

# Effective Teaching in the Context of 21<sup>st</sup> Century Learning in A Malaysian Secondary School

Liew Ke-Du

Open University Malaysia  
Miri Learning Centre  
98000 Miri, Sarawak, Malaysia  
keduliew@gmail.com

Received: 27 November 2018

Accepted: 15 December 2018

Published: 30 January 2019

## ABSTRACT

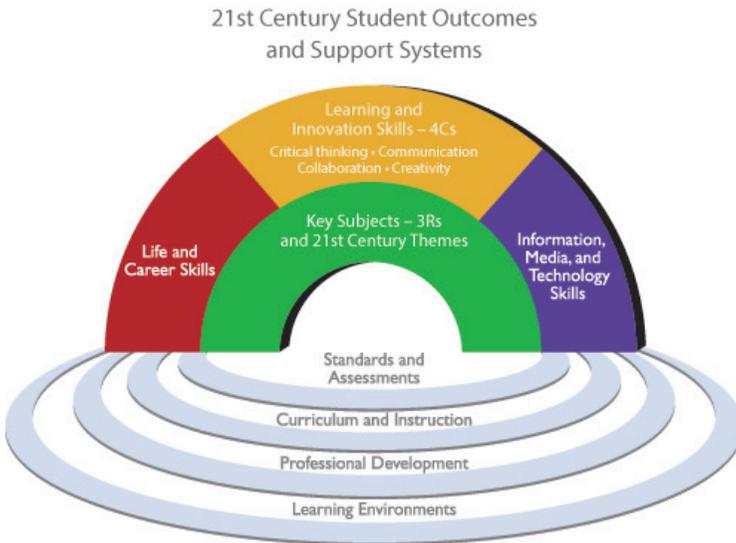
*This paper describes the effectiveness of teaching practice of five teachers in a public secondary school in the context of 21<sup>st</sup> Century Learning. The mastery of 21<sup>st</sup> Century Learning by the teachers is a must in order to cope with the change in curriculum to meet with the global changing environment. The effectiveness of teacher to implement this educational change will determine student outcomes desired by all educational stakeholders, including the policy makers, school, parents, communities etc. Qualitative research method is used in this paper, including individual interview, classroom observation and document analysis. Through the observation and interview with the teachers, several aspects were investigated, which are, definitions of effective teaching, appropriate teaching skills, appropriate teaching practices, exemplary teachers, meeting the requirements of the context, adapting to the changing context, and criteria of effective teacher. The findings of these seven aspects are also discussed thoroughly, with reference to the literature review. Even though the interviewees have different views and approaches in effective teaching practices, their effort to implement 21<sup>st</sup> Century Learning in line with curriculum changes and innovation go towards improving student outcomes.*

**Keywords:** *effective teaching, change in education, 21<sup>st</sup> Century Learning, Kagan Cooperative learning*

## BACKGROUND OF THE STUDY

This paper identifies the criteria of effective teaching in the context of 21st century learning in a Malaysian secondary school. The findings of this case study will help to identify the process and effectiveness of planning and implementing 21<sup>st</sup> Century Learning, in the context of a secondary school.

There are many dimensions of 21<sup>st</sup> century learning, the common ones are 21<sup>st</sup> century classroom and 21<sup>st</sup> century skills. The former refers to hardware in education while the latter refers to software in education. The Partnership for 21<sup>st</sup> Century Skills (2009) has a comprehensive framework as shown in Figure 1, which emphasised the interconnection of all elements in the process of 21<sup>st</sup> century teaching and learning, so that students are more prepared for the changing world and global economy.



