



The Level of Adaptive Teaching Skills among Primary School Teachers in Implementing Zero Reject Policy: A Study in Rural Sarawak

Nur Kamariah Ensima Abdullah, Mohd Isa Hamzah, Mohd Hanafi Mohd Yasin, Nurfaradilla Mohamad Nasri

The National University of Malaysia

nurncmau@gmail.com
isa_hamzah@ukm.edu.my
mhmy6365@ukm.edu.my
nurfaradilla@ukm.edu.my

Abstract: The Zero Rejection Policy (ZRP) is a proactive measure by Malaysia to ensure the rights and equal access of children to education in the country. Thus, the introduction of ZRP introduced in December 2018 brought a paradigm shift to education in Malaysia, especially special education. The admission of Special Needs Pupils (SEN) in schools without any rejection leads to the implementation of inclusive education in mainstream classrooms. Thus, this study aims to examine the level of adaptive teaching skills among primary school teachers in order to implement Zero Reject Policy. This a mix method study involving 230 primary school teachers for quantitative research and 13 teachers for qualitative research. The findings of the quantitative study show that teachers have a high level of adaptive teaching skills. However, the qualitative study found that the majority of teachers stated their level of adaptive teaching skills among teachers was only in the intermediate level. While almost half of the teachers have not been able to receive special education children in the classroom because they are still not confident to teach inclusive classes if they do not get adequate training. Therefore, it is recommended that courses and training be implemented for teachers to improve the skills and knowledge of teachers to implement ZRP in schools.

Keywords: Adaptive teaching, SEN, ZRP, rural

1 Introduction

The Malaysian Education Development Plan (PPPM) 2013 - 2025 is a reform, which aims to ensure an increase in universal access rates among children from preschool to upper secondary level by 2020. Thus, the education for all began to resonate in Malaysia from 2018 with the tagline "Education for All, Responsibility of All" which given an autonomy and accountability for schools and universities. Therefore, MOE introduced a new policy announced in December 2018, known as Zero Reject Policy (ZRP).

© The Author(s) 2023

M. Salimi et al. (eds.), *Proceedings of the 6th International Conference on Learning Innovation and Quality Education (ICLIQE 2022)*, Advances in Social Science, Education and Humanities Research 767, https://doi.org/10.2991/978-2-38476-114-2_3

Relatively ZRP is not a new policy but is related to compliance with the Education Act 1996 [Act 550], Section 29A. Compulsory Primary Education outlines that, subsection (2). Every parent who is a Malaysian citizen shall ensure the children at the age of six years on the first day of January in the current school year should be the registered in a primary school in that year and continues to be primary school pupils throughout the period of compulsory education. Subsection (4) parent who contravenes subsection (2) shall be guilty of an offense and shall, be liable to a fine not exceeding five thousand ringgit or to imprisonment for a term not exceeding six months or both.

Therefore, based on ACT 550, Ministry of Education in Malaysia emphasizes that SEN has the right to receive compulsory education at the primary school level. Student with SEN also has the right to receive education in line with their disability either to Special Education Schools or mainstream schools through Inclusive Education or Special Education Integration Program. With the implementation of this ZRP, Students with Special Needs (SEN) can register anywhere in the school they are interested in and the school cannot reject the student's application.

2 Literature Review

Adaptive teaching is an important aspect of effective teaching in the classroom [6]; [13]; [22]; [29]; [9]; [16]. The ability of teachers to modify teaching methods is increasing from year to year. [2]; [6]; [21]; [32]. In study of [6]; [13]; [26]; [3]; explains that adaptive teaching is the skill of the teacher to change the teaching style according to the suitability and needs of the classroom.

