

Influences of Courses and Experiences on the Readiness of Core Subject Teacher in Implementing Special Education Primary School Standard Curriculum (KSSRPK) Learning

Siti Norziha binti Anuar & Mohd Mokhtar bin Tahar

Faculty of Education, National University of Malaysia,
43600 Bangi, Selangor, MALAYSIA
p96008@siswa.ukm.edu.my

Abstract: The readiness of the core subject teachers of the Special Needs Education Classes (KPKP) in terms of knowledge, skills, and attitudes have enabled the implementation of the Special Education Primary School Standard Curriculum (KSSRPK). Changes in a curriculum that have been introduced since its introduction in 2011 led to the formation of the KSSRPK (Revised 2017). Also, teacher readiness is less emphasized in the implementation of the curriculum in Malaysia which will have an impact on the effectiveness of the implementation of the curriculum. The purpose of this study was to identify the level of readiness of the core subjects in terms of knowledge, skills, and attitudes in implementing the learning of KSSRPK. Researchers also wanted to determine if there was a difference between the influence of the course and the experience of the preparation of the core subject teachers in implementing the KSSRPK of learning. Research in this area can serve as a guide for all teachers who teach special education to equip themselves with a wide range of knowledge to be more versatile and capable of teaching MBK learning. This study was conducted quantitatively and formulated a survey using a questionnaire that tested its validity and reliability. The sample of this study consisted of 60 teachers in the primary school of Petaling Utama district. Descriptive analysis and inference were used to test the research questions using Statistical Package for the Social Sciences (SPSS) version 23.0. The findings of this study show that the level of teacher readiness in aspects of knowledge, skills, and attitudes are at a high level. The findings of this study also indicate that there is no significant difference between the course factors and the experience of core subject teachers preparation in implementing the learning of KSSRPK. The findings of this study provide information to the school about the readiness of the core subject teachers in implementing the Learning KSSRPK as well as provide information on the level of teacher readiness based on the course factors and experience studied. This finding is very useful in enabling schools, PPD, JPN and MOE to take appropriate action to ensure that all KPKP teachers are successful in implementing KSSRPK learning. In conclusion, courses and experiences are not the main factors affecting teachers' readiness in terms of knowledge, skills, and attitudes towards successful implementation of the KSSRPK.

Keywords: Special Education Primary School Standard Curriculum (KSSRPK), core subject teachers, Special Needs Education Classes (KPKP), Readiness, Courses, Experiences.

INTRODUCTION

The national school curriculum is the noble desire of the nation to provide present and future generations with a world-class education. There is no denying that the curriculum is a nationwide education system. Therefore, the process of curriculum development is constantly changing. It involves activities such as revision, restructuring, improvement to changes and changes in the curriculum. This process is usually focused on three basic components of the curriculum which are content, teaching and learning activities and form of assessment. Subsequently, the Ministry of Education (MOE) through the Center for Curriculum Development (PPK) had revised the curriculum to suit current needs and conditions. Therefore, the readiness

of the core subject teachers of the Special Needs Education Class (KPKP) in terms of knowledge, skills, and attitudes is essential in the successful implementation of the Special Education Primary School Standard Curriculum (KSSRPK).

The education system is at the heart of the development of a nation when developing the economy. This is in line with the Ministry of Education (MOE) goal to build people's full potential for creating a quality and world-class education system. Curriculum transformation is an attempt by the government to develop the education system of the country so that it does not miss out on modernization. The Government is also concerned with the education of Special Needs Students (MBKs) as they are a major contributor to the country's economic development as embodied in the Special Education Mission (2018), which is the quality education that promotes MBK excellence. In this regard, the study of the influence of the course and the experience on the preparation of core subject teachers in implementing KSSRPK should be conducted to ensure that teachers are always ready to succeed in the implementation of the curriculum even though it is constantly changing.

In successfully transforming the country's education and responding to the challenges of the Malaysian Education Development Plan (PPPM) 2013-2025, teachers are key agents in realizing transformation through the grassroots level of education. At the Wave 2 PPPM (2016-2020) level, teachers need to play a role in driving the country's transformation faster and more effectively. Teachers play a role in translating all of the nation's policies and aspirations through education. The KSSRPK has undergone a holistic change involving the existing school curriculum which includes changes in form, organization, content, pedagogy, time allocation, assessment methods, materials and curriculum management in schools (Curriculum Development Division, 2010). Accordingly, teachers should always be ready to fulfill the government's aspirations for implementation an ever-changing curriculum to produce people who are intellectually, spiritually, emotionally and physically balanced (National Philosophy of Education, 1988). Teacher readiness is also essential to achieving educational excellence to meet the demands of the 21st Century Education Vision.