**Figure 1: 21<sup>st</sup> Century Learning Framework (Partnership for 21<sup>st</sup> Century Skills, 2009)**

As refers to Figure 1, 21<sup>st</sup> century classroom (the hardware) is part of *learning environments* whereas 21<sup>st</sup> century skills (the software) involves three major skills, which are: *life and career skills; learning and innovation skills; and information, media and technology skills.*

## **METHODOLOGY**

### **Context of the Study**

The current study involves a public secondary school located in Sarawak, Malaysia (henceforth “School A”). Founded in 2000, it is located twelve kilometres from Miri city and is categorised as Public Secondary School City II. The number of teaching staff is 145 and students, 2827. The school is operated in two sessions, thirty classes in the afternoon session consisting two Remove classes, fourteen Form One and fourteen Form Two. There are forty-four classes in the morning session consisting fourteen Form Three, thirteen Form Four, thirteen Form Five, two Lower Six and two Upper Six classes. There are around forty students per class. Some option classes have students less than twenty students while others go beyond fifty in other option classes. Therefore, it is quite challenging for the school and the teachers the manage the large classes.

There are ninety-three teachers in the morning session and fifty-two in the afternoon session. Most of the top management personnel are in the morning session. They are the principal, four senior assistants (administration and academic, student affairs, co-curriculum and form 6), four head teachers (language, science and mathematics, technical and vocational, and humanities), three school counsellors, one learning resource teacher and one data teacher. the top management personnel located in afternoon session are senior assistant for afternoon session and the other two school counsellors.

### **The Participants**

Five teachers were identified due to their availability and willingness to be interviewed. The semi-structured face-to-face interviews between the researcher and each of the participants lasted between thirty minutes to one hour. Seven interview questions were prepared in advance. During the interview, additional issues were also discussed, in relation to the response of the interviewees in the planned questions. The five teachers were teaching English Language in the Language Department. They are (H1) Head of Language Department, (T1) Senior Teacher 1, (T2) Senior Teacher 2, (T3) Junior Teacher 1 and (T4) Junior Teacher 2. Other teachers

who were mentioned during the interview were identified as T5 (junior teacher 3), T6 (senior teacher 3), T7 (senior teacher 4) accordingly to protect their identities.

The teachers were categorised based on their “professional life phases”. The six professional life phases are: professional life phase 0-3 (commitment – support and challenge); professional life phase 4-7 (identity and efficacy in classroom); professional life phase 8-15 (managing changes in role and identify – growing tensions and transitions); professional life phase 16-23 (work-life tensions – challenges to motivation and commitment; professional life phase 24-30 (challenges to sustaining motivation; and professional life phase 31+ (sustaining/ declining motivation, ability to cope with change, looking to retire) (Day, et al., 2007, p.69-70).

Therefore, T3 and T4 are in professional life phase 0-3; T5 in professional life phase 4-7; T6 in professional life phase 8-15; H1 and T2 in professional life phase 16-23; T1 and T7 in professional life phase 24-30. In addition, H1 manages five panels, which are Malay Language, Malay Literature, English Language, Chinese Language and MUET (Malaysian University English Test). She also teaches two English Language classes. The other four teachers are teaching four to five classes in the morning session, a mixture of Form Three, Four and Five, except T2 who is teaching Form One and Two classes in the afternoon session.

Both T1 and T2 are former Excellent Teachers in English Language as they had changed their career pathways to become academic teachers due to personal challenges. They were also involved in School Improvement Specialist Coaches (SISC) programme in 2011 and 2012 respectively. T1 is also a former examiner for public schools and trainer, with about 20 years’ experience. She was going to retire soon. T2 also has approximately eight years of experience as an English Language Panel Head, speaker and mentor for Action Research. Both T3 and T4 are junior teachers who have been teaching English Language for about two to three years.

In addition, the researcher also carried out semi-structured classroom observations of T1, T2, T3 and T4 teaching practises. Students’ responses to the lessons were also taken into consideration. Observation protocol and field notes were kept by the researcher. Teaching and learning materials,

textbooks, timetables, lesson plans, students' work and results were some of the documents collected with the consent of everyone involved. These documents were analysed to get in-depth information about the instructional practices of the teachers and the learning process of the students. The findings of the study are as follows.

## Definition of Effective Teaching

The findings of the study are reported according to the main seven questions posed to the participants during the study.

