A STUDY OF SELF-DIRECTED LEARNING READINESS AND SELF-DIRECTED PROFESSIONAL DEVELOPMENT PRACTICES OF TEACHERS

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Abstract

The main aim of this study is to investigate self-directed learning readiness and self-directed professional development practices of teachers from Basic Education High Schools in Myeik Township, Tanintharyi Region. By using proportional stratified sampling method, 83 senior teachers, 130 junior teachers and 57 primary teachers were selected as sample. A set of questionnaire, open-ended questions and interview were used to collect required data. The internal consistency (Cronbach's Alpha) of questionnaire was 0.94. Descriptive statistics, independent samples *t* test, one-way ANOVA, Tukey post hoc mean comparison and Pearson product moment correlation were used to analyse the data. The research finding indicated that the teachers had high level of self-directed learning readiness and often performed the self-directed professional development practices. Moreover, significant differences were not found in self-directed learning readiness level and self-directed professional development practices of teachers according to their personal factors. However, in each area of self-directed professional development practices, there were significant differences according to teachers' personal factors except gender. It was also found that there was a moderately positive correlation between self-directed learning readiness and self-directed professional development practices of teachers ($r = .442$, $p<0.01$).

Keywords: self-directed learning readiness, self-directed professional development

Introduction

Teachers are the foundational component in the delivery of quality education. They play as an important role in teaching learning process for improving students' learning outcomes. They need to possess high level of competence and performance, conduct the tasks ethically, and show commitment in teaching. This all can be obtained from professional development. Sparks and Loucks-Horsley (1989) claimed that professional development is a mechanism that foster the professional growth and expertise of educators. Effective professional development programs can improve teachers' skills and attitudes in the classroom. Teachers face different students in classroom situations and their professional needs are different from each other. To meet their individual professional needs, teachers need to learn not only from centralized professional development programs but also through self-directed learning. Self-directed learning is a process in which a learner assumes primary responsibility for planning, implementing and evaluating the learning process (Brockett & Hiemstra, 1991). By incorporation of these self-directed learning principles in professional development, teachers can perform self-directed professional development (Porter, 2014). Then, they feel ownership and success in professional development.

Significance of the Study

Centralized professional development programs can give only standardized knowledge and may not fulfill individual needs of teachers. In these programs, due to time limit, it is difficult to reflect the realities of classrooms and help educators find solution to the day-to-day challenges they faced. To be effective and successful, teacher professional development must be high quality and relevant to teacher's needs. Self-directed learning helps teachers to learn what they need to learn anywhere at any time (Chiang, 1998) to meet individual professional needs. To perform self-directed learning, an individual need to have readiness for self-directed learning. The degree of

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readiness varies in different learning situations and not all adults have the same level of readiness or aptitude for engaging in self-directed learning (Candy, 1991). When individuals know their level of readiness for self-directed learning, they can determine which level of training should be chosen. For administrators and management of education unit, it is also important to know teachers' self-directed learning readiness level to provide suitable supports for teachers' self-directed professional development. Moreover, Knowles (1975) described that self-directed learners learn more than other learner. Therefore, in this study self-directed learning readiness and self-directed professional development practices of teachers were investigated.

Theoretical Framework

In this study, the investigation of teachers' readiness for self-directed learning will be based on: self-directed learning model developed by Garrison (1997) and self-directed learning readiness scale developed by Fisher et al. (2001).

Garrison (1997) developed a self-directed learning model which included: self-management, self-monitoring, and motivation. In 2001, Fisher et al. described that self-directed learning readiness examines the degree that self-directed learner takes personal control and acknowledges the freedom that is associated with learning what the individual considers important. Then, they developed self-directed learning readiness scale with three dimensions: self-management, self-control (self-monitoring), and desire for learning (motivation).

Self-management: self-management is concerned with task control issues. It focuses on the social and behavioral implementation of learning intentions, that is, the external activities associated with learning process. This dimensions concerns the enactment of learning goals and management of learning resources and support.

