THE LEVEL OF SELF-DIRECTED LEARNING AMONG TEACHER TRAINING INSTITUTE STUDENTS – AN EARLY SURVEY

Kok Boon Shiong¹, Prof Dr Baharuddin Aris², Prof Madya Dr Zaidatun Tasir²

1 Jabatan Teknologi Pendidikan, IPGM KAMPUS KENT
2 Jabatan Multimedia, Fakulti Pendidikan, Universiti Teknologi Malaysia

Abstract

Modern learning approaches increasingly have fewer structured learning activities and more self-directed learning tasks guided through consultation with academics. This research tends to determine the level of students self-directed learning readiness among the students in the institute. 266 students took part in this research from two major streams which are KPLI and PISMP. The instrument is a questionnaire adopted from Guglielmino (1977) SDRLS questionnaire. Result from the data analysis shown that most of the students SDLRS is on average or below average. The data also shown that there is significances difference between female and male students’ self-directed learning readiness. Beside, SDLRS difference based on gender, research also shown that there is significances different between students’ SDLRS and their options.

1.0 Introduction

The study of online learning has attracted much attention from scholars and teachers, especially those in higher education institutions or colleges (Hill, Wiley, Nelson, and Han, 2003; Hofmann, 2002). However an understanding of learner attributes and how the impact of learning theory in online learning contexts is equally important (Song, and Hill, 2007). The enhancements of online technologies have provided more changes and variety pedagogical approach in the instructional system design.

In the past few years, inquiry has been focused upon the relationship between self directed readiness and personality variables (Martin, 1996). Several researches have been conducted in finding the relationship between the learning style, multiple intelligent, and learners’ personality on self-directed learning (SDL). However, more recent trends are focused on the development of theory which has led to the generation of models to explain the meanings and contexts of SDL.

According to Roberson (2005), many researchers refer to similar works that have laid to the foundation of self-directed learning and due to the complexity of self-directed learning; researchers have re-structured their discourse of SDL around these three parameters:

i. An individual learner’s dispositions and activities characterizing self-directed approaches;

ii. Relevant cultural goals or educational philosophy; and

iii. The social, historical, and educative environmental conditions influencing self-directed learning.
2.0 Rationale of the Research Study

Self-directed, lifelong learning is the most basic ingredient for surviving and thriving in a world of change (Guglielmino, 2005). In other words, students must be able to learn and re-learn in the system. To survive in the fast pace era, students with high SDL are able to learn more and believe to be more creative. Whereas, students without the initiative of learning always facing problems in learning.

What is the major problem face by tertiary education students in learning? Will the students with low SDL survive in the system? Can this group of students survive without the lecturer guidance throughout their learning process? The institute even purposely allocated a specific time for the students to learn independently according to subject.

Omitted the problem of infrastructure in the institute, for instance the problem to access internet, lack of computer and lack of LCD projector, it is found that the low level of SDL indeed affect the students. Why? It is generally believed that online learning gives more control of the instruction to the learners (Garrison, 2003; Gunawardena and McIsaac, 2003). Recent research in an online distance education indicates that students need to have a high level of self-direction to succeed in online learning environment (Shapley, 2000). In other words, students with low level of SDL may hardly survive in this complex learning environment.

2.1 Self Directed learning

Self-directed learning (SDL) has been variously defined (Kerka, 2005), among the well-known researcher in this field defines SDL as:

i. Knowles (1975) described self-directed learning as “a process in which individuals take the initiative, with or without the help of others.” The processes in self-directed learning include diagnosing one’s own learning needs, setting personal goals, making decisions on resources and learning strategies and assessing the value of the outcomes.

ii. Guglielmino (1977) theorized that “self-direction in learning can occur in a wide variety of situations, ranging from a teacher-directed classroom to self-planned and self-conducted learning projects.” She further stated that it is the personal characteristics of the learner (i.e., attitudes, values, beliefs, and abilities) “that ultimately determine whether self-directed learning will take place in a given learning situation. The self directed learner more often chooses or influences the learning objectives, activities, resources, priorities and levels of energy expenditure than does the other-directed learner.”

iii. Gibbon (2002) described self-directed learning is any increase in knowledge, skill or performance pursued by any individual for personal reasons employing any means, in any place at any time at any age.
Summarize from the definitions, SDL is a process, in which learners take the initiative to gain learning experiences, learning resources, implementing learning activities and evaluating on the learning outcomes.

