



การประชุมวิชาการนำเสนอผลงานวิจัยระดับชาติ ครั้งที่ 4

"GRADUATE SCHOOL CONFERENCE 2022 iHappiness" ความสุขและคุณภาพชีวิตที่ดีอย่างยั่งยืนในยุคสังคมดิจิทัล :

Research on the current situation of personal knowledge management of teachers in special education schools in Guangxi

Xiaolan Ma*

Email: 527874907@qq.com*

Asst. Prof. Dr. Suttipong Boonphadung

Email: suttipong.bo@ssru.ac.th

Educational Administration Program, Graduate School, Suan Sunandha Rajabhat University

Abstract

This study used a questionnaire survey method to investigate 356 special education school teachers in Guangxi Zhuang Autonomous Region, China. The purpose was to understand the current situation of teachers' personal knowledge management in special education schools in Guangxi Zhuang Autonomous Region, and to explore its existing problems and influencing factors. The research results showed that: 1) The overall level of personal knowledge management of teachers in special education schools in Guangxi was at an upper-middle level; 2) There were significant differences in the knowledge storage dimension of teachers' personal knowledge management in Guangxi special education schools in terms of professional titles, the personal knowledge storage ability of teachers with intermediate professional titles and primary professional titles was better than that of teachers without professional titles; 3) There are no significant differences in the gender, teaching age and educational background of the teachers' personal knowledge management in Guangxi special education schools.

Keywords: Knowledge Management, Personal Knowledge Management, Special Education School Teacher

Introduction

Knowledge management is the thoughtful and systematic coordination of an organization's people, technology, processes, and organizational structure to add value through reuse and innovation. This alignment is achieved through the creation, sharing and application of knowledge and the feedback of valuable lessons and best practices back into corporate memory to facilitate continuous organizational learning (Kimiz Dalkir, 2005). A well-managed organization can reduce repetitive errors and create new opportunities at work (Duska Gajic & Renata Riboni, 2009).



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With the development of the knowledge economy, from regional education to school education to teacher education, knowledge management has been applied to all aspects of education (Liang Yong, 2017), and researchers are paying more and more attention to teachers' knowledge management. Teachers' personal knowledge is a kind of practical knowledge and the basic knowledge of teachers' professional development (Gao Feifei, 2016). Teachers' personal knowledge management is the management of the acquisition, storage, transformation, sharing and application of teachers' knowledge in order to realize the transformation and innovation of knowledge. From the perspective of individual teachers, teachers' personal knowledge management has positive implications for teachers' education and professional growth (Chen Lie, 2009).

In August 2015, the Ministry of Education of China released the "Professional Standards for Special Education Teachers (Trial)" (Ministry of Education of the People's Republic of China, 2015). Basic requirements for special education teachers. Facing the requirement of multi-professional knowledge and multi-professional ability, whether teachers in special education schools can master effective personal knowledge management methods and whether they have personal knowledge management ability has become an important factor affecting their education and teaching level and professional development. Personal knowledge management plays an important role in promoting the personal development of teachers (Ma Hui, 2014), and it is of great significance to improve the quality of special education. The research on personal knowledge management of teachers in special education schools should become the necessity of special education research. However, there are few studies on the personal knowledge management of special education teachers. Therefore, this study takes the teachers of special education schools in Guangxi Zhuang Autonomous Region of China as the research object to investigate the current situation of teachers' personal knowledge management in special education schools, in order to propose effective ways to improve special education teachers. Recommendations for personal knowledge management of teachers in education schools.

Objectives

This research used a questionnaire survey to understand the current situation of teachers' personal knowledge management in special education schools in Guangxi Zhuang Autonomous Region of China and whether there were significant differences in personal knowledge management in different variables, explore the existing problems and influencing factors, and propose the personal knowledge of teachers in special education schools in Guangxi. Effective strategies for improving management ability can be used as a reference for education administrative departments and related schools to improve teachers' personal



knowledge management ability.

Research Scope

1. Scope of content

Personal knowledge management for teachers in special education schools.

2. Scope of the population

There were 356 teachers in special education schools in Guangxi Zhuang Autonomous Region, China.