Mohd Izzuddin, Azmil and Kamarulzaman (2015) explained that the readiness of teachers to implement formal teaching is significantly influenced by knowledge, teaching skills, personality, and motivation. Next, Abdul Rasid, Shamsudin, Azhar, and Juanes (2016) suggested the readiness of teachers on the application of reflective practice in learning English will be achieved if teachers have the knowledge and understanding of the readiness of the effectiveness of the application of teaching thinking skills in essay writing. In implementing the teaching process and an understanding of the effectiveness of applying thinking skills in essay writing teaching. In implementing the teaching process and learning for Islamic Education teachers, the level of teacher readiness in the knowledge and skills aspects of KBAT are positively enabling the teaching and learning of Islamic Education to run smoothly (W. A. Wan Ismail, W.I. Muhammad, M.A. Lubis & M.I. Hamzah, 2016).

A study by Rohaida Mazlan (2017) found that teachers are not yet ready. This has led to a successful teaching study. Lokman, Rohaya, Hamimah and Mohamad (2017) have defined high levels of teacher readiness in both professional and personal aspects for effective teacher leadership. Subsequent studies of Khairani, Amanisah and Abd. Meanwhile, Latif (2017) suggests that teachers need to be more prepared in designing learning activities so that the challenges of 21st century learning are at a moderate level. Earlier, Norasmah and Rofilah (2013) have stated that secondary school teachers who are ready to implement distributed leadership can assist principals in effective and efficient school management. Aziah and Abdul Ghani (2014) have previously argued that aspects of teacher readiness need to be emphasized and have a high impact on the success of a change in preparing teachers for change. This study also notes that teacher experience is a valuable asset to meet the challenges of constantly changing curriculum changes to be implemented in schools. Teachers with knowledge, skills, interests, and attitudes play an important role in the implementation of the KSSR. Besides, experienced teachers also show higher levels of readiness (Norazilawati, Noraini, Mahizer, Nik Azmah & Rumaizah, 2014).

Furthermore, Salwa (2016) highlighted that a medium-level Islamic Education teacher's preparation can perform a school-based assessment (PBS) well. This study was supported by an outside researcher in Aceh Jaya which stated that teachers can receive a higher cause implementation of the curriculum in 2013 (Nor Azhari and Muhammad Jafar, 2015). A further study from M. Kaviza, Fauziah and Nurliyana (2018) on the other hand stated that the teacher's level of readiness is so weak, thus history teachers cannot implement teaching and learning methods based on historical sources. Teaching experience also distinguishes the level of readiness in implementing knowledge-based teaching and learning methods using historical sources among teachers. A study from Siti Nor Aisah, Zaliza, Tee Tze Kiong, Suriani and Ridzwan (2018) has made it clear that teachers' readiness to conduct School-Based Assessments (PBS) is at a high level because teachers understand PBS policies and concepts and how to implement this PBS in the classroom in the right way. This is because half of them have already attended PBS-related courses.

Adequate preparedness among the Excellent Teacher of Malay Language causing Learning Communities Professionals can be fully implemented and cultured (Ezwafahmy, 2018). According to Azalida and Norazilawati (2018), Jaggil and Suhaimi (2018), teachers' knowledge, skills, and attitudes have made the 21st-century learning process run smoothly despite the four-year introduction introduced in all schools, beginning in 2014. Teachers who are prepared from the knowledge and skills aspects of the classroom can perform well in classroom assessment (Fakhri & Mohd Isha, 2016). Therefore, the findings of this study can determine the level of teacher readiness where the level of teacher readiness is crucial for successful KSSRPK Learning. The aspect of teacher readiness from the literature review had proved the success of KSSRPK Learning among the teachers.

The findings of this study can also identify differences in courses and experiences in preparing key subject teachers in implementing KSSRPK where Special Education Teachers as key leaders in implementing KSSRPK should ensure that the knowledge presented helps in generating knowledge, innovative, creative and empowering competitiveness and ability to drive the future development of the country (Rosnaini & Mohd Arif, 2010). The Curriculum Development Division (2014) and Ahmad Tajudin (2006) also support balanced and responsible human capital development as global players and knowledge workers through quality curriculum development.