Self-monitoring: self-monitoring is the process whereby the learner takes responsibility for the construction of personal meaning (i.e., integrating new ideas and concepts with previous knowledge). Responsibility for self-monitoring reflects a commitment and obligation to construct meaning through critical reflection and collaborative confirmation.

Motivation: motivation play a very significant role in the initiation and maintenance of effort toward learning and the achievement of cognitive goals. Motivation reflects perceived value and anticipated success of learning goals at the time learning is initiated and mediated between context (control) and cognition (responsibility) during the learning process.

On the other hand, manageable analysis on teachers' self-directed professional development practices will be conducted in terms self-directed learning practices proposed by Govender (2015). These practices included:

- Learning with others
- Learning through others
- Learning through self
- Teachers' continuing self-directed professional development and change
- Sources of self-directed learning outside the professional schooling community

Learning with others: Learning is a social phenomenon. In schools, teachers learn through professional talks about student learning, teaching and education. They share knowledge about the planning and teaching of their subjects. They also share knowledge and experiences obtained from courses and workshops. They study their teaching subjects collaboratively. They take collaborative research and reflection on the issues related to teaching learning situation.

Learning through others: Teachers also learn through others. They learn through workshops and mentorship. They learn through observing other teachers' teaching, classroom management and creation of teaching aids.

Learning through self: As intellectual adventures, teachers reflect the effectiveness of their teaching practices. They reflect their strengths and weaknesses about teaching and modify their teaching practices. They take research to investigate new teaching methods/ strategies that are best suited to their individual classroom conditions. Then, they share their findings about teaching methods to colleagues and write in journals and publications.

Teachers' continuing self-directed professional development and change: As changes always occur in education, teachers need to take ongoing professional development. Teachers act as both learners and teachers. Not only they engage in formal professional development through registering for post-grade or diploma studies but also they attend trainings, workshops and courses through own ways to enhance their professionalism. They elevate their status by acting as resources for their learners and other colleagues.

Sources of self-directed learning outside the professional schooling community: For their professional development, teachers learn through one's own plan by using internet to search information, reading books and professional literature. They use social media tools and learn from online programs. They engage in community affairs to observe the contextual realities of their students.

Objectives of the Study

General Objective

- To study self-directed learning readiness and self-directed professional development practices of teachers

Specific Objectives

- To investigate the readiness levels of teachers for self-directed learning
- To study the variations of teachers' readiness for self-directed learning in terms of their personal factors
- To study teachers' practices for self-directed professional development
- To study the variations of teachers' practices for self-directed professional development according to their personal factors
- To find out the relationship between self-directed learning readiness and self-directed professional development practices of teachers

Research Questions

(1) What are the readiness levels of teachers for self-directed learning?

(2) Are there any significant differences in teachers' readiness for self-directed learning in terms of their personal factors?

(3) To what extent do the teachers perform self-directed professional development practices?

(4) Are there any significant differences in teachers' practices for self-directed professional development according to their personal factors?

(5) Is there any relationship between self-directed learning readiness and self-directed professional development practices of teachers?

Limitations of the Study

This study will be restricted to the teachers from Basic Education High Schools in Myeik Township, Tanintharyi Region.

Definitions of Key Terms

Self-Directed Learning Readiness

Self-directed learning readiness is the extent to which an individual possesses preferences and attitudes towards learning that are necessary for self-directed learning (Hall-Johnsen, 1985).

Self-Directed Professional Development

Self-directed professional development is defined as professional development that incorporates principles of self-directed learning (Porter, 2014).

Operational Definitions

Self-Directed Learning Readiness

In this study, self-directed learning readiness is the degree to which the teachers possessed abilities, attitudes and preferences that are necessary for self-directed learning. Self-directed learning readiness of teachers will be determined by the mean values of the teachers' responses to the items of self-directed learning readiness questionnaire. The greater the mean value indicates that the teachers have higher self-directed learning readiness level.