3. Scope of variables

Independent variables include teachers' gender, professional title, teaching age, and educational background; dependent variables include knowledge acquisition, knowledge storage, knowledge sharing, knowledge application, knowledge innovation and total score of personal knowledge management

4. Scope of place and time

From March 2022 to May 2022, in various prefecture-level and district-county-level special education schools in Guangxi Zhuang Autonomous Region, China.

Methodology

1. Participants in the study

This study adopted the convenient sampling method, taking teachers of special education schools in Guangxi Zhuang Autonomous Region as the research object, in the form of questionnaire stars, a total of 397 questionnaires were distributed, and 397 questionnaires were returned, of which 356 were valid questionnaires, and the effective rate was 90%. , the composition of valid subjects: 56 males, accounting for 15.7%, 300 females, accounting for 84.3%; 38 senior titles, accounting for 10.7%, 123 intermediate titles, accounting for 34.6%, and 123 junior titles , accounting for 34.6%, 72 people without professional title, accounting for 20.2%; 145 people with teaching age of 5 years and below, accounting for 40.7%, 52 people in 6-10 years, accounting for 14.6%, 11-15 years 33 people, accounting for 9.3%, 24 people in 16-20 years, accounting for 6.7%; 4 people with technical secondary school and secondary school education, accounting for 1.1%, 80 people with college degree, accounting for 22.5%, 269 people with undergraduate degree, accounting for 75.6%, graduate students There are 3 people with above education, accounting for 0.8%.

2. Research instrument

This research referred to the "Questionnaire on Knowledge Management of Middle School Teachers" compiled by Wang Hongli (Wang Hongli, 2015), and adapted it into "Questionnaire on the Status Quo of Personal Knowledge Management of Teachers in Special



Education Schools in Guangxi" according to the actual situation of teachers in special education schools in Guangxi, including two Most: The first part is the personal information of the respondents; the second part is a questionnaire to measure teachers' professional satisfaction. This part has five dimensions and a total of 30 questions, namely knowledge acquisition (5 questions), knowledge storage (7 questions), knowledge sharing (3 questions), knowledge application (7 questions) and knowledge innovation (8 questions). The questionnaire adopts the Likert-style 5-level scoring method, assigning the item options in each dimension, 1-5 means "completely inconsistent", "relatively inconsistent", "uncertain", "relatively consistent" and "completely consistent" , in this study, the theoretical median value is 3, and the mean value of each dimension is higher than 3, which means that the teacher is at the upper middle level; the mean value of each dimension is lower than 3, which means the teacher is at the lower middle level; the higher the total score, the higher the knowledge management level of teachers. The higher it is; on the contrary, the lower the teacher's knowledge management level. Through the test with SPSS20.0, the KMO value of the questionnaire was 0.961, and the overall Cronbach's a coefficient of the questionnaire was 0.921, indicating that the questionnaire had good reliability and validity.

3. Data collection

In this study, questionnaires were distributed to teachers of special education schools in Guangxi Zhuang Autonomous Region, China. In the process of distributing the questionnaires, the researchers personally contacted the principals of each special education school, and asked the principals to send the questionnaires to the teachers in their schools to fill in the questionnaires, and told them to tell the teachers of the schools to fill in the questionnaires according to their actual conditions.

4. Analysis of data

The questionnaire survey method was used in this study, and SPSS 20.0 was used for statistical analysis of data, including descriptive statistics, independent sample T test and one-way ANOVA.

Research results

1. General situation of personal knowledge management of teachers in special education schools in Guangxi Zhuang Autonomous Region

As shown in Table 2, the average score of teachers' personal knowledge management in Guangxi special education school was 3.93, and the standard deviation was 0.52. The scores of each dimension from high to low were: knowledge application (4.05 ± 0.54), knowledge innovation (3.97 ± 0.55), knowledge acquisition (3.97 ± 0.58), knowledge sharing (3.97 ± 0.65), knowledge storage (3.68 ± 0.66), Among them, the knowledge application score



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was the highest, and the knowledge storage score was the lowest.