The main problem with teacher readiness is that teachers are less concerned with pedagogical content and general pedagogical knowledge which is an important aspect of curriculum implementation in Malaysia. Teachers' knowledge of curriculum implementation is the dominant factor in curriculum implementation (Abdul Rahim, Ahmad Johari, Jamaluddin & Musa, 2006). Teacher knowledge of pedagogical content and general pedagogical aspects of the implementation of a curriculum will influence the effectiveness of the implementation of a curriculum (Baharin & Lim, 2010; Shulman, 1987; Zaidatun & Lim, 2010). Lack of teacher knowledge impedes the effective implementation of the curriculum (Abdul Rahim, Ahmad Johari, Jamaluddin & Musa, 2006; Azlina & Mazlifah, 2010). In this regard, the purpose of this study was to identify differences in courses and experiences in the preparation of core subject teachers in terms of knowledge, skills, and attitudes in implementing KSSRPK learning in primary school. Through this study, the unit of analysis is the main subject teachers of the KPKP in the primary school in the district studied.

METHOD

The conceptual framework of the study is shown in Figure 1. Knowledge, skills, and attitudes readiness of core subject teachers to adopt KSSRPK learning act as a dependent variable while demographic factors serve as independent variables consisting of course and experience. Whereas the study unit is analyzed by primary school special education teachers who teach the KPKP core subject. The level of preparedness of teachers in terms of knowledge, skills, and attitudes was then evaluated to see if there were any differences based on the factors of the course attended and the factors of teacher experience.

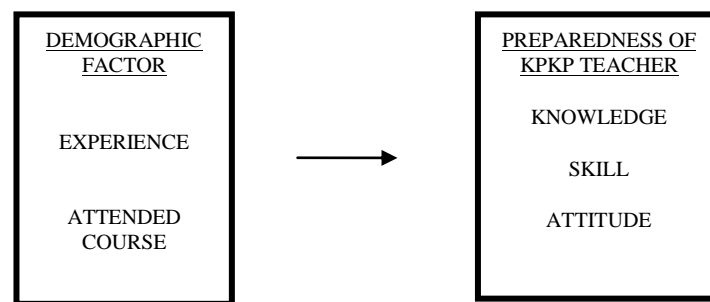


Figure 1 Conceptual Framework
Source: Modified from Abdul Rahman bin Habibi (2016)

The sampling method used is the intended sampling method. This method is used to obtain information directly from the target group while saving time and cost (Circular 2003). Moreover, according to Abdul Rahim (2009), this method also gives good descriptive results on the subject of the study. The study population consisted of Special Education Learning Classes (KPKP) teachers currently serving in the state of Selangor. The selection of respondents among KPKP teachers in Selangor due to the high number of availability respondents and this allowed to produce more accurate research results. According to the statistics of the Selangor State Education Department (June 2019), the number of KPKP teachers in primary schools is 1060.

The selected KPKP teachers in Selangor are a total of 1060 who are teaching using the KSSRPK of

learning. Accordingly, the researcher has distributed the form questionnaire to 60 KPKP teachers who teach in the Petaling Utama area as respondents of the study.

To obtain the study data, a set of questionnaires was developed as a research instrument adapted from the study by Tamilarasi A/P Karuppanan (2007). The questionnaire is divided into three (4) sections, Parts A, B, C and D covering 41 items in total. Part A is a Demographics consisting of five (5) items aimed at capturing the respondents' background. Part B consists of 10 items aimed at assessing the knowledge of the KPKP teachers for the subjects in implementing the KSSRPK of learning. Part C comprises 17 items aimed at measuring the skill level of the KPKP teachers for the subjects in implementing KSSRPK learning. The D section comprises 14 items aimed at measuring the level of attitude of the KPKP teachers for the subjects in implementing KSSRPK learning. All three sections were rated on a five-point Likert scale ranging from scale 1 (strongly disagree), scale 2 (disagree), scale 3 (slightly agree), scale 4 (agree), and scale 5 (strongly agree) (Kelly). et al. 2008). Data analysis was performed using Statistical Package for Social Sciences (SPSS) software version 23.0. Descriptive analysis was used to analyze data obtained from Section A (Demographics) and to answer study question 1 involving frequency, percentage, mean, standard deviation as well as data organization. For this purpose, the interpretation of mean scores is determined with reference to Table 1.