2.2 The Level of self-directed learning

Some scholars have recognized the importance of the learning context for SDL (Candy, 1991), noting that learners may exhibit different levels of self-direction in different learning situations or environment. According to Candy (1991), learners may have a high level of self-direction in an area in which they are familiar, or in areas that are similar to a prior experience. For example, a Malay-speaking learner may have a high level of self-direction in learning English Language, and a learner who plays rugby may be highly self-directed when learning to play badminton. More research is needed in this area if we are to gain a richer understanding of how SDL functions in specific contexts (Song, and Hill, 2007).

2.3 Self-directed learning readiness scale

McCune (1989) identified variables associated with self-directed learning and indicated one of the most frequently used instruments for measuring self-directed learning as Guglielmino’s Self-Directed Learning Readiness Scale (SDLRS). The SDLRS is a 58-item Likert-type scale self-reporting instrument that yields scores between 58 and 260, with higher scores indicating more readiness for self-directed learning.

Since its initial development, the Self-Directed Learning Readiness Scale (SDLRS) also known as the Learning Preference Assessment, (LPA) has been used widely. The SDLRS-A has been used by more than 500 major organizations around the world. The instrument has been translated into Spanish (Castilian, Columbian, and Cuban), French, German, Italian, Korean, Malay, Chinese, Japanese, Finnish, Greek, Portuguese, Afrikaans, Russian, Latvian, Lithuanian, Farsi, Dutch, Polish and Turkish. More than 70,000 adults and 5,000 children have taken the SDLRS/LPA. It has been used in numerous research studies, including more than 90 doctoral dissertations.

The adult form of the questionnaire (SDLRS-A or Learning Preference Assessment) has 58 items. Respondents are asked to read a statement and then indicate the degree to which that statement accurately describes their own attitudes, beliefs, actions or skills. The SDLRS/LPA is available in a research version (for which scoring is done by Guglielmino and Associates) and a self-scoring version. There is also an elementary form, the SDLRS-E, and an ABE version (SDLRS-ABE).

The SDLRS/LPA and the SDLRS-ABE can be accessed online. The elementary form is available in paper format only:
According to Guglielmino (1978), there are eight factors related to self-directed learning readiness: “love of learning, self concept as an independent learner, ability to handle risk, ambiguity, and complexity in learning, creativity, seeing learning as an ongoing lifelong process, taking the initiative in learning, understanding one’s self, and being responsible for one’s learning. These factors suggest that some personality factors may relate to self-directed learning” (Ware, 2003). In 1991, Guglielmino and Guglielmino designed a self-scoring format for the instrument.

McCune, Guglielmino, and Garcia (1990) indicated that many validation studies of the SDLRS have been conducted, with most researchers reporting range of scores approximating the desired bell shaped curve. While many researchers taut the validity and reliability of the SDLRS, it has not been without its controversy. Bonham (1991) challenged the construct validity of the instrument, questioning whether low scoring measured a student as not ready for self directed learning or not reading for any type of learning, other-directed or self-directed. Other critics include Field (1989) and Brookfield (1993), believing the SDLRS to be inappropriately validated and conceptually flawed.

3.0 Research Methodology

3.1 Purpose of the study

The purpose of the study is to determine the level of self-directed learning readiness (SDLRs) among the students and the difference in SDRLs between PISMP and KPLI students.

3.2 Research objective

The broad goal of this study is to build knowledge in order to ensure that different instructional design. In achieving this, the objectives of the research will attempt to:

a) Determine the level of self-directed learning readiness among the students.

b) Determine any differences in the level of self-directed learning between PISMP and KPLI students.

c) Determine any differences in the level of self-directed learning between female and male students.

d) Determine any differences between the students’ SDLRS and their options.

3.3 Research design

This research and development project is descriptive in nature and adopted quantitative method. Since the study was not concerned about improvements in
students’ performance before and after a lesson, experimental research design was not enforced in the study.

### 3.4 Research instrument

The research instrument consisted of a questionnaire with 58 items which was adopted from Guglielmino’s Self-Directed Learning Readiness Scale (SDLRS). The Likert scale was used in the questionnaire namely: 1 as Strongly Disagree, 2 as Disagree, 3 as Somewhat Agree, 4 as Agree and 5 as Strongly Agree.

Lucy Guglielmino (1977) developed the instrument to assess readiness for self-directed learning, the Self-Directed Learning Readiness Scale. The Self-directed Learning Readiness Scale (SDLRS) is a 58-item Likert-type scale self-reporting instrument which ranks from 1 to 5, with 17 negative items, the higher scores indicating more readiness for self-directed learning. This SDLRS is designed to measure the complex of attitudes, abilities and characteristics which comprise readiness to engage in self-directed learning.