Table 1 The overall situation of personal knowledge management of teachers in special education schools in Guangxi

	N	minimu m	maximu m	M	SD
knowledge acquisition	356	1.00	5.00	3.97	.58
knowledge storage	356	1.57	5.00	3.68	.66
knowledge sharing	356	1.00	5.00	3.97	.65
Knowledge application	356	1.00	5.00	4.05	.54
knowledge innovation	356	1.00	5.00	3.97	.55
total score	356	1.11	5.00	3.93	.52
valid N (list state)	356				

Analysis of Differences in Personal Knowledge Management of Teachers in Special Education Schools in Guangxi Zhuang Autonomous Region In this study, the total score of personal knowledge management and its five dimensions were used as dependent variables, and the teacher's gender, professional title, teaching age and educational background were used as independent variables for comparative analysis. The results were shown in Table 2: Guangxi Special Education School Teacher Knowledge There is no significant difference in management in terms of gender, school location, professional title, teaching age and educational background, but there is a significant difference in professional title.

Table 2 Difference analysis of personal knowledge management of teachers in special education schools in Guangxi with different variables

variable	project	knowledge acquisition	knowledge storage	knowledge sharing	Knowledge application	knowledge innovation	total score
gender	male	3.86±0.66	3.57±0.78	3.86±0.72	3.93±0.66	3.8±0.66	3.82±0.63
	Female	3.99±0.56	3.70±0.63	3.99±0.63	4.07±0.51	3.98±0.53	3.94±0.50
	T	-1.48	-1.33	-1.35	-1.73	-1.27	-1.64
job title	Senior title	3.84±0.72	3.65±0.77	3.83±0.78	4.01±0.78	3.98±0.78	3.86±0.69
	Intermediate title	4.03±0.51	3.62±0.59	3.94±0.65	4.10±0.48	3.95±0.50	3.92±0.46
	Primary title	3.92±0.62	3.62±0.71	3.95±0.65	3.96±0.59	3.93±0.59	3.88±0.56
	No title	3.99±0.55	3.91±0.57	4.10±0.97	4.10±0.40	4.05±0.43	4.03±0.43



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variable	project	knowledge acquisition	knowledge storage	knowledge sharing	Knowledge application	knowledge innovation	total score
	F	1.23	3.59	1.66	1.58	0.68	1.44
	P	0.30	0.03	0.18	0.20	0.57	0.23
	LSD	---	Intermediate	---	---	---	---
			title>No title				
			Primary title>No title				
Teaching age	5 years and below	3.97±0.60	3.76±0.66	4.03±0.64	4.03±0.54	3.99±0.51	3.96±0.52
	6-10 years	4.01±0.53	3.63±0.69	3.96±0.65	4.04±0.48	3.97±0.60	3.92±0.50
	11-15 years	4.00±0.47	3.53±0.77	4.05±0.66	4.07±0.54	3.94±0.48	3.92±0.51
	16-20 years	3.83±0.78	3.59±0.64	3.74±0.74	3.83±0.74	3.77±0.80	3.75±0.69
	21+ years	3.94±0.55	3.67±0.61	3.90±0.65	4.12±0.52	3.98±0.54	3.93±0.49
	F	0.49	1.14	1.48	1.55	0.87	0.80
	P	0.74	0.34	0.21	0.19	0.48	0.53
Education	Secondary school or middle school	4.15±0.44	4.11±0.54	4.08±0.63	4.03±0.76	3.94±0.67	4.06±0.56
	college	3.94±0.60	3.75±0.64	3.96±0.60	4.09±0.47	4.01±0.51	3.95±0.48
	Undergraduate	3.97±0.58	3.65±0.67	3.97±0.67	4.03±0.57	3.95±0.57	3.92±0.54
	Graduate and above	4.07±0.12	3.86±0.14	3.67±0.33	3.95±0.82	3.96±0.72	3.90±0.11
	F	0.23	1.07	0.26	0.29	0.24	0.19
	P	0.88	0.36	0.86	0.83	0.87	0.91

Discussion

1. The overall situation of personal knowledge management of teachers in special education schools in Guangxi

According to the research results, the average total score of teachers' personal knowledge management in special education schools in Guangxi was 3.93, indicating that the overall level of personal knowledge management of special education teachers in Guangxi Zhuang Autonomous Region was at an upper-middle level. At the same time, the average value of each dimension of personal knowledge management of teachers in Guangxi special education schools was higher than the set value of 3 for the general level, and the level of each dimension tends to be balanced and stable. Among the five dimensions, knowledge acquisition, knowledge sharing and knowledge innovation have consistent scores, knowledge application has the highest score, and knowledge storage has the lowest score, which is consistent with the research results of Li Weiyu⁹ (Li Weiyu & Guo Wenbin, 2022).