*Q1: What does it mean by effective teaching?* H1 believed that effective teaching is simple and not complicated. It should only involve one learning technique at once. For example, a well organised and straight forward Running Dictation (Figure 2) lesson is better than a lesson with Inside-Outside Circle (Figure 3). She disagreed with the latter as her class was crowded and too much effort would be needed to control the class. She gave such comment after observing T2's teaching and learning using Inside-Outside Circle.

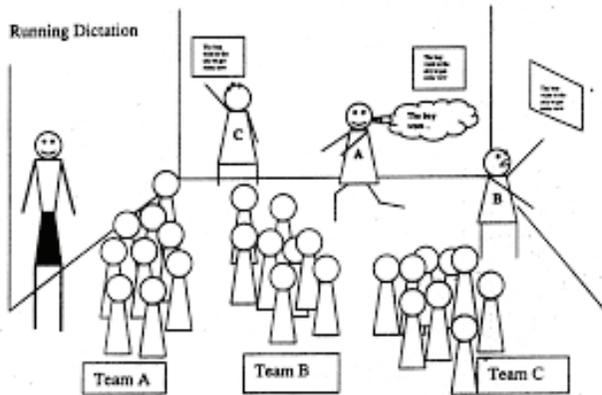
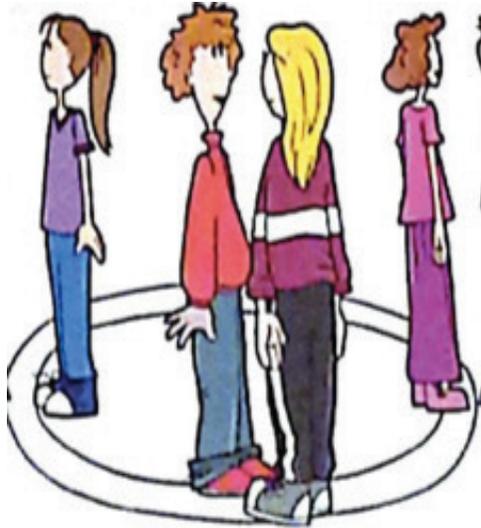


Figure 2: Collaborative Learning Strategy – Running Dictation. Source: <https://sissi92culc.files.wordpress.com/2015/07/e4b88be8bdbc.png>



**Figure 3: Kagan Cooperative Learning – Inside-Outside Circle. Source: [https://cristinatacata.files.wordpress.com/2012/02/inside\\_outside\\_circle1.gif](https://cristinatacata.files.wordpress.com/2012/02/inside_outside_circle1.gif)**

In contrast, T1 disagreed with H1. For her, effective teaching involves variety of teaching styles and learning techniques. She had carried out Inside-Outside Circle successfully with her class. To solve the limited space in the classroom, she brought her nineteen students to the school field. T2 noticed that her class did not practise Inside-Outside Circle successfully as there were too many of them (more than forty). When she did try it in the classroom, it became “messy and crowded”. For her, effective teaching is trial and error. It may be effective for this class but not for another due to different students’ learning abilities. Both T3 and T4 are new in the teaching profession. For T3, effective teaching is strategic and planned teaching style, so she always referred to the senior teachers for specific teaching techniques. T4 is very stressful when discussing about effective teaching. For her, it involves a lot of critiques and failures as she received negative feedback from H1, T1 and T2 after her class observation during Lesson Study, one of the Professional Learning Community strategies practised in School A.

## **Appropriate Teaching Skills**

*Q2: What are the appropriate skills need to be acquired by an effective teacher?* H1 commented that an effective teacher must follow orders and be available for impromptu tasks. For her, if a teacher wants to do something different, it must be proven to be productive and increase student learning outcomes. T1 believed that an effective teacher cares for her students and her colleagues. She is strict to her students yet care about her students learning progress. She always gives professional advice to T2, T3 and T4, especially when their teaching approaches were criticised by H1.