Self-Directed Professional Development Practices

In this study, self-directed professional development practices were the practices performed by the teachers through own initiatives to develop skills, knowledge, expertise and other characteristics as teachers. Self-directed professional development practices of teachers will be measured by the mean values of teachers' responses to the items of self-directed professional development practices questionnaire. The greater the mean values that the teachers get, they more perform the self-directed professional development practices.

Methodology

Both quantitative and qualitative methods were used to collect the required data. For quantitative research study, a set of questionnaire was used. For qualitative research study, open-ended questions and interview were applied. By using proportional stratified sampling method, 83 senior teachers, 130 junior teachers and 57 primary teachers were selected as participants. Therefore, totally 270 teachers were participated in this study.

The questionnaire used in this study included four parts. Part one was personal factors of teachers. Part two was 30 items for examining teachers' self-directed learning readiness with three dimensions: self-management, self-monitoring and motivation. Each item was rated with five-point Likert scale (1=strongly disagree, 2=disagree, 3=undecided, 4= agree, 5= strongly agree). Part three was 31 items for examining self-directed professional development practices with five dimensions: learning with others, learning through others, learning through self, teachers' continuing self-directed professional development and change, and sources of self-directed learning outside the professional schooling community which were rated with five-point Likert scale (1=never, 2=seldom, 3=sometimes, 4=often, 5=always). Part four included five open-ended questions. And, interview was also conducted.

Descriptive statistics, independent samples *t* test, one-way ANOVA, Tukey post hoc mean comparison and Pearson product moment coefficient were used to analyse the data. Moreover, answers of open-ended questions and interviews were read and analysed.

Findings

In this section, the results from analysing data regarding with self-directed learning readiness and self-directed professional development practices of teachers were described.

Table 1 Mean Values and Standard Deviations of Self-Directed Learning Readiness of Teachers   (N=270)

No.	Variables	Mean (SD)	Remark
1.	Self-Management	4.05 (.40)	High
2.	Self-Monitoring	4.12 (.37)	High
3.	Motivation	4.29 (.37)	High
	Teachers' Self-Directed Learning Readiness	**4.15 (.32)**	**High**

Scoring Direction: 1.00-2.00 = low   2.01-3.00 = moderately low 3.01-4.00 = moderately high   4.01-5.00 = high

According to table 1, the mean values of teachers in such dimensions as self-management, self-monitoring and motivation were high. Moreover, the mean value of teachers' self-directed learning readiness was also high. Therefore, it can be said that teachers had *high level* of self-directed learning readiness.

Table 2 Mean Values and Standard Deviations of Self-Directed Professional Development Practices of Teachers   (N=270)

No.	Variables	Mean(SD)	Practice
1.	Learning with Others	3.81 (.57)	Often
2.	Learning through Others	3.99 (.59)	Often
3.	Learning through Self	3.63 (.59)	Often
4.	Teachers' Continuing Self-Directed Professional Development and Change	3.11 (.64)	Sometimes
5.	Sources of Self-Directed Learning Outside the Professional Schooling Community	3.48 (.59)	Sometimes
	Self-Directed Professional Development Practices of Teachers	**3.59 (.47)**	**Often**

Scoring Direction: 1.00-1.49 = never   1.50-2.49 = seldom   2.50-3.49 = sometimes   3.50-4.49 = often
                             4.50-5.00 = always

As shown in table 2, teachers *sometimes* learned for their continuing self-directed professional development and change, and from sources of self-directed learning outside the professional schooling community. But, they *often* learned with others, through others, and through self. Then, the mean value 3.59 showed that the teachers *often* performed self-directed professional development practices.