Q1 What is the level of readiness of Special Education teachers in terms of knowledge, skills, and attitudes in implementing the Special Education Primary School Standard Curriculum (KSSRPK) for core subjects?

Table 1 Mean Score Interpretation

| Mean Score | Interpretation |
|-------------|----------------|
| 1.00 - 1.89 | Very Low |
| 1.90 – 2.69 | Low |
| 2.70 – 3.49 | Moderate |
| 3.50 - 4.29 | High |
| 4.30 - 5.00 | Very High |

Source: Izani & Yahya (2014).

Inference statistics were used to answer study questions 2 and 3, using the Manova test. The MANOVA test is appropriate because the number of samples per group compared to a multivariate analysis exceeds the minimum value of 20 samples (Pallant, 2007). This study also contains three dependent variables, knowledge, skills and attitudes of teachers in implementing KSSRPK learning for core subjects.

Q2 Are there significant differences in the special education teachers' readiness in terms of knowledge, skills, and attitudes in implementing the Special Education Primary Curriculum (KSSRPK) for core subjects based on the demographic factors of the attended course?

Q3 Are there significant differences in the special education teachers' readiness in terms of knowledge, skills, and attitudes in implementing the Special Education Primary School Standard Curriculum (KSSRPK) for core subjects based on demographic factors of experience?

RESULT

Descriptive tests were conducted to identify respondents' demographic distribution as shown in Table 2.

Table 2: Demographic distribution of respondents

| Code | Responden's Profile | | Frekuensi (N = 127) | Percentage (%) |
|------|------------------------|---------------------|------------------------|----------------|
| A1 | Gender | Male | 14 | 23.3 |
| | | Female | 46 | 76.7 |
| A2 | Academic Qualification | PhD | 0 | 0.0 |
| | | Master | 10 | 16.7 |
| | | Undergraduate | 50 | 83.3 |
| | | Diploma/Certificate | 0 | 0.0 |
| | | Others | 0 | 0.0 |
| A3 | Origin Option | Special Education | 39 | 65.0 |
| | | Other Option | 21 | 35.0 |
| A4 | KSSRPK Learning Course | Yes | 53 | 88.3 |
| | | No | 7 | 11.7 |
| A5 | Experience | < 5 years | 8 | 13.3 |
| | | 6 - 10 years | 27 | 45.0 |
| | | 11 - 15 years | 17 | 28.3 |
| | | 16 - 20 years | 6 | 10.0 |
| | | > 20 years | 2 | 3.3 |

Q1: What is the level of readiness of Special Education teachers in terms of knowledge, skills, and attitudes in implementing the Special Education Primary School Standard Curriculum (KSSRPK) for core subjects?

Table 3: Mean score of teacher readiness level.

| Teacher Readiness | N | Mean Score | Std. Deviation | Level |
|-------------------|----|------------|----------------|-----------|
| Knowledge | 60 | 3.937 | .55172 | High |
| Skill | 60 | 4.069 | .48545 | High |
| Attitude | 60 | 4.517 | .45602 | Very High |
| Total | 60 | 4.174 | .49773 | High |

Table 3 shows the results of the analysis of the mean scores of teachers' readiness levels in terms of knowledge, skills, and attitudes. The overall mean score for teacher readiness was 4.174. In line with the interpretation of the mean scores proposed by Izani & Yahya (2014), it appears that teachers' readiness to implement the Learning CSR for core subjects is at a high level. Besides, it was found that the teacher's level of readiness in terms of attitude showed a very high mean score of 4.517. Meanwhile, the level of teacher readiness in terms of skills and knowledge showed a high level of 4.069 and 3.937 respectively.

The data obtained has been verified earlier using the Kolmogorov-Smirnov normality test. Based on the table of data obtained is abnormal. Next researcher uses a histogram graph to determine the validity of the data. Once the normal test is run, all variable data are assumed to be normally distributed when the bell-shaped pattern is present obtained (Chua Yan Piaw, 2014). Therefore, the error test can be continued.

S2: Are there significant differences in the special education teachers' readiness in terms of knowledge, skills, and attitudes in implementing the Special Education Primary Curriculum (KSSRPK) for core subjects based on the demographic factors of the attended course?