T2 also agreed with T1, as both had been mentors and coaches for young and junior teachers. For T2, an effective teacher is willing to share her professional skills with her colleagues, regardless of teaching subject. She had been an Action Research Mentor of young teacher's induction programme (PPGB: Program Pembangunan Guru Baharu) for many years. T3 thinks that an effective teacher must be open-minded. T4 admitted that it was not easy to receive negative criticisms continuously and remained enthusiastic about teaching.

## **Appropriate Teaching Practices**

*Q3: What are the practices need to be demonstrated by an effective teacher?* H1 mentioned that an effective teacher must meet the requirements of teaching and learning of SKPMg2 standards of teaching (Standard Kualiti Pendidikan Malaysia Gelombang 2: Pembelajaran dan Pemudahcaraan Sekolah). For her, an effective teacher fulfills the six important roles listed in SKPMg2 Standard 4 well and "excellently". The roles are: 4.1-teacher as planner, 4.2-teacher as controller, 4.3-teacher as guide, 4.4-teacher as driver, 4.5-teacher as assessor, and 4.6-student as active learner (Kementerian Pendidikan Malaysia, 2017b).

T1 agreed with H1. T1 added that the 4.6 role, that is, student as active learner is hardly achievable if the students do not have initiatives to improve their learning outcomes either at school or home. For her, a teacher may practise roles 4.1 to 4.5 excellently but without positive responses from

students, it is a “failure”. On the other hand, T2 believed that the best practice of an effective teacher is to love and trust her students. With students from different socioeconomic status, differentiated instruction practice is needed. The teacher needs to be patient in accepting the students’ personal problems and in overcoming their learning difficulties. T2 shared that she altered and modified her daily lessons to match the students’ needs and conditions.

T3 often practiced whole class discussion, especially in her weak class as this encouraged them to get involved, directly or indirectly. She had tried small group discussions, but it was less effective as the students were too weak to generate discussions. They lacked general knowledge and had low proficiency in English language. Therefore, they were passive in group discussions, and often ended up “chitchatting in their mother tongue”. T4 liked to get to know each of her student and planned her teaching practices according to their unique learning styles. Of course, it was impossible to cover everyone in one session, but she always spent her free time to meet the students for small group discussions and coaching sessions. For her, individual touch is the best practice.

## **Exemplary Teachers**

*Q4: Do you observe any exemplary teachers in your school? Why do you think they are excellent teachers?* It was not necessary to have a master’s or Doctorate degree to be an excellent teacher. H1 commented that a teacher need not apply for Guru Cemerlang (excellent teacher) to prove her effectiveness in teaching. Academic qualification does not reflect efficiency of a teacher. For H1, an exemplary teacher needs to prove her teaching effectiveness in her classroom teaching practices and in her student learning outcome, especially in academic performance. She disagreed that the two former GC in the school were exemplary teachers as they neither showed the two criteria mentioned earlier, nor did they share their “so-called” excellent practices with other colleagues. She identified that a junior teacher, T5, in her department is able to demonstrate effective teaching by conducting Gallery Walk, one of the cooperative learning techniques in her classroom well.

On the other hand, T1 did not acknowledge anyone as exemplary teachers in the school directly. She suggested that a senior teacher, T6, from another school in the same district showed the characteristics of an exemplary teacher. She had high proficiency in English language, was a coach/ mentor/ facilitator for educational programmes in several districts, and used/ introduced cooperative learning techniques.

T2 noticed that there were several exemplary teachers in the school. All of them (“some seniors, some rather junior”) were hardworking and innovative, regardless of their years of service. For T2, excellent teachers showed love and care to their students. In addition, they were also “brave” enough to try out new teaching and learning techniques, irrespective of whether the techniques failed or succeeded. T2 viewed the practices as priceless.