Table 3 Independent Samples *t* Test Results Showing Mean Values and Standard Deviations of Self-Directed Professional Development Practices of Teachers Grouped by Qualification   (N=270)

Variables	Qualification	N	Mean	SD	*t*	*Df*	*p*
Learning with Others	B.A./ B.Sc./ M.A/M.Sc.	195	3.87	.54	2.806	119.09	.006**
	B.Ed./ M.Ed.	75	3.64	.62			
Learning through Others	B.A./ B.Sc./ M.A/ M.Sc.	195	3.99	.57	-0.03	268	ns
	B.Ed./ M.Ed.	75	3.99	.62			
Learning through Self	B.A./ B.Sc./ M.A/ M.Sc.	195	3.60	.61	-1.61	268	ns
	B.Ed./ M.Ed.	75	3.73	.53			
Teachers' Continuing Self-Directed Professional Development and Change	B.A./ B.Sc./ M.A/ M.Sc.	195	3.09	.61	-0.78	268	ns
	B.Ed./ M.Ed.	75	3.16	.72			
Sources of Self-Directed Learning Outside the Professional Schooling Community	B.A./ B.Sc./ M.A/ M.Sc.	195	3.43	.61	-2.16	268	.031*
	B.Ed./ M.Ed.	75	3.60	.51			
Teachers' Self-Directed Professional Development Practices	**B.A./ B.Sc./ M.A/ M.Sc.**	**197**	**3.59**	**.47**	**-.388**	**268**	**ns**
	B.Ed./ M.Ed.	**75**	**3.61**	**.47**			

 Note: * p<.05, ** p<.01, ns= no significance

In table 3, it was found that there was no significant difference in teachers' self-directed professional development practices between the group of teachers who got B.A./ B.Sc./ M.A/ M.Sc. degree and the group of teachers who got B.Ed./ M.Ed. degree. But, there were significant differences in such areas of self-directed professional development practices as learning with others (*t* (119.09) = 2.806, *p*< 0.01) and sources of self-directed learning outside the professional schooling community (*t* (268) = -2.16, *p*<0.05) between the two qualification groups.

Table 4 One-Way ANOVA Results Showing Mean Values and Standard Deviations of Self-Directed Professional Development Practices of Teachers Grouped by Age   (N=270)

Variables	Age	N	Mean	SD	*F*	*p*
Learning with Others	≤ 30 years	66	3.62	.53	3.11	.07*
	31-40 years	92	3.87	.55		
	41-50 years	62	3.87	.61		
	≥ 51 years	50	3.86	.52		
Learning through Others	≤ 30 years	66	3.99	.61	2.54	ns
	31-40 years	92	4.10	.59		
	41-50 years	62	3.84	.60		
	≥ 51 years	50	3.98	.51		
Learning through Self	≤ 30 years	66	3.74	.52	1.92	ns
	31-40 years	92	3.67	.58		
	41-50 years	62	3.50	.74		
	≥ 51 years	50	3.60	.48		
Teachers' Continuing Self-Directed Professional Development and Change	≤ 30 years	66	3.17	.64	.59	ns
	31-40 years	92	3.13	.65		
	41-50 years	62	3.03	.58		
	≥ 51 years	50	3.09	.69		
Sources of Self-Directed Learning Outside the Professional Schooling Community	≤ 30 years	66	3.60	.54	3.40	.018*
	31-40 years	92	3.55	.54		
	41-50 years	62	3.39	.62		
	≥ 51 years	50	3.31	.65		
Teachers' Self-Directed Professional Development Practices	**≤ 30 years**	**66**	**3.61**	**.45**	**1.13**	**ns**
	31-40 years	**92**	**3.65**	**.46**		
	41-50 years	**62**	**3.52**	**.53**		
	≥ 51 years	**50**	**3.56**	**.44**		

Note: * p<.05, ns= no significance

As shown in table 4, there was no significant difference in teachers' self-directed professional development practices among the age groups of ≤ 30 years, 31-40 years, 41-50 years and ≥ 51 years. But, statistically significant differences were found in such areas of self-directed professional development practices as learning with others (F (3, 266) = 3.11, $p<0.0$) and sources of self-directed learning outside the professional schooling community (F (3,266) = 3.40, $p<0.05$) among these age groups.