Table 4: Box's M Test

| Box's M | F-value | Degree of Freedom 1 | Degree of Freedom 2 | Significant Value |
|---------|---------|------------------------|------------------------|-------------------|
| 10.376 | 1.396 | 6 | 613.779 | .214 |

There is no significant differences in covariance between dependent and independent variables ($F = 1.396$, $p = .214$) ($p < .05$) as shown in Table 4. This implies that variables dependent upon homogeneous variance are homogeneous across independent variables. As such, the null hypothesis fails to conclude that there is no difference in teacher readiness in terms of knowledge, skills, and attitudes based on the courses attended.

S3: Are there significant differences in the special education teachers' readiness in terms of knowledge, skills and attitudes in implementing the Special Education Primary School Standard Curriculum (KSSRPK) for core subjects based on demographic factors of experience?

Table 5: Box's M Test

| Box's M | F-value | Degree of Freedom 1 | Degree of Freedom 2 | Significant Value |
|---------|---------|------------------------|---------------------|-------------------|
| 13.628 | .632 | 18 | 1565.615 | .877 |

Table 5 shows that there was no significant covariance difference between the dependent variables and the independent variables ($F = .632$, $p = .877$) ($p < .05$). This means that the variable covariance variant is homogeneous across the independent variables. Thus the null hypothesis is rejected where there is no difference in teacher readiness based on experience factors.

DISCUSSION

The level of teacher readiness in terms of knowledge

This study found that teachers' readiness level of knowledge was high (Mean = 3.937, S.D = 0.55172). This finding shows that high teacher readiness makes teachers better prepared to implement KSSRPK learning and prove that planning and implementing PdPc will be more organized and thorough to ensure that the goals are achieved successfully. This finding is in line with Nurul Huda's (2013) view that teachers have a good level of readiness in terms of knowledge in the implementation of Competency-Based Learning (PBK) and that teachers are prepared and aware of the concept of PBK used and that teachers have the information and can implement it properly. This finding also supports the study of Nooraini and Abdul Halim (2017) where a high level of mathematics teacher knowledge enables the implementation of 21st century learning and teaching processes to work well.

Knowledge is the ability to recall or identify specific elements. Knowledge is gained through experience, observation, reading or notification (Faridah, Faiziah & Amran, 2016). Teachers' knowledge of their need to master the curriculum content to build effective PdPc processes in the 21st century PdPc provides the highest mean values. This finding was supported by Aznita (2014) in her study on the readiness level of mathematics teachers in implementing a standard primary school mathematics curriculum in Johor Bahru. The study found that 94.4% of the sample agreed that they were aware of the formation of the new curriculum and as the implementing agent of the curriculum, teachers needed to expand and understand the content of the curriculum to make the curriculum successful.

The level of teacher readiness in terms of skills

The study found that teachers' level of readiness in terms of skills was high (Mean = 4.069, S.D = 0.48545). In general, this finding illustrates that aspects of skills have made teachers more prepared to implement KSSRPK learning so that they are always happy and satisfied with their day-to-day tasks. This is particularly important because the teacher's skills are the backbone of supporting the teacher in achieving the PdPc goals. This result is in line with the findings of Norazilawati, Noraini, Mahizer, Nik Azmah and Rumaizah (2014) in

which science and mathematics teachers are seen as having a high level of readiness in terms of skills at a high level which has led to the implementation of KSSRPK not a problem for teachers. It also supported by the study of Nooraini and Abdul Halim (2017) where the level of skills at the medium level makes teacher readiness for teaching and learning in the 21st century will run smoothly. If teachers have the knowledge and skills, they can make improvements to the ongoing PdPc in the classroom (Norismayati et al., 2013; Sulaiman et al., 2014). In addition, the skills that teachers possess can enhance teaching practice and assessment based on the needs of the student learning environment to enhance student achievement (Wang, 2016).

The level of teacher readiness in terms of attitude

This study found that teachers' level of readiness in terms of attitude was very high in implementing KSSRPK learning. This finding is supported by Aznita (2014) who studies the level of readiness of mathematics teachers in the aspect of attitude that makes KSSRPK well implemented. The findings of this study are also supported by the study of Nurul Huda (2013) who noticed that the degree of preparation of the teacher in terms of attitude towards the implementation of PBK is moderate and that the teachers are prepared and attentive in doing so positively.