T3 too identified a few exemplary teachers in the school, e.g. T1 and T2. In her opinion, T1 had in-depth content knowledge and was professional while T2 was patient with her students and was ready to share her professional practices. Similarly, T4 thought that senior teacher T2 was an exemplary teacher. In T4’s opinion, T2 was a resourceful and knowledgeable teacher. She sought advice from T2 as she was a professional and helped her a lot in her teaching practices. Sometimes, T4 also sought emotional support from T2 as she was good in giving motivation.

## **Meeting the Requirements of the Context**

*Q5: Do they meet the requirements of effective teaching for 21<sup>st</sup> century learning in your school?* All five teachers agreed that exemplary teachers demonstrated effective teaching for 21<sup>st</sup> century learning, especially cooperative learning. For H1, the junior T5 practised Gallery Walk; For T1, the senior T6 practised Hot Seat; For T2, the exemplary teachers practised varieties of cooperative and collaborative learning techniques such as foldable, bloom ball and running dictation. For T3 and T4, T1 practised Inside-Outside Circle while T2 practised i-Think map and Round Robin. Both T1 and T2 also became T3 and T4 mentors for several years in Professional Learning Communities (PLC). The PLC activities include peer coaching, video critiques, lesson study, learning walk, and sharing sessions.

## Suit to the Changing Context

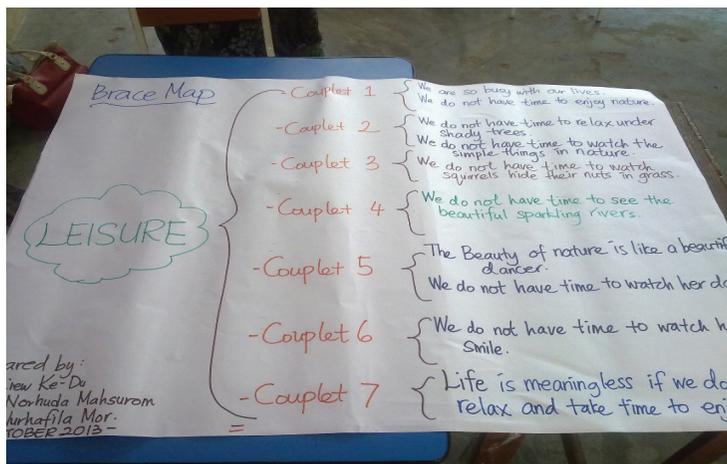
*Q6: Are they able to suit to the changing of 21<sup>st</sup> century learning in your school?* The teachers commented that 21<sup>st</sup> Century Learning has been introduced in this school for years. All teachers in School A have gone through a series of compulsory on-the-job training since 2011 to cope with the changes of 21<sup>st</sup> Century Learning. The first wave of 21<sup>st</sup> Century Learning (Figure 4) started with curriculum change in 2003 with the reviewed syllabus in KBSM (Kurikulum Bersepadu Sekolah Menengah), and changes in textbooks and assessments. The following wave of 21<sup>st</sup> Century Learning curriculum change was in 2011 which emphasised teaching and learning strategies. The third wave was implemented in 2017, starting with change of syllabus for Form 1 in 2017, Form 2 in 2018, Form 3 and Remove Class in 2019. CEFR (Common European Framework of Reference for Languages) aligned syllabus for English Language was introduced, beginning with CEFR Cascade Training Familiarisation in 2016. This was followed by cascading of CEFR-aligned curriculum for Form 1 and Form 2 in 2017 and Remove Class in 2018.



**Figure 4: Evolution of Curriculum. Source: KPM (2017a), Pembelajaran Abad Ke-21: PAK21, p.45**

In order to cope with the curriculum change for 21<sup>st</sup> Century Learning, School A started to implement i-Think map in 2013 and was selected as Pioneer School (Sekolah Perintis) in 2014 for i-Think on-line programme.

Six i-Think maps were adopted as teaching tools in the school: Circle map, Tree map, Bubble map, Double Bubble map, Flow map, Multi-flow map, Brace map (Figure 5), and Bride map.