Table 5 One-Way ANOVA Results Showing Significantly Different Areas in Self-Directed Professional Development Practices of Teachers Grouped by Age   (N=270)

Variables		Sum of Squares	*df*	Mean Squares	*F*	*p*
Learning with Others	Between Group	2.98	3	.100	3.11	.027*
	Within Group	85.21	266	.32		
	Total	88.19	269			
Sources of Self-Directed Learning Outside the Professional Schooling Community	Between Group	3.43	3	1.14	3.40	.018*
	Within Group	89.49	266	.34		
	Total	92.92	269			

Table 6 Tukey HSD Results Showing Significant Difference in Teachers' Self-Directed Professional Development Practices Grouped by Age   (N=270)

Variables	Age (I)	Age (J)	Mean Difference (I-J)	*p*
Learning with Others	≤ 30 years	31-40 years	-.2464	.037*
Sources of Self-Directed Learning Outside the Professional Schooling Community	≤ 30 years	≥ 51 years	.2971	.034*

Note: * p<.05

As shown in table 6, it can be noted that although the teachers from age group (≤ 30 years) learned with others less than the teachers from the age group (31-40 years), they learned from sources of self-directed learning outside the professional schooling community more than the teachers from the age group (≥ 51 years).

Table 7 One-Way ANOVA Results Showing Mean Values and Standard Deviations of Self-Directed Professional Development Practices of Teachers Grouped by Teaching Service   (N=270)

Variables	Teaching Service	N	Mean	SD	*F*	*p*
Learning with Others	≤ 10 years	94	3.72	.58	1.22	ns
	11-20 years	80	3.85	.56		
	21-30 years	69	3.87	.59		
	≥ 31 years	27	3.82	.53		
Learning through Others	≤ 10 years	94	4.06	.63	.86	ns
	11-20 years	80	3.97	.58		
	21-30 years	69	3.92	.56		
	≥ 31 years	27	3.99	.54		
Learning through Self	≤ 10 years	94	3.76	.54	3.01	.03*
	11-20 years	80	3.51	.62		
	21-30 years	69	3.65	.63		
	≥ 31 years	27	3.51	.54		

Variables	Teaching Service	N	Mean	SD	*F*	*p*
Teachers' Continuing Self-Directed Professional Development and Change	≤ 10 years	94	3.21	.68	1.88	ns
	11-20 years	80	3.00	.58		
	21-30 years	69	3.06	.60		
	≥ 31 years	27	3.20	.71		
Sources of Self-Directed Learning Outside the Professional Schooling Community	≤ 10 years	94	3.62	.52	3.71	.012*
	11-20 years	80	3.49	.56		
	21-30 years	69	3.34	.61		
	≥ 31 years	27	3.33	.72		
Teachers' Self-directed Professional Development Practices	**≤ 10 years**	**94**	**3.66**	**.46**	**.96**	**ns**
	11-20 years	**80**	**3.56**	**.47**		
	21-30 years	**69**	**3.56**	**.48**		
	≥ 31 years	**27**	**3.59**	**.50**		

Note: * p<.05, ns= no significance

According to table 7, it was found that there was no significant difference in teachers' self-directed professional development practices among the teaching service groups (≤ 10 years, 11-20 years, 21-30 years, ≥ 31 years). But, there were significant differences in such areas of self-directed professional development practices as learning through self (F (3,266) = 3.1, p<0.05) and sources of self-directed learning outside the professional schooling community (F (3,266) = 3.71, p<0.05).