The difference in teacher readiness toward the course attended

Courses attended by teachers in providing readiness for implementing KSSRPK learning do not imply that teachers are more prepared and confident in the implementation of the curriculum. Accordingly, the findings of this study are not in line with the study of Azharizah and Salleh (2018) where training is very much needed to provide counselors with the ability to provide counseling services to special needs students. Earlier, the Fakhri and Mohd Isa (2016) also found that training was essential to enable teachers to better prepare for School-Based Assessment (PBS). However, the findings of this study indicate that the course factors or training do not directly affect the teacher's readiness for implementing the KSSRPK of learning. This may be because the basic course followed before they became educators is sufficient to prepare them for implementing KSSRPK learning. Also, the skills that teachers have may be sufficient to enhance teacher readiness (Wang, 2016).

Differences in teacher readiness for work experience

In this study, teacher experience in implementing KSSRPK learning did not significantly influence teacher readiness. The findings of this study are supported by Sanitah and Norsiwati (2012) who stated that there is no correlation between teacher knowledge and teacher skills with experience in preparing a first-year mathematics teacher. A study by Kang Mu Huai and Lim Hooi Lian (2015) revealed that there were no significant differences between the aspects of teachers' knowledge of KSSRPK implementation and teachers' concern for KSSRPK implementation with all categories of teacher teaching experience. This is further reinforced by the study of Nurul Farahah and Suziyani (2018) who stated that there is no significant difference in teacher readiness in implementing Crop Basics teaching based on teaching experience where effective implementation of Crop Basics teaching is required through teacher training to increase knowledge and teacher skills while also improving teacher readiness.

IMPLICATIONS OF THE STUDY

From the discussion, it was found that the course and experience had no significant effect on teacher readiness. These courses do not provide useful input that teachers can use during their teaching. Several suggestions have been identified that can improve readiness among the teachers. Teachers are encouraged to increase their knowledge so that they can effectively teach in today's global age. In addition, teachers should also be open to accepting changes and implementing any changes that occur in implementing KSSRPK learning. This attitude can make teachers more open to their knowledge and skills in keeping with the latest developments in the education world. Schools play an important role such as allowing teachers to teach subjects using the KSSRPK without evaluating their experience. This can help them develop confidence in their teaching as they are trusted based on their knowledge and skills while on the subject. Teachers will be better prepared to do their job as educators. In addition, the school must also ensure that all teaching facilities are adequate and well functioning.

SUMMARY

Teacher readiness is one of the most important aspects of implementing KSSRPK Learning for the core subjects. Teacher readiness has a huge impact on the implementation of KSSRPK. Teacher readiness is not affected if teachers do not attend the KSSRPK Learning course. Teacher experience also had no positive effect on readiness. This indirectly indicates whether fresh or experienced teachers are ready to guide the nation's development through its teaching process. To ensure high levels of teacher readiness, schools, PPD, JPN, and

MOE do not need to ensure that teachers are given courses or training to equip themselves with the knowledge and skills that make the students more open to them.