The changing of learning style through an appropriate pedagogical approach is a weapon for student to mastery in learning. The presence of students from various levels grouped in the class requires the teacher as a support and implementation of teaching and facilitation in the classroom to design and implement appropriate learning in order to achieve learning objectives. Adaptive learning also requires teachers to adapt the learning situation in the classroom and learning process to help students in better understanding. The change in learning style is a dynamic process and needs to be coordinated effectively according to the needs and characteristics of the student. [1]; [8]; [31]. Mastery in teaching methods that are able to meet the needs of students becomes a complexity and challenge for teachers, especially from the aspect of limited preparation time, limited class size, workload, lack of resources, large number of students, lack of skills and motivation among teachers.[4]; [24]

However, there are also studies reveal that teachers are not only find it difficult to manage a learning style that meets the needs of students, but teachers also find it difficult to maintain a comprehensive teaching pace every day. [23]; [25]; [33]; [34]. This situation occurs because the time constraints for the teacher to translate theory into teaching practice in the classroom. The situation is even more complicated when student achievement often changes every time. Therefore, the diverse ability of students in the class requires a teacher to teach with various strategies and give instructions that are easy to understand; besides the teacher needs to adjust the curriculum and teaching aids to ensure that students can achieve the learning objectives on the day in question.

In addition, this matter becomes a point of departure for the equality of opportunities for students to excel academically, socially and emotionally. This equality of opportunity includes the readiness of students with various levels and interests as well as learning styles that suit the physical condition of students. [10]. The effectiveness of teaching involving diverse students not only depends on the skills and knowledge of the teacher but also depends on the confidence and attitude of the teacher towards an idea and change. [12]; [17]. The teacher's attitude and motivation to carry out comprehensive teaching consistently every day unable formed by only undergoing a certification course as a teacher. However, can be through teacher training such as courses, experience, organization, work culture and even teacher observation.[11]; [15]; [19]. The work culture in a school has a greater influence teacher training. [27];[30].

3 Research Methodology

The objective of this study is to examine the level of adaptive skill among primary school teacher focusing in rural areas in Sarawak. There are four sub factor have been examine under the teacher abilities to conduct adaptive teaching skills which is, teacher abilities to implement adaptive teaching based on teacher planning skill, teaching strategies, reinforcement, and motivation and acknowledgement. Mix method study conducted in the study whereby the researcher used the sequential explanatory model method, is used when collecting data and analyzing quantitative data in the first round, and followed by the collection and analysis of qualitative data in the second round, to strengthen the results of the quantitative research done in the first round. Due to the Covid -19 pandemic, the questionnaire distribute via goggle form and the interview was conducted via telephone call and video call. There are 230 samples involved in quantitative study whereby 13 respondent involved in qualitative study. The SPSS Version 13 was used to analyze the quantitative study and the Nvivo programmer was used to analyze the qualitative study.

4 Findings and Discussion

The research finding was divide into two, which is quantitative finding followed by qualitative finding.

Quantitative Findings

There were 230 respondent involved in this quantitative study. The findings of quantitative will be discuss on the table 1 until 9 below.

Table 1. Respondent Demographic

		n	%
Gender	Male	107	46.5
	Female	123	53.5
Teaching experience	1 – 3 years	25	10.9
	4 – 5 years	33	14.3
	6 – 14 years	114	49.6
	Over 15 years	58	25.2

Based on table 1 above, the frequency of male and female are relatively balance whereby male is 107 (46.5%) while female 123 (53.4%). Based on the analyses, majority of the respondent an experience teachers with 6 to 14 years' experience, 58 (25.2%) over 15 years, 33 (14.3%) 4 to 5 years and 25 (10.9%) 1-3 years.