**Figure 5: Brace Map Done by English Language Teachers During In-house Training in 2013. Source: Courtesy from T2**

In addition, workshop in Cooperative learning techniques was conducted by a former Excellent Principal and also a SIPartner+ (School Improvement Partner Plus) in 2016. He introduced Jig-saw, Peer-tutoring, Inner-outer circle; Pairs-check and Running dictation. Talk and discussion sessions for English Language teachers in Collaborative learning strategies were carried out in 2016 by T1 and T2. Kagan Cooperative Learning (Kagan & Kagan, 2009) structures were discussed in-depth during the sessions, from Fan-A-Pick to Three-stray One-Stay. T2 also gave talks and shared her teaching experience of 21<sup>st</sup> Century learning, PAK (Pembelajaran Abad ke-21 or 21<sup>st</sup> Century Learning) in 2016 and 2017 with all school A teachers. The PAK activities were Round Table, Think-Pair-Share, Hot Seat, Reciting/ Singing, Presentation, Role Play, Gallery Walk, Three Stray One Stay and i-Think Maps (Kementerian Pendidikan Malaysia, 2017a, 2017b).

In order to improve teacher effectiveness and efficiency for 21<sup>st</sup> Century Learning, junior teachers PPGB (Program Pembangunan Guru Baharu) have been practicing action research since 2011. It has become compulsory for all teachers in School A since 2018 as part of the Continuing

Professional Development (CPD) programme in Miri District public secondary schools.

Besides, Collaborative learning among teachers, Professional Learning Communities (PLC) has been implemented since 2012, including Lesson Study, Learning Walks, Peer Coaching and Teacher Sharing Session. Then, Video Critiques was added in 2013, followed with Book Clubs in 2016. Five more PLC strategies, Data Analysis, Vertical and Horizontal Team Meetings, Problem Solving Group, Critical Friends Group and Teacher Study Group are to be implemented in 2019. Other creative techniques were also introduced by the English Language Panel. An English Language Teacher, T7, introduced Foldable in 2015 (Figure 6):

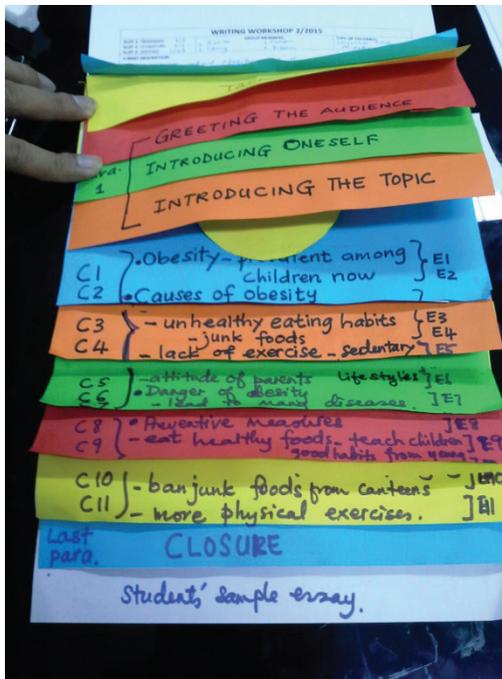


Figure 6: Foldable Done by T7's Students in 2015. Source: Courtesy from T7

## **Criteria of Effective Teacher**

*Q7: What are criteria that you would like to propose for an effective teacher in your school?* H1 insisted that an effective teacher must be practical in the teaching and learning process, and theory and philosophy of education alone do not make a teacher excellent in teaching. She emphasised that 21<sup>st</sup> Century Learning should be simplified or the whole teaching and learning session will be “in chaos”. In contrast, T1 and T2 believed that continuous learning and professional development will equip teachers with content and professional knowledge for effective teaching. T1 and T2 were active conducting workshops in and outside the school as facilitators, coaches, and mentors.