Evidence of reliability and validity for the SDLRS was recently reviewed and summarized. The reported reliability data for internal consistency are split-half and coefficient alpha between 0.67 and 0.96, and test-retest reliability of 0.79 and 0.82. The validity of the SDLRS has been studied extensively. Some of the evidence cited in the review of the instrument includes:

i. Content validity: strong congruence between Guglielmino’s original Dephi results and a review of the literature on self-directed learning (Finestone, 1984).

ii. Construct validity: Significant convergent and divergent validity found in five different studies (Delahaye and Smith, 1995).


iv. undertaken, with hours spent on self-directed learning, and with observable student behaviors related to self-directed learning

### 4.0 Results of the Study

The respondents consisted of 266 Program Persediaan Ijazah Sarjana Muda Pendidikan (PPISMP), Program Ijazah Sarjana Muda Pendidikan (PISMP), Program Perguruan Pendidikan Rendah Pengajian Empat Tahun (PPPR4T) and Kursus Pendek Lepasan Ijazah (KPLI) students. Among the 266 students, 124 students belong to KPLI mode and 142 students from PISMP or PPISMP mode.

The data analysis divided into two parts, KPLI group and PISMP group. Basically researcher wishes to identify the differences between these two mode of students’ SDL level.

### 4.1 SDLRS of PISMP, PPISMP and PPPR4T students

SDLRS data collected from PISMP, PPISMP and PPPR4T mode students. Three groups of PISMP and 4 groups of PISMP students took part in this research.
Table 1  SDL of PISMP, PPISMP and PPPR4T students

<table>
<thead>
<tr>
<th>SDL</th>
<th>Female</th>
<th>%</th>
<th>Male</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>2</td>
<td>2.35</td>
<td>1</td>
<td>1.75</td>
<td>3</td>
<td>2.11</td>
</tr>
<tr>
<td>Below Average</td>
<td>24</td>
<td>28.24</td>
<td>17</td>
<td>29.82</td>
<td>41</td>
<td>28.87</td>
</tr>
<tr>
<td>Average</td>
<td>35</td>
<td>41.18</td>
<td>27</td>
<td>47.37</td>
<td>62</td>
<td>43.66</td>
</tr>
<tr>
<td>Above Average</td>
<td>19</td>
<td>22.35</td>
<td>11</td>
<td>19.30</td>
<td>30</td>
<td>21.13</td>
</tr>
<tr>
<td>High</td>
<td>5</td>
<td>5.88</td>
<td>1</td>
<td>1.75</td>
<td>6</td>
<td>4.23</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100%</td>
<td>57</td>
<td>100%</td>
<td>142</td>
<td>100%</td>
</tr>
</tbody>
</table>

From Table 1, 142 students took part in this survey. The number of students with SDL below average are 106 (74.65%) and 36 (25.35%) students with SDL above average or higher.

4.2 SDL of KPLI students

Data collected from 6 groups of KPLI students, among the 142 students they are from KPLI Bimbingan dan Kaunseling, KPLI Bahasa Melayu, KPLI Pendidikan Jasmani dan Kesihatan, KPLI Pemulihan, KPLI Pra Sekolah dan KPLI Sains.

Table 2  SDL of KPLI students

<table>
<thead>
<tr>
<th>SDL</th>
<th>Female</th>
<th>%</th>
<th>Male</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>5</td>
<td>6.17</td>
<td>2</td>
<td>4.65</td>
<td>7</td>
<td>5.65</td>
</tr>
<tr>
<td>Below Average</td>
<td>22</td>
<td>27.16</td>
<td>10</td>
<td>23.26</td>
<td>32</td>
<td>25.81</td>
</tr>
<tr>
<td>Average</td>
<td>26</td>
<td>32.10</td>
<td>22</td>
<td>51.16</td>
<td>48</td>
<td>38.71</td>
</tr>
<tr>
<td>Above Average</td>
<td>22</td>
<td>27.16</td>
<td>7</td>
<td>16.28</td>
<td>29</td>
<td>23.39</td>
</tr>
<tr>
<td>High</td>
<td>6</td>
<td>7.41</td>
<td>2</td>
<td>4.65</td>
<td>8</td>
<td>6.45</td>
</tr>
<tr>
<td>Sum</td>
<td>81</td>
<td>100</td>
<td>43</td>
<td>100</td>
<td>124</td>
<td>100</td>
</tr>
</tbody>
</table>

From Table 2, 124 students took part in this survey. The number of students with SDL below average are 87 (71.03%) and 37 (28.97%) students with SDL above average or higher.