4.1 The Level of adaptive teaching skills among primary school teachers based on teachers lesson planning aspect

Table 2. Frequency and percentage score of teaching planning aspect

No	Item		Disagree	Uncertain	Agree
PP1	I ensure my learning objective achieve everyday	n	0	8	222
		%	0.0%	3.5%	96.5%
PP2	I take notes on students' readiness before start the lesson	n	0	8	222
		%	0.0%	3.5%	96.5%
PP3	I did not teach as planned in the daily lesson plan	n	178	32	20
		%	77.4%	13.9%	8.7%
PP4	I planned fun learning teaching method	n	1	22	207
		%	0.4%	9.6%	90.0%
PP5	I don't plan a variety of teaching strategies	n	175	37	18
		%	76.1%	16.1%	7.8%

Based on Table 2 above, items PP3 and PP5 are negative items while items PP1, PP2 and PP4 are positive items. Based on the five tested items, the respondents gave a high level of agreement for items PP1 and PP2, which means almost all respondent agree with both item 96.5% (222) people. While the respondents gave a high percentage of Disagree for item PP3 which is 77.4% (178) people and the highest percentage for the Uncertain item is item PP5 which is 16.1% (37) people.

In conclusion, teachers' pay attention on students' readiness before teaching and learning process and will always ensure that the learning objectives are achieved every day. For this reason, teachers do not agree that they teach not according to lesson plans because they plan lessons to teach diverse students even though there is a small number of teachers who are still not sure if they teach according to their lesson plan or the other way around. The details of the analysis for the mean score, frequency and interpretation based on the mean score.

Table 3. Mean score, frequency and interpretation

Min score	Interpretation	n	%		
1.00 to 1.80	Very Low	0	0.0%		
1.81 to 2.60	Low	0	0.0%		
2.61 to 3.40	Moderate	18	7.82%		
3.41 to 4.20	High	85	36.96%		
4.21 to 5.00	Very High	127	55.22%		
N	Minimum	Maximum	Mean	Std Deviation	Interpretation
230	3.00	5.00	4.3104	.51745	Very High

Based on the interpretation of Table 3 above, the teacher's skill in implementing adaptive teaching skills in teaching planning aspect is ranked very high with a mean score of 4.3104, S.L = .51745. The detailed findings show that half of the respondents have a very high level, which is 55.22% (127) people. While 36.95% (85) people are ranked, high and only 7.82% (18) people are ranked moderate.

In conclusion, the teacher's skill in implementing adaptive teaching from the aspect of teaching planning is very high. The teacher makes a good teaching plan by ensuring that the learning objectives are achieved, taking into account the readiness of the students before starting the learning session, planning fun teaching methods and planning diverse teaching strategies.

4.2 The Level of adaptive teaching skills based on teaching strategies aspect

Table 4. Frequency and percentage score of teaching strategies aspect

No	Item		Disagree	Uncertain	Agree
SP1	I encourage collaborative learning	n	1	27	202
		%	0.4%	11.7%	87.8%
SP2	I do not conduct project-based learning	n	131	69	30
		%	57.0%	30.0%	13.0%
SP3	I always teaching problem solving	n	8	57	165
		%	3.5%	24.8%	71.7%
SP4	I am more comfortable implementing teacher-centered learning	n	92	76	62
		%	40.0%	33.0%	27.0%
SP5	I group students according to their abilities during the teaching and learning process	n	80	67	83
		%	34.8%	29.1%	36.1

Table 4 above is findings on the percentage and frequency of respondents for five items under the teaching strategy construct. Among these five items, items SP2 and SP4 are negative items while items SP1, SP3, and SP5 are positive items.

Based on the findings, teachers give positive respondents to positive items and vice versa. Item SP1 is related to collaborative learning got the highest level of agreement, which is almost 90%, 87.8% (202) of the respondents. While the Disagree item that gets the highest agreement is for

item SP2 57.0% (31) of the respondents. While the highest percentage of uncertain is item SP2 30.0% (69) and item SP5 29.1% (67) respondent.

Overall, the teacher practices a collaborative learning style that gives students the opportunity to interact and conduct project-based teaching. However, there are some teachers who are still not sure if they group students or not during the lesson. This situation may influenced by the small number of students in rural areas schools, which deal with fewer numbers of student. The details of the mean score, frequency and percentage of respondents regarding the level of adaptive teaching skills from teaching strategies aspect are as detailed in Table 5 below.