On the other hand, T3 and T4, the junior teachers often accepted H1, T1 and T2’s advice and adapted them with their own version of teaching practices. This produced a mixture of failed and successful results. Their readiness for improvement motivated them to excel in their teaching. Hence these five teachers had different approaches in implementing 21<sup>st</sup> Century Learning in line with curriculum changes and innovation for improving student learning outcomes. This reflected Mortimore’s (as cited in Muijs & Reynolds, 2018l, p.3) description of an effective teacher as someone who is able to improve student learning outcomes at classroom level through “structured session, intellectually challenging teaching, a work-oriented environment, communication between teachers and pupils, and a limited focus within the sessions.”

## **CONCLUSION**

Day, et al. (2007) mentioned that effective teachers must face varieties of challenges in the changing environment. Change is not easy. A mandated change imposed by the government seems like an impossible mission. Teachers already experience a lot of tension and challenges such as long working hour, heavy workload, changing educational policy. This tension is often ignored. Although 21<sup>st</sup> Century classroom also include features of the previous practices (e.g. 3M implemented in 1983) like students sitting in a group of four in the classroom rather than in linear form, one may argue that the former focuses on skills and not subject content per se.

However, educational change and innovation is a complex and lengthy process, whether introduced by the authorities, or by the direct stakeholders. It is an evolutionary process that the stakeholders need to deal with in a reasonable and facilitated space (Blenkin, Edwards & Kelly, as cited in Byrne, Downey & Souza, 2013). Once educational change and innovation is implemented drastically, the outcome may not be favourable because resistance to change is the norm during the process of change as reflected in the participants' views during the interview sessions. In Malaysia, educational changes and innovation are often implemented top-down and therefore uneasiness and resistance from stakeholders especially teachers are somehow expected. It would be ideal if changes are initiated from the ground level, i.e. teachers and the students than a top-down approach. This is possible if there are motivation drivers, i.e. some degree of self-directed autonomy, sense of purpose, mastery (Pink, 2009) and the rewards of collaborating with peers to do something of value (Fullan, 2015). Teachers could achieve their goals in their own time and space, by continuously improving their professionalism and working collaboratively with colleagues. As experienced teachers T1 and T2 believed, continuous learning and professional development will equip teachers to become agents of change in the 21<sup>st</sup> century.

## REFERENCES

- Byrne, J., Downey, C., & Souza, An. (2013). Planning a competence-based curriculum: The case of four secondary schools in England. *The Curriculum Journal*, 24(3), 335-350. doi: 10.1080/09585176.2012.731007
- Day, C., Sammons, P., Stobart, G., Kington, A., & Gu, Qing. (2007). *Teacher matter: Connecting work, lives and effectiveness*. England, UK: Open University Press.
- Fullan, M. (2015). *Freedom to change: Four strategies to put your inner drive into overdrive*. San Francisco, CA: Jossey-Bass.
- Kagan, S., & Kagan, M. (2009). *Kagan cooperative learning*. San Clemente, CA: Kagan Publishing.

- Kementerian Pendidikan Malaysia. (2017a). *Pembelajaran Abad ke-21: PAK21*. Retrieved from <https://drive.google.com/drive/folders/1d0hVcWrAWrVQSZq4k2l3vfyQgq4VgaU>
- Kementerian Pendidikan Malaysia. (2017b). *Standard Kualiti Pendidikan Malaysia Gelombang 2 (SKPMg2)*. Kuala Lumpur, Malaysia: Jemaah Nazir dan Jaminan Kualiti
- Muijs, D., & Reynolds, D. (2018). *Effective teaching: Evidence and practice* (4<sup>th</sup> ed.). London, UK: SAGE.
- Partnership for 21st Century Skills (2009, December). *P21 framework definitions*. Retrieved from [http://www.p21.org/documents/P21\\_Framework\\_Definitions.pdf](http://www.p21.org/documents/P21_Framework_Definitions.pdf)
- Pink, D. (2009, August 25). *The puzzle of motivation*. [Video file]. Retrieved from <https://www.youtube.com/watch?v=rrkrvAUbU9Y>