REFERENCES

- Abdul Rasid, J., Shamsudin, O., Azhar, M. S. & Masamin, J. 2016. Kesediaan guru dalam pelaksanaan kemahiran berfikir terhadap pengajaran penulisan karangan murid bukan Melayu. *PENDETA Journal of Malay Language, Education and Literature* 7(1): 1–8.
- Abdullah, A. H. 2017. Kesediaan Guru Matematik Sekolah Menengah Dalam Melaksanakan Proses Pembelajaran dan Pengajaran Abad ke-21 (April).
- Abdullah, N., Noh, N. M., Hamzah, M., Azmah, N., Yusuf, N., Omar, R., Pendidikan, U., et al. 2014. Kesediaan guru sains dan matematik dalam pelaksanaan kurikulum standard sekolah rendah 14(1): 81–96
- Ainun Rahmah Ibrahima, Zamri Mahamod & Wan Muna Ruzana Wan Mohamad. 2017. Pembelajaran Abad ke-21 dan Pengaruhnya Terhadap Sikap, Motivasi dan Pencapaian Bahasa Melayu Pelajar Sekolah Menengah. *Malay Language Education Journal - MyLEJ* 7(2):77–88.
- Attan, N. 2007. Tahap kesediaan guru sains dalam penggunaan teknologi maklumat berasaskan komputer dalam proses pengajaran dan pembelajaran 46: 45–60.
- Ezwafahmey, A. K. 2018. Tahap kesediaan guru cemerlang bahasa melayu terhadap pelaksanaan komuniti pembelajaran profesional di sekolah menengah di negeri melaka. *Malay Language Education Journal* 8(April): 63–73.
- Finster, M. 2016. Teacher Leadership Program Readiness Surveys Toolkit / Guide (December).
- Jaggil Apak & Muhamad Suhaimi Taat. 2018. Pengaruh Kesediaan Guru Terhadap Pengurusan Bilik Darjah Abad Ke-21. *Malaysian Journal of Social Sciences and Humanities (MJ - SSH)* 3(4): 6–22. Retrieved.
- Ismail, W. A. W., Muhammad, W. I., Lubis, M. A. & Hamzah, M. I. 2016. Akademia Baru Kesediaan Guru Pendidikan Islam Sekolah Rendah di Selangor terhadap Penerapan KBAT dalam Pengajaran dan Pembelajaran (Readiness of Islamic Education Teacher in Selangor's Primary School in the Implementation of KBAT in Teaching and Learning 3(1): 79–92.
- Katzenmeyer, M., & Moller, G. (2009). *Awakening The Giant: Helping Teachers Develop As Leaders*. Thousand Oaks, CA: Corwin Press
- Kang Mu Hui & Lim Hooi Lian. 2015. Pengetahuan dan Keprihatinan Guru-guru terhadap Pelaksanaan Kurikulum Standard Sekolah Rendah (KSSR). *Jurnal Pendidikan Bitara UPSI* 9: 22–31.
- Kesediaan, K. T. 2007. Kajian Tinjauan Kesediaan Guru-guru Sejarah Menerapkan Kemahiran Pemikiran Sejarah kepada Para Pelajar 32: 119–137.
- Kesediaan, T., Dalam, G. S., Kaedah, M., Sejarah, S., Tinjauan, S. & Negeri, D. I. 2018. JuKu (April): 23–31.
- Khalil, F. A. & Awang, M. I. 2016. Isu Kesediaan Guru dalam Amalan Melaksanakan Pentaksiran Berasaskan Sekolah 2: 1–7.
- Khairani binti Zakariya @ Abd. Hamid, Ph.D.1, Amanisah binti Shuib2 & Abd. Latif bin Ahmad, Ed.D. 2015. Hubungan Antara Cabaran Dalam Pembelajaran Abad-21 Dengan Kesediaan Guru-Guru Dalam Merancang Aktiviti Pembelajaran Di Zon Utara Malaysia.
- Mohd Fahmi, M.Y. 2016. Kesedian Guru Sekolah Menengah Mengamalkan Pengajaran Abad Ke-21 (January). University Tun Hussein Onn: Tesis Sarjana.
- Mohd Izzuddin, M. P., Azmil, H., Kamarulzaman, A. G. & Ab. Halim, T. 2015. Kesediaan Guru dalam Pengajaran Model Khatam al-Quran Program j- QAF. *Prosiding Seminar Antarabangsa Isu - Isu Pendidikan 2015 (IsPen2015)* 1(1): 373–393.
- Mohd. Tahir, L., Talib, R., Mohd Naim, H. & Musah, M. B. 2017. Penilaian Psikometrik Instrumen Kesediaan Guru sebagai Pemimpin Guru. *Sains Humanika* 9(2).
- Nor, M., Azman, A. & Kasem, M. J. 2015. Memperkasa warga Indonesia menerusi kurikulum pendidikan baru: Kajian persepsi guru terhadap pelaksanaan Kurikulum 2013 di Aceh Jya Empowering future Indonesian citizens through reformed school curriculum : A teacher perception study of Curriculum 2013 7(7): 45–57.
- Norazizah binti Abdullah & Dr Azita binti Ali. 2014. Tahap Kesediaan Guru Pelatih Reka Bentuk Dan Teknologi Terhadap Pengajaran Mata Pelajaran Reka Cipta.
- Nurzarina Amran & Roslinda Rosli. 2015. Kefahaman Guru Tentang Kemahiran Abad Ke-21(Teachers'. *Jurnal Pendidikan* 21).
- Tajudin, A., Abdullah, N., Manusia, F. P., Pendidikan, U. & Idris, S. 2018. Kesediaan Guru Sains Sekolah Rendah Terhadap Pelaksanaan Pembelajaran Abad Ke-21 8(1): 99–114.
- Zubaidah, S. 2010. Pembelajaran Kolaboratif Dan Group Investigation (Sebagai Salah Satu Teknik Pembelajaran Kolaboratif). *Seminar Nasional Pembelajaran Biologi dengan* (June): 1–22.