The reasons are, first, that in recent years, the state has vigorously promoted the development of special education and educational rehabilitation, provided policy guarantees for the all-round development of children with special needs, increased investment in special education, and improved the treatment of special education teachers. (Ran Nana, Wang Hui & Yang Ze, 2020); second, this may be related to the fact that there have been more trainings for special education teachers in Guangxi in recent years, and teachers have increased their emphasis on their own professional quality, thereby improving their personal knowledge management level; Third, due to the complexity of the teaching objects, the teaching work of teachers in special education schools is cumbersome, so that the teachers do not have much time to record their teaching experience, etc. Therefore, they are slightly lacking in knowledge storage.

2. Discussion and analysis on the differences in professional titles of teachers in special education schools in Guangxi

The research results show that there were significant differences in the knowledge storage of individual knowledge management of special education teachers in Guangxi in terms of professional titles. There was no significant difference between senior professional titles and intermediate, junior and non-professional titles, but there were significant differences in personal knowledge management between teachers with intermediate and primary titles and teachers without professional titles, which is different from the results of (Chen, 2008). The reason may be that teachers with senior professional titles have no expectations for their professional titles, while intermediate and junior teachers still have a lot of room for promotion in professional titles, so they pay more attention to the storage of personal knowledge and to writing teaching reflections, and better use knowledge management software to learn and accumulate knowledge. Teachers without professional titles may lack enthusiasm for self-improvement due to low job satisfaction, or they may have limited personal abilities. Therefore, they usually do not pay much attention to personal knowledge storage.

3. Discuss and analysis of differences in gender, teaching age and educational background of teachers' personal knowledge management in special education schools in Guangxi

3.1 The research results showed that there was no significant gender difference in the personal knowledge management of teachers in special education schools in Guangxi, which is consistent with the research results of Wang Hongli (Wang Hongli, 2015) and Zhang Yingying (Zhang Yingying, 2011). The reason may be that in the current era of knowledge economy, both male teachers and female teachers need to carry out necessary personal knowledge management, so as to improve personal education and teaching ability.



3.2 The results of the study found that there was no significant difference in the teaching age of teachers in special education schools in Guangxi, which is different from the research results of (Zhou Lili, 2017). The reason may be because young teachers lack experience, so they need to not only improve their education and teaching level through knowledge precipitation and accumulation of experience, so they will actively manage personal knowledge through various channels.

3.3 The results of the research showed that there was no significant difference in the educational background of teachers in the general situation of personal knowledge management in special education schools in Guangxi, which was consistent with the research results of Wang Hongli (Wang Hongli, 2015), and the same as Gao Feifei (Gao Feifei, 2016) and Zhou Lili (Zhou Lili, 2017). have different results. The reason is that in the context of the knowledge economy era, teachers with both high and low education attach great importance to the improvement of their professional quality, and teachers with low education have passed post-employment training and are more willing to listen to other people's opinions and suggestions, it is easier to show a kind of enthusiasm for their own knowledge management.

Conclusion

1. The overall level of personal knowledge management of teachers in special education schools in Guangxi was at an upper-middle level.

2. There were significant differences in the knowledge storage dimension of teachers' personal knowledge management in Guangxi special education schools in terms of professional titles, the personal knowledge storage ability of teachers with intermediate professional titles and primary professional titles was better than that of teachers without professional titles.

3. There were no significant differences in the gender, teaching age and educational background of the teachers' personal knowledge management in Guangxi special education schools.

Suggestion

1. Special education schools

Special education schools continue to attach importance to and support the improvement of teachers' personal knowledge management capabilities, and further improve teachers' knowledge management systems. Create a good atmosphere for teachers to disseminate and express explicit and tacit knowledge, provide a platform for information exchange, develop mechanisms, hardware and software facilities to encourage teachers in personal knowledge management, and help teachers choose knowledge management tools



that suit them.

2. Individual teachers

Teachers in special education schools should continuously enhance their awareness of personal knowledge management, form the idea of sharing and exchanging knowledge with other teachers, and continuously improve themselves in terms of theoretical cultivation, knowledge acquisition, knowledge storage, knowledge application, knowledge sharing and knowledge innovation, so as to better Adapt to the current development needs of special education work.

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