Table 5. Mean score, frequency and interpretation

Min score		Interpretation	n	%	
1.00 to 1.80		Very Low	0	0	
1.81 to 2.60		Low	11	4.78%	
2.61 to 3.40		Moderate	95	41.31%	
3.41 to 4.20		High	103	44.78%	
4.21 to 5.00		Very High	21	9.13%	
N	Minimum	Maximum	Mean	Std Deviation	Interpretation
230	2.40	5.00	3.5826	.55324	High

Based on table 5 above, overall mean score for teacher’s level in implementing adaptive teaching skill based on teaching strategies relatively high with mean score 3.5286, S.L .55324. Whereby 44.98% (103) respondent are high, 41.78% (95) respondent are moderate and 4.78% (11) low, 9.13% (21) respondent in very high level.

4.3 The Level of adaptive teaching skills based on teacher’s reinforcement aspect

Table 6. Frequency and percentage score of teaching strategies aspect

No	Item	Disagree	Uncertain	Agree
PK1	I diversify the reinforcement activities	n 3 % 1.3%	32 13.9%	195 84.8%
PK2	I used teaching aids/material	n 1 % 0.4%	22 9.6%	207 90.0%
PK3	I encourage students to think creatively and critically	n 0 % 0%	25 10.9%	205 89.1%
PK4	I give training according to the student's ability level	n 1 % 0.4%	25 10.9%	204 88.7%
PK5	I do not give additional exercise to remedial student	n 119 % 51.7%	40 17.4%	71 30.9%

Table 6 above is the respondent's level of agreement for the reinforcement item. Based on five items PK1, PK2, PK3 and PK4 are positive items. While item, PK5 is a negative item. The findings of the study show that PK2 item got the highest frequency of agree, which was 90.0% (207) respondent, while PK5 item got the highest score of disagree, which was 51.7% (119). Meanwhile, item PK5 is also an item that has a highest for uncertain, which is 17.4% or 40 respondent,

Based on the findings, it was found that teachers use teaching aids and teachers stimulate students to think creatively and critically. The teacher also provides worksheet according to the student's ability and provides additional worksheets for remedial student. Details about the mean score, frequency and percentage of respondents will be explained in Table 7 below.

Table 7. Mean score, frequency and interpretation

Min score	Interpretation	n	%		
1.00 to 1.80	Very Low	0	0.0%		
1.81 to 2.60	Low	0	0.0%		
2.61 to 3.40	Moderate	30	13.04%		
3.41 to 4.20	High	130	56.52%		
4.21 to 5.00	Very High	70	30.44%		
N	Minimum	Maximum	Mean	Std. Deviation	Interpretation
230	2.40	5.00	4.0661	.52115	High

Table 7 above shows the mean score, frequency and percentage of the respondent's level of adaptive teaching skills based on reinforcement aspect. Based on the analysis above, overall the mean score is high, mean = 4.0661, S.L = .52115. Meanwhile, the majority of respondents' mean scores ranked high, 56.54% (130) respondent, very high: 30.44% (70) respondent, while 13.04% (30) people were at a medium level.

4.4 Level of adaptive teaching skills among primary school teachers based on teacher's motivation and acknowledgement aspect

Table 8. Frequency and percentage score of teaching strategies aspect

No	Item		Disagree	Uncertain	Agree
MP1	I give positive reinforcement to students	n	0	15	215
		%	0%	6.5%	93.5%
MP2	I not sensitive with student interest	n	183	29	18
		%	79.6%	12.6%	7.8%
MP3	I give opportunity to student ask question	n	0	8	222
		%	0%	3.5%	96.5%
MP4	I give motivation to weakest student	n	1	9	220
		%	0.4%	3.9%	95.7%
MP5	I encourage student to communicate actively	n	0	10	220
		%	0%	4.3%	95.7%

Table 1.8 above is the respondents' agreement on the motivation and acknowledgement aspect. There are five items were tested under this construct, item MP1, MP3, MP4 and MP5 are positive items while item MP2 is a negative item. The item that shows the highest agreement is MP3, 96.5% (222) respondent while MP4 and MP5 each 95.7% (220) respondent

Overall, teachers always motivate students and give students opportunities to ask questions, encourage students to communicate actively and motivate the weakest. In addition, the teacher is also sensitive towards student interest. The findings of the study show that almost all respondents agreed to items MP3, MP4 and MP5, 96.5% (222) of respondent, MP2, 79.6% (183) of teachers stated that they disagreed that they were less sensitive towards student interest. The interpretation of this finding including the mean score, frequency and percentage is as in Table 9 below.