Table 8 One-Way ANOVA Results Showing Significantly Different Areas in Self-Directed Professional Development Practices of Teachers Grouped by Teaching Service

(N=270)

Variables		Sum of Squares	*df*	Mean Squares	*F*	*p*
Learning through Self	Between Group	3.13	3	1.04	3.01	.03*
	Within Group	92.05	266	.351		
	Total	95.28	269			
Sources of Self-Directed Learning Outside the Professional Schooling Community	Between Group	3.73	3	1.25	3.71	.012*
	Within Group	89.18	266	.34		
	Total	92.92	269			

Table 9 Tukey HSD Results Showing Significant Difference in Teachers' Self-Directed Professional Development Practices Grouped by Teaching Service   (N=270)

Variables	Teaching Service (I)	Teaching Service (J)	Mean Difference (I-J)	*p*
Learning through Self	≤ 10 years	11-20 years	.2496	.029*
Sources of Self-Directed Learning Outside the Professional Schooling Community	≤ 10 years	21-30years	.2756	.015*

Note: *p<.05

According to table 9, it can be said that the teachers from the teaching service group (≤10 years) learned through themselves more than the teachers from the teaching service group (11-20 years) and learned from sources outside the professional schooling community more than the teachers from the teaching service group (21-30years).

Table 10   One-Way ANOVA Results Showing Mean Values and Standard Deviations of Self-Directed Professional Development Practices of Teachers Grouped by Position   (N=270)

Variables	Position	N	Mean	SD	*F*	*p*
Learning with Others	Primary Teacher	57	3.87	.51	3.11	ns
	Junior Teacher	130	3.86	.58		
	Senior Teacher	83	3.68	.59		
Learning through Others	Primary Teacher	57	4.16	.60	4.71	.01*
	Junior Teacher	130	3.89	.55		
	Senior Teacher	83	4.03	.60		
Learning through Self	Primary Teacher	57	3.70	.54	3.56	.03*
	Junior Teacher	130	3.53	.64		
	Senior Teacher	83	3.74	.54		
Teachers' Continuing Self-Directed Professional Development and Change	Primary Teacher	57	3.15	.58	.88	ns
	Junior Teacher	130	3.05	.3		
	Senior Teacher	83	3.16	.69		
Sources of Self-Directed Learning Outside The Professional Schooling Community	Primary Teacher	57	3.58	.55	5.98	.003**
	Junior Teacher	130	3.36	.62		
	Senior Teacher	83	3.61	.52		
Teachers' self-directed professional development practices	**Primary Teacher**	**57**	**3.68**	**.41**	**2.35**	**ns**
	Junior Teacher	**130**	**3.53**	**.49**		
	Senior Teacher	**83**	**3.63**	**.46**		

Note: * p<.05, ** p<.01, ns= no significance

According to table 10, it was not found significant difference in teachers' self-directed professional development practices among senior, junior and primary teacher groups. But, there were significant differences in such areas of self-directed professional development practices of teachers among these position groups as *learning through others* (F (2, 267) = 4.71, $p<0.05$), learning through self (F (2,267) = 3.56, $p<0.05$), and sources of self-directed learning outside the professional schooling community (F (2,267) = 5.98, $p< 0.01$).

Table 11 One-Way ANOVA Result Showing Significantly Different Areas in Teachers' Self-Directed Professional Development Practices Grouped by Position   (N=270)

Variables		Sum of Squares	*df*	Mean Squares	*F*	*p*
Learning through Others	Between Group	3.16	2	1.58	4.71	.01*
	Within Group	89.45	267	.34		
	Total	92.61	269			
Learning through Self	Between Group	2.47	2	1.24	3.56	.03*
	Within Group	92.71	267	.35		
	Total	95.18	269			
Sources of Self-Directed Learning Outside the Professional Schooling Community	Between Group	3.98	2	1.99	5.98	.003**
	Within Group	88.93	267	.33		
	Total	92.91	269			

Table 12   Tukey HSD Results Showing Significant Difference in Teachers' Self Directed Professional Development Practices Grouped by Position   (N=270)

Variables	Age (I)	Age (J)	Mean Difference (I-J)	*p*
Learning through Others	Primary Teacher	Junior Teacher	.2726	.009**
Learning through Self	Junior Teacher	Senior Teacher	-.2063	.035*
Sources of Self-Directed Learning Outside the Professional Schooling Community	Primary Teacher	Junior Teacher	.2263	.038*
	Junior Teacher	Senior Teacher	-.2533	.006**

Note: * p<.05, ** p<.01

According to table 12, it can be interpreted that primary teacher group more learned through others and from sources of self-directed learning outside the professional schooling community than junior teacher group. Similarly, senior teacher group more learned through self and from sources of self-directed learning outside the professional schooling community than junior teacher group.

