</td>
</tr>
<tr>
<td>Self-concept as an effective learner</td>
<td>1.884</td>
<td>.119</td>
<td>.073</td>
</tr>
<tr>
<td>Ability to use basic study and problem-solving skills</td>
<td>1.742</td>
<td>.147</td>
<td>.068</td>
</tr>
<tr>
<td>Openness to learning</td>
<td>1.141</td>
<td>.342</td>
<td>.045</td>
</tr>
<tr>
<td>Initiative and independence in learning</td>
<td>0.473</td>
<td>.756</td>
<td>.019</td>
</tr>
</tbody>
</table>

*p < .05
Table 3
Self-directed learning readiness differences across majors

<table>
<thead>
<tr>
<th>Dimensions of self-directed learning readiness</th>
<th>$F$</th>
<th>$p$-value</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness to learning</td>
<td>6.259</td>
<td>.000*</td>
<td>.343</td>
</tr>
<tr>
<td>Initiative and independence in learning</td>
<td>3.241</td>
<td>.003*</td>
<td>.213</td>
</tr>
<tr>
<td>Informed acceptance of responsibility</td>
<td>2.566</td>
<td>.014*</td>
<td>.176</td>
</tr>
<tr>
<td>Creativity</td>
<td>2.117</td>
<td>.041*</td>
<td>.150</td>
</tr>
<tr>
<td>Ability to use basic study and problem-solving skills</td>
<td>1.635</td>
<td>.125</td>
<td>.120</td>
</tr>
<tr>
<td>Positive orientation to the future</td>
<td>1.189</td>
<td>.314</td>
<td>.090</td>
</tr>
<tr>
<td>Self-concept as an effective learner</td>
<td>0.849</td>
<td>.562</td>
<td>.066</td>
</tr>
<tr>
<td>Love of learning</td>
<td>0.806</td>
<td>.599</td>
<td>.063</td>
</tr>
</tbody>
</table>

*p < .05

Comparison of self-directed learning readiness across majors

To compare self-directed learning readiness across majors, a one-way MANOVA was performed. The omnibus MANOVAs showed that self-directed learning readiness differs across majors, Wilks’ Lambda, $F (64, 519.8) = 1.865$, $p < .001$, $\eta^2 = .138$. According to Cohen (1988), the partial eta squared of .138 is considered a small effect size. To examine the resulting differences, linear discriminant functions were obtained. The discriminant ratio coefficient suggested that the four variables responsible for distinguishing self-directed learning readiness among majors were: openness to learning ($p < .001$, $\eta^2 = .343$), initiative and independence in learning ($p = .003$, $\eta^2 = .213$), informed acceptance of responsibility ($p = .014$, $\eta^2 = .176$), and creativity ($p = .041$, $\eta^2 = .150$). Table 3 summarizes the resulting differences.

Discussion

In the present study, we attempted to investigate self-directed learning readiness of students in colleges of education in Thailand and compare this readiness across years of education and majors. The results showed that college students in Thailand reported possessing a moderate level in two dimensions of self-directed learning readiness: creativity and openness to learning. The other six dimensions (self-concept as an effective learner, initiative and independence in learning, informed acceptance of responsibility, love of learning, positive orientation to the future, and the ability to use basic study and problem-solving skills) were at a high level.

The findings in this study were not consistent with Klunklin et al. (2010), who examined the self-directed learning readiness of Thai nursing students. They pointed out that the students possessed a moderate level of love of learning and positive orientation to the future, while education students in this study demonstrated creativity and openness to learning at a moderate level. A possible explanation for this inconsistency may be that different populations possess different dimensions of readiness. Nursing graduates are expected to address the health needs of patients and make ethical decisions when encountering
complex situations (Yuan et al., 2012), while education graduates are expected to acquire content and pedagogical skills in order to become teachers (Burns & Richards, 2009). The nature of these professions and their corresponding curricula may influence the readiness to take charge of one’s own learning process.