Table 9. Mean score, frequency and interpretation

Min score	Interpretation	n	%		
1.00 to 1.80	Very Low	0	0.0%		
1.81 to 2.60	Low	0	0.0%		
2.61 to 3.40	Moderate	9	3.91%		
3.41 to 4.20	High	64	27.83%		
4.21 to 5.00	Very High	157	68.26%		
N	Minimum	Maximum	Mean	Std Deviation	Interpretation
230	3.00	5.00	4.4974	.48586	Very High

Table 9 above shows the level of teacher skills in implementing adaptive teaching from motivation and acknowledgment aspect. Total mean score show that in very high level 4.4974, S.L .48586. Based on the findings, majority respondent are very high level 68.26% (157) respondent, 27.83% (64) respondent are high, while 3.91% (9) respondent are moderate

Table 10. Mean score, frequency and interpretation

Min score	Interpretation	n	%		
1.00 to 1.80	Very Low	0	0.0%		
1.81 to 2.60	Low	0	0.0%		
2.61 to 3.40	Moderate	16	6.96%		
3.41 to 4.20	High	151	65.65%		
4.21 to 5.00	Very High	63	27.39%		
N	Minimum	Maximum	Mean	Std Deviation	Interpretation
230	2.90	4.80	4.0237	.35692	High

As the conclusion, based on the table 10 above, the level of teacher’s skill in implementing adaptive teaching is proximally high with mean score 4.0237, S.L .35692. Out of 230 respondents, more than half of them 65.65% (151) respondent are at high level, while 27.39% (63) respondent are ranked very high while 6.96% (16) people are at medium level

Qualitative Finding

4.5 Do you think you are good in implementing adaptive teaching skills? Why does the teacher feel that way?

The researcher interview 13 respondent to identify teacher level of skills in implementing the adaptive teaching. Based on thematic analysis majority respondent think that their level are in intermediate level or just moderate. Only four respondent think that there are very good in implementing adaptive teaching, while three more respondent think that their skills are limited or low level. Table 1.11 above will show the theme, respondent and frequency for every level of skill.

Table 11. Theme, Respondent and Frequency

Theme	Respondent	Frequency
Low	R3T3,R4T4,R9T9	3
Moderate	R12T12,R1T1,R2T2,R6T6,R8T8,R13T13	6
Good	R10T0,R11T11,R5T5,R7T7	4

Low

Respondent think their level of adaptive teaching skill is still in low level or limited because there unable to teach student with SEN. According to respondent R3T3, he has a weak level of adaptive skills because he does not have the ability to teach students with special needs. “...No, I do not have the expertise to teach special needs students...” R3T3 . While for respondent R4T4 responden that he never attent any course for remedial student so far “...Not that good, because I have never attended a remedial class courses...” R4T4. In addition, respondent R9T9 thinks he has limited adaptive teaching skills because he is not yet able to attract SEN interest to remain active in his class “...No, because I am not able to attract SEN interest to remain active in class...” R9T9