The Relationship Between Self-Directed Learning Readiness and Self-Directed Professional Development Practices of Teachers

In order to find out the relationship between self-directed learning readiness and self-directed professional development practices of teachers, Person correlation was computed.

Table 13 The Relationship Between Self-Directed Learning Readiness and Self-Directed Professional Development Practices of Teachers   (N=270)

Variables	Self-Directed Learning Readiness of Teachers	Self-Directed Professional Development Practices of Teachers
Self-Directed Learning Readiness of Teachers	1	.442**
Self-Directed Professional Development Practices of Teachers	.442**	1

**Correlation is significant at the 0.01 level (2-tailed)

Table 13 shows that there was a moderately positive correlation between self-directed learning readiness and self-directed professional development practices of teachers ($r=.442$, $p<0.01$).

Qualitative Findings

Findings from open-ended questions

Q1-What kind of abilities do you have to do self-directed learning?

- Able to search out and learn from resources, plan and set goals for their learning, collaborate, do systematically, manage time well (n=146, 78%)
- Always want to learn and have desire to know deeply, diligence and perseverant, and believe in their abilities (n=27, 14%)
- Can reflect their strengths and weaknesses about teaching (n=14, 8%)

Q2- How do you perform to improve your teaching profession?
- Attending trainings, workshops, courses, and by using resources (books, TV, internet) (n=133, 51%)
- Asking advice from experienced teachers (n=42, 16%)
- Reflecting and modifying their teaching, applying knowledge from courses, workshops in their teaching (n=21, 8%)
- Self-study, continuous learning (n=21,8%)

Q3-For your professional development, which one do you more practiced, attending courses and workshops mandated by policy makers or learning through own ways? Give reasons.
- Attending courses and workshops (n=218, 86%)
  - Get teaching methods and guide from mentor teachers
  - Able to collaborate and discuss among teachers
  - Convenient for teachers as stakeholders concerned with education support transportation fees and manage for staying
- Both (n=31, 12%) because both make their teaching effective
- Learning through own ways (n=5, 2%),
  - courses and workshops cannot fulfil individual teacher's unique needs
  - no induction programs, courses and workshop for beginner teachers
  - Time, energy can be saved and more effective

Q4-Describe the courses or practices that can be more effective for your teaching?
- Sharing and discussion among co-workers (n=127, n=52%)
- New curriculum course, subject mastery course, laboratory course, workshops for increasing student achievement rate (n=63, 26%)
- Learning through different ways (n=23,9%)
- Learning by using resources (n=12, 5%)

Q5-What are the challenges that you faced in performing self-directed professional development practices?
- Excess workload and less free time to learn (n=29, 13%)
- Family responsibilities, money and health difficulties (n=24,11%)
- Less access of internet connectivity and resources (n=19,8%)
- Less competency in technology (n=9, 4%)

Findings from Interview

The results of interview indicated that the teachers possessed abilities, attitudes and preferences that are necessary for self-directed learning. For self-directed professional development, the teachers had not often learned with others and observed other teachers' teaching and creation of teaching aids due to many workloads and less free time. They also had never done individual research or collaborative research because they were not familiar with research. Further, they were weak in learning for their continuing professional development due to many barriers. And, they could not frequently learn from sources of self-directed learning outside the professional schooling community because of many difficulties.

Conclusion and Discussion

In this research, the finding revealed that the teachers had high level of self-directed learning readiness. Knowles (1970) said that adults are self-directed in other areas of their lives and therefore, they prefer self-directed learning. According to interview findings, it was found that most of the teachers had high level of self-directed learning readiness.