However, the findings in this study present a picture of current circumstances of students in colleges of education in Thailand. It was interesting to learn that students in colleges of education possessed natural attitudes, abilities, and readiness to take charge of their own learning. The students thought they could be effective learners, who initiated self-learning, learned independently, accepted learning responsibility, enjoyed learning, had future orientation, and used basic study and problem-solving skills. Instructors can support students by providing motivational strategies and maximizing learning opportunities to encourage students to engage in the process of learning. In addition, Thai college education students seemed to lack the readiness for creativity and openness to learning. This may be because the culture of learning in which Thai students often regard university teachers as a source and authority of knowledge, leads to the inability to think creatively. University teachers may also perceive themselves as authority figures, and they may not believe in students’ ability to learn. As a result, they do not open learning opportunities for students to conduct self-directed learning.

Additionally, when comparing self-directed learning readiness across years of education, the results showed that different years of education possessed different degrees of self-directed learning readiness. The results in this study were consistent with previous studies (Kocaman et al., 2009; Smedley, 2007; Yuan et al., 2012). However, this study identified the source of the resulting differences across years of education as positive orientation to the future, informed acceptance of responsibility, and love of learning. At this point, the direction of the difference is not clear, yet it is likely that younger students may have less future orientation, responsibility, and love of learning than older students. Future research should attempt to investigate the directions of these differences.

Furthermore, when examining the differences in self-directed learning readiness across majors, the findings revealed that different majors possessed different self-directed learning readiness. The resulting differences included openness to learning, initiative and independence in learning, informed acceptance of responsibility, and creativity. Previous studies have not examined the differences in self-directed learning readiness across majors. The findings in this study provide a springboard for future studies to consider comparing self-directed learning readiness across majors so that the knowledge of this readiness can be expanded.

**Limitations**

Generalizations of the results in the present study should be treated cautiously, since volunteer sampling and the snowball sampling technique were employed. However, we were able to obtain the desired number of
participants for sufficient statistical power. The limitations of this study also include the self-reported nature of the survey. This study relies on the participants’ perceptions about themselves rather than their actual behaviors, so the interpretation should be done cautiously. In addition, the reliability of the creativity subscale was extremely low. When examining the frequencies and means on this subscale, the participants’ responses were inconsistent. This may be because the translation of concept may not pertain well to Thai college students’ experiences. Future research should be cautious when translating existing research instruments.

**Implications**

The findings in the present study shed light on the current circumstances of students’ self-directed learning readiness in colleges of education in Thailand. These findings could be added to the knowledge base of teacher educators and curriculum designers. Teacher educators could use the results in this study to design curricula that include promoting self-directed learning. To elaborate, since students in colleges of education in Thailand seemed to lack creativity and openness to learning, teacher educators who attempt to foster self-directed learning may reconsider their roles in the classroom. Teacher educators can examine students’ needs and provide instructions tailored to these needs. At the same time, they should also gradually relinquish their power in the classroom by inviting students to reflect on their needs, set goals for learning, create learning plans, identify out-of-class learning resources, monitor learning, and self-evaluate their own learning outcomes (Knowles, 1975). These tasks required teachers to change their roles from a knowledge transmitter to a facilitator. Additionally, teacher educators can integrate students into the learning process and empower their decision making to take charge of their own learning.

Researchers have developed strategies to foster self-directed learning. For example, Smedley (2007) offered a set of strategies that may assist self-directed learning readiness: creating a supportive learning environment, providing constructive feedback, encouraging self-assessment, using self-reflection, providing opportunities to engage in their own learning processes, and developing goal-orientation values. These strategies may be helpful for teacher educators who consider taking a step towards fostering students’ self-directed learning and helping students to survive and thrive in this information age. Specific to the Thai context, all of these strategies may be effective for Thai college students, who assume responsibility in their learning. However, it is the teacher educators’ job to help students gain skills and to support the students in taking charge of their own learning.

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