Moderate

According to respondent R12T12, she has limited experience in teaching which is for her, nine year is not that enough to improve her skills in applying adaptive teaching. “... My adaptive teaching skills are at a moderate level. This is because 9 years of teaching in the interior helped me to some extent in improving my adaptive teaching skills...” R12T12. In addition, for respondent R6T6, she has limited experiences dealing with SEN “... Moderately, because I still new in teaching and I have not yet deal with SEN, except during my teacher training...” R6T6. Meanwhile, the respondents also think that the past experience is not enough to make them proficient in implementing adaptive teaching and also need some times to digest about ZRP “...I not familiar with

the situation and need some period of time to digest everything..." R1T1. In addition, respondents felt they were average because there was still a lot to be learn. "... *I still have a lot to be learn...*" R13T13. Handling students with mix - abilities requires a teacher who has experience and knowledge to be able to handle and manage teaching and learning in classroom. "...*I still need experience and knowledge to ensure that I can handle and manage my teaching and learning sessions involving students with multiple intelligences...*" R8T8. According to R2T2, as a teacher he needs to improve his skills in accordance with the needs of the latest policy, to ensure that he is a teacher who continues to be relevant to current needs. "...*In my opinion, I am in moderate level, I need to upgrade myself to be more updated and more digitized...*" R2T2

Good

Respondent R10T10 believes that his previous experience of teaching remedial classes makes him have a good adaptive teaching skills and he can handle students with special needs...*Yes, because I have had experience teaching remedial classes, so to some extent I can handle students with special needs...*R10T10. Meanwhile, the teacher's adaptive skills are good because the teacher's ability to implement the best teaching methods by applying daily activities and learning that suit the students' abilities...*Yes, I think I am able to do the best because I always apply daily activities and learning according to the students' abilities. ...*R11T11. Somehow, R5T5 ranked himself by giving 8/10. "... *I would say I'm good by giving 8/10. For me, I can achieve my teaching objective successfully and I always listen and speak with my student to give them a guidance and support...*" R5T5. According to respondent R7T7, he still has experience-teaching students with special needs. Therefore, he feels that his adaptive skills are at a good level. "...*Yes. I have served in three different schools. There are students with disabilities (learning difficulties) that I have taught...*" R7T7.

5 Discussion

Four aspect focusing in this study namely, teachers' ability in planning the lesson, teachers' teaching and learning strategies, reinforcement, and motivation and acknowledgment to determine the level of adaptive teaching skills among primary school teachers in rural Sarawak. Adaptive teaching is an important aspect of effective teaching in the classroom [7]; [13]; [20]; [22]; [28]; [9]. Overall, the level of adaptive teaching skills among primary school teachers in rural school in Sarawak, the quantitative findings show that the mean score is 4.0237, S.L .35692 and this leads to an indicator that the level of teacher's adaptive teaching skills is high.

However, the qualitative research found that, majority respondent think that their adaptive teaching skills are moderate. Among the 13 respondent for qualitative study, three were in the weak level, six are moderate while four of them think that they are in good level. Based on the study conducted by [2]; [6]; [21]; [22]; [32]; [33]. The ability of teachers to modify teaching methods is increasing from year to year. Thus, teachers teaching skills are change according to the suitability and the needs of the classroom. [9]; [6]; [13]; [26].

Based on the interview conducted in this study, most of teachers mention that, their levels' of adaptive teaching skills are limited due to lack of exposure and teachers' training related with SEN or remedial student. Therefore, [11]; [15]; [19] mention that teachers level of knowledge can be fostered through teacher training such as courses, experience, organization, work culture and also teacher observation. Thus, teacher's attitude and motivation to continue to carry out comprehensive teaching every day cannot be formed by only undergoing a certification course as a teacher. [33] However, some studies mention that the work culture in a school has a greater influence compare to teachers training. [30]; [27].

6 Conclusion

The Zero Reject Policy (ZRP) was in line with the call of UNESCO to provide education for all. This policy also coincides with the Malaysian Education Development Plan (2013 – 2025) which emphasizes equal access to quality education. The success of a policy is also closely related to the competence of teachers at the lower level as a policy implementation body. Therefore, this study provides an overview of the teacher adaptive level in implement this policy especially those who are teaching in the

Overall, the level of adaptive teaching among teachers in this study are moderate. Most of the teacher mention that their ability to adapt is moderate because there are lack of courses and exposure towards ZRP as well as teaching student with disabilities. However, the findings on quantitative revealed that level of adaptive teaching based on teaching planning and motivation aspect were very high. Meanwhile, level of adaptive teaching based on teaching strategies and teacher's reinforcement were high.