Regarding with self-directed professional development practices, the finding showed that teachers often performed self-directed professional development practices such as learning with others, learning through others. Collaboration is a goal of all professional learning. Moving out the isolation by working individually in classroom to share ideas and new learning with peers and content experts in a supportive group fosters a sense of collegiality and professionalism among teachers (Loucks-Horsley et al., 2010). However, in interview, the teachers could not often learn through others and with others since they had to do many paper work and their work schedules are not the same with each other.

Moreover, the research finding revealed that the teachers sometimes conducted individual or collaborative research among self-directed professional development practice According to interview results, teachers had never done individual or collaborative research. Conducting action research for solving immediate classroom instructional problems are common practices for teachers who are curious and interested in self-directed professional development (Ribeiro, 2002, cited in Simegn, 2014). Holly (1991) also notes that action research is a major form of professional development and central to the restructuring of schools (cited in Loucks-Horsley et al.,2010).

The teachers sometimes learned for their continuing self-directed professional development and change. According to interview results, teachers faced many difficulties such as lack of time and money, family responsibilities, inadequate teacher resources to learn for their continuing professional development. According to the quantitative finding, the teachers sometimes learned from sources of self-directed learning outside the professional schooling community. The interview results also indicated that the teachers sometimes read journals and others publications as they had many paper work and less free time.

The group of teachers who got B.Ed./M.Ed. degree learned from sources of self-directed learning outside the professional schooling community more than the group of teachers who got B.A./ B.Sc./M.A./M.Sc. degree. And, the group of teachers who were B.A./ B.Sc./M.A./M.Sc. degree holders learned with others more than the group of teachers who were B.Ed./M.Ed. degree holders. According to the interview results, the group of teachers who were B.Ed./M.Ed. degree holders more interested in students' socioeconomic backgrounds as they understand child psychology. Therefore, it can be said that the more teachers understand the child psychology, the more they are interested in students' background.

Huberman (1995) stated the stages of professional life of teachers as career entry, stabilization, diversification, put himself in question, serenity, conservatism, divestment. Teachers' experiences, confidence and professional needs may change throughout their career life. In this study, there were significant differences in such area as "*learning with others", "learning through self"* and "*sources of self-directed learning outside the professional schooling community*" according to their age and teaching service.

There was a moderately positive correlation between teachers' self-directed learning readiness and self-directed professional development practices. Knowles (1975) also pointed out self-directed learners will learn more, learn better, retain and make better of learning than do reactive learners.

Recommendations

Depending on the analysis of research findings, the following suggestions were presented as follow.

- As the readiness level of teachers for self-directed learning is high, teachers should practice more self-directed professional development activities by using their high self-directed learning readiness.

- As collegial relationship highly supports professional development of teachers, stakeholders and administrators should encourage collegial relationship among teachers.

- The administrators should create time for professional learning of teachers in school by carefully managing teachers' work schedules.

- Teachers should be encouraged to do action research in order to improve their teaching learning process by sharing necessary knowledge about research and providing required resources.

- Teachers should try to improve technological skills. They need to be informed online sources that can be learned for their professional development.

- Teachers should learn from books and by using internet when time schedule and place of trainings and courses are inconvenient for them.

- The stakeholders and administrators need to examine teachers' level of readiness for self-directed learning and create professional learning opportunities according to their readiness level.

- The stakeholders should provide adequate infrastructure and recruit enough teachers to reduce teachers' workloads which can consume time and energy and help them focus on their professional development practices.

Needs for Further Research

This study investigated the teachers from only Basic Education High Schools. As self-directed professional development practices are important for all teachers, additional studies should be conducted with teachers from both Primary Schools and Middle Schools. This study was conducted in Myeik Township. Future studies could be conducted in other geographical areas of Myanmar. Then, comparison could be made among different geographical areas in Myanmar. In this study, the relationship between self-directed learning readiness and self-directed professional development practices were investigated. Further studies should investigate factors affecting self-directed learning readiness and self-directed professional development practices and build models with these factors.

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