4.3 Overall result of SDL

The overall data of 266 students whose took part in the research. The data collected during the early semester of the year.

Table 3  SDL of all students in this institute

<table>
<thead>
<tr>
<th>SDL</th>
<th>Female</th>
<th>%</th>
<th>Male</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>7</td>
<td>4.22</td>
<td>3</td>
<td>3.00</td>
<td>10</td>
<td>3.76</td>
</tr>
</tbody>
</table>
Below Average  46  27.71  27  27.00  73  27.44  
Average        61  36.75  49  49.00  110  41.35  
Above Average  41  24.70  18  18.00  59  22.18  
High           11  6.63   3  3.00   14  5.26  
Total          166 100  100 100   266 100

From Table 3, 266 students took part in this survey. The number of students with SDL below average are 193 (72.55%) and 73 (27.45%) students with SDL above average or higher.

4.4 SDL between different options

Data analysis based on the students SDLRS with respect to their options in the institute.

Table 4 SDL of all students in this institute

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degree of Freedom</th>
<th>Mean Square</th>
<th>F-Value</th>
<th>Significance Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>30122.68</td>
<td>13</td>
<td>2317.13</td>
<td>5.41</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>11731643.45</td>
<td>1</td>
<td>11731643.45</td>
<td>27396.32</td>
<td>.000</td>
</tr>
<tr>
<td>Options</td>
<td>30122.69</td>
<td>13</td>
<td>2317.13</td>
<td>5.41</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>107911.36</td>
<td>252</td>
<td>428.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12175961.00</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>138034.05</td>
<td>265</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From table 4, the comparison of SDLRS among differences option students, significance value 0.000 shown that there is a difference between SDLRS and students’ options.

5.0 Discussion

In order to succeed in the process of learning, students must be capable to learn independently, take initiative to find extra resources and must be able to complete in-hand task within the time frame without fully depend on lecturer guide. This is in line with Durr, Guglielmino and Guglielmino (1996) point of view; self-directed learning is an effective alternative to classroom learning in many situations. Gibbon (2002) stressed that self-directed learning is any increase in knowledge in any place at any time at any age.

5.1 Level of SDRLS among the students
From the data analysis, only 27% of the students, 73% of the students SDLRS is on average or below. Although the institute always highlights the important of self-directed learning in learning through difference ways, allocation of Independent Self Learning (ISL) session to the students, but it is still not enough to promote self-directed learning readiness among the students. Durr, Guglielmino and Guglielmino (1996) suggested high level of readiness in self-directed learning is important to make effective use of self-directed learning.

5.2 Level of SDLRS between PISMP and KPLI students

In comparing the SDLRS between PISMP and KPLI students, it is found that 29% of the students' SDLRS above average whereas only 25% of the PISMP students' SDLRS above average (refer to table 2.1 and 2.2). Thus, it is obvious that SDLRS of KPLI students are slightly higher than the PISMP students. The level of SDL among KPLI students is better compared to the PISMP mode students this is because KPLI students’ education background is higher. This is simply because undergraduate students are mature and their interaction with peers and teachers will be better than non-graduates. This is line with Bickel et al. (1981) research found that graduates students have already learnt how to study and how to ration the other temptations of student life in order to keep up with their studies. This makes graduates better able to handle a self-directed learning approach than non-graduates.

5.3 Level of SDLRS between male and female students

From table 2.3, it is obvious that 52 (31%) female students' SDLRS above average whereas 21(21%) of the male students' SDLRS above average. Thus, the level of SDLRS of female students is better than male students.

5.6 Level of SDLRS between students with different options

The ANOVA test in Table 4, shown that there is a significance difference between students' SDLRS and their options. Thus, is it their option does effect their SDLRS? Among all the options, PISMP PRA SEKOLAH has the highest average of SDLRS whereas; KPLI BIMBINGAN KAUNSELING has the lowest average of SDLRS. James and Chilvers (2001) pointed out that for graduate to make a difference, courses must be designed specifically for graduates, and "build upon their strengths, motivation, and prior learning."

6.0 Concluding Remarks

From the results and discussion of this research, it can be concluded that the pedagogical strategies and approaches must changed in order to enhance or provoke self-directed learning among the students. Students with different gender and options also influence their SDLRS. Thus, it is important to indentified and enhance the students’ SDLRS in the future research. The concept of self-directedness encompasses awareness of one’s learning needs, the ability to choose what learning methods and strategies to enforce and the ability of self-assessment when evaluating the outcome of one’s learning activities (Guglielmino, 1977).
References