Therefore, the party concerned need to draw up an intervention plan or framework to improve the competence of teachers in implementing DSP, especially involving the knowledge and skills of teachers. The implementation of appropriate courses and training such as inclusive education introduction courses, skills to identify the characteristics of special education, pedagogical skills of students of various levels, SEN assessment methods or whatever course targets are deemed necessary, especially involving primary teachers in rural areas who are faced with the condition of facilities inadequate infrastructure.

References

1. Birnie, Billie F.(2015) Clearing House: A Journal of Educational Strategies, Issues and Ideas, v88 n2 p62-65 2015
2. Borko, H., & Putnam, R. (1996). Learning to teach. In D. Berliner, & R. Calfee (Eds.), *Handbook of educational psychology* (pp. 673–708). New York, NY: MacMillan.
3. Burns, M. K., & Dean, V. J. (2005). Effect of acquisition rates on off- task behavior with children identified as giving learning disabilities. *Learning Disability Quarterly*, 28, 273 – 281

4. Chan, C.W.M, Chang, R. M. L., Westwood, P. & Yuen, M. (2002). Teaching adaptively: How easy is it in practice? A perspective from Hong Kong. *Asia-Pacific Educational Researcher*, 11, 1, 27-58.
5. Department of Education. 2005. Guidelines for Inclusive Learning Programmes Your Constructive Inputs To These Draft Guidelines Will Be (June): 1–115.
6. Duffy, G. G. (1998). Teaching and the balancing of round stones. *Phi Delta Kappan*, 79, 777–780.
7. Duffy, G. G. (2002). Visioning and the development of outstanding teachers. *Reading Research and Instruction*, 41, 331–344.
8. Education Act 1996 (Act 550) & Selected Regulations.1998. Kuala Lumpur: International Law Books
9. Farrell, T. S. C. (2008). Critical incidents in ELT initial teacher training. *ELT Journal*, 62(1), 3–10. doi:10.1093/elt/ccm072
10. Florian, L., and J. Spratt. 2013. “Enacting Inclusion: A Framework for Interrogating Inclusive Practice.” *European Journal of Special Needs Education* 28 (2): 119–135
11. Florio-Ruane, S., & Lensmire, T. J. (1990). Transforming future teachers’ ideas about Writing instruction. *Journal of Curriculum Studies*, 22, 277-289
12. Fullan, M. (1997). *What's Worth Fighting For in the Principalship?* 2nd edn. Toronto: Ontario Public School Teachers' Association; New York: Teachers College Press; Buckingham: Open University Press.
13. Gambrell, L. B., Malloy, J. A., & Mazzoni, S. A. (2007). Evidencebased best practices for comprehensive literacy instruction. In L. B. Gambrell, L. M. Morrow, & M. Pressley (Eds.), *Best practices in literacy instruction* (3rd ed.). New York, NY: Guilford Press.
14. Hoffman, J. V., & Duffy, G. G. (2016). Does thoughtfully adaptive teaching actually exist? A challenge to teacher educators. *Theory into Practice*, 55(3), 172–179. doi:10.1080/00405841.2016.1173999
15. Koutselini, M. (2008). Listening to students’ voices for teaching in mixed ability classrooms: Presuppositions and considerations for differentiated instruction. *Learning and teaching*, 1(1), 17-30
16. Lee, K. T., Chalmers, C., Chandra, V., Yeh, A., & Nason, R. (2014). Retooling Asian-Pacific teachers to promote creativity, innovation and problem solving in science classrooms. *Journal of Education for Teaching*, 40(1), 47–64. doi:10.1080/02607476.2013.864017
17. McLaughlin, M., and A. Dyson. 2014. “Changing Perspectives of Special Education in the Evolving Context of Standards-Based Reforms in the US and England.” In *The Sage Handbook of Special Education*, edited by L. Florian, 889–914. London: Sage
18. Ministry of Education Malaysia. 2018. Annual Report 2018: Malaysia Education Development Plan 2013-2025. Ministry of Education Malaysia 1–96. Retrieved from <https://www.moe.gov.my/en/kuat-turun/penerbitan-dan-jurnal/ppm-2013-2025-pendidikan-prasekolah-hingga-lepas-menengah/laporan-tahunan-2018/3283-laporan-tahunan-bm/file>
19. Neophytou, S., Koutselini, M., & Kyriakides, L. (2011). Investigating the Impact of Differentiated Instruction in Mixed Ability Classrooms: its impact on the Quality and Equity Dimensions of Education Effectiveness. Paper published in the proceedings of the International Congress for School Effectiveness and Improvement 2011.
20. Parsons, S. A. (2012). Adaptive teaching in literacy instruction: Case studies of two teachers. *Journal of Literacy Research*, 44(2), 149–170. doi:10.1177/ 1086296X12440261
21. Pearson, P. D. (2007). An endangered species act for literacy education. *Journal of Literacy Research*, 39(2), 145–162. doi:10.1080/10862960701331878

22. Pearson, P. D., & Hoffman, J. V. (2011). Principles of practice for the teaching of reading. In T. V. Rasinski (Ed.), *Rebuilding the foundation: Effective reading instruction for 21st century literacy* (pp. 9–38). Bloomington, IN: Solution Tree.
23. Schumm, J. S., & Vaughn, S. (1991). Making adaptations for mainstreamed students: General classroom teachers' perspectives. *RASE: Remedial & Special Education*, 12(4), 18–27. <https://doi.org/10.1177/074193259101200404>
24. Scott, B.J., Vitale, M.R. & Masten, W.G. (1998). Implementing instructional adaptations for students with disabilities in inclusive classrooms. *Remedial and Special Education*, 19, 2, 106- 119.
25. Simpson, M. & Ure, J. (1994). Studies in differentiation practices in primary and secondary schools. Interchange Paper 30. Edinburgh: Research and Intelligence Unit, Education and Industry Department.
26. Snow, C. E., Griffin, P., & Burns, M. S. (Eds.). (2005). *Knowledge to support the teaching of reading: Preparing teachers for a changing world*. San Francisco, CA: Jossey-Bass.
27. Surgrue, C. (1997). Complexities of Teaching ,Child-Centred Perspectives <https://doi.org/10.4324/9780203453827>
28. Taylor, B. M., Raphael, T. E., & Au, K. H. (2011). Reading and school reform. In M. L. Kamil, P. D. Pearson, E. B. Moje, & Afflerbach, P. P. (Eds.), *Handbook of reading research* (Vol. IV, pp. 594–628). New York, NY:
29. The zero-reject policy in special education. 2015. 3: 273–298. doi:10.1177/1477878505057428
30. Tillema, H. H. (2000) Belief Change towards Self-Directed Learning in Student Teachers: Immersion in Practice or Reflection on Action. *Teaching and Teacher Education*, v16 n5-6 p575-91 Jul-Aug 2000
31. Tomlinson, C.A. (1999). The differentiated classroom: Responding to the needs of all learners
32. Vagle, M. D. (2016). Making pedagogical adaptability less obvious. *Theory into Practice*, 55(3), 207–216. doi:10.1080/00405841.2016.1184535
33. Westwood, P. (2001). Differentiation as a strategy for inclusive classroom practice: Some difficulties identified. *Australian Journal of Learning Disabilities*, 6, 1, 5-11.
34. Ysseldyke, J., Thurlow, M.L., Wotruba, J.W. & Nania, P.A. (1990). Instructional arrangements: Perceptions from general education. *Teaching Exceptional Children*, 22, 4, 4-8.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

