# Encouraging Independence and Interdependence in Assessment: Moving Towards Assessment for Learning in Heritage Language Classrooms in Singapore

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### Abstract

Assessment for learning (AfL) can be viewed as a set of practices that enhance student learning. AfL is applicable in many varied contexts, yet the necessary situation-specific enactment (reflecting, for example, the learner's age, subject matter and resources available) can impede critical examination and thoughtful dissemination. This study explored the extent by which teachers in Malay heritage language classrooms understood, believed and practiced AfL. The three principles underpinning AfL were originally formulated by a large multi-university team working with over 40 schools in England, and can be summarised as: making learning explicit, promoting learner autonomy, and focusing on learning rather than grades. The research reported in this paper involved Malay Language teachers from multiple secondary schools across Singapore. The study involved a survey completed by 121 teachers to indicate the extent of their belief and practice of AfL, 8 classroom observations and 20 in-depth interviews with teachers who have different AfL profiles. It was found that while Malay Language teachers were keen to develop their AfL understanding, they did not associate changes that they had to implement in their classroom assessment practices with the principles underpinning AfL. Also, teachers' attempts to carry out independent self-assessment and interdependent peer assessment were successful only to a certain extent due to the reluctance of students to switch their focus on learning, rather than task performance. It is suggested that the application of AfL principles can make assessment reform in heritage language classrooms more coherent and practices meaningful for teachers.

Keywords: Assessment for learning, Assessment, Heritage Language

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### Introduction

This study focuses on how Singaporean Malay Language (ML) teachers comprehend assessment for learning (AfL). How do these teachers mediate their existing assessment practices in light of AfL, the assessment reform that has taken centrestage in worldwide educational reform? Although AfL has been studied extensively in the western classroom context, relatively little is known about how teachers in heritage language classrooms, perceive AfL. Heritage languages such as Malay, Tamil and Mandarin are offered in all Singapore schools and the sociocultural contexts surrounding the teaching and learning of these subjects are rich and unique. In choosing to research the practice of AfL within ML classrooms, the sociocultural context of the Malay teacher, known as a *Cikgu*, has to be highlighted.

The context of ML teaching and learning in Singapore is weighted with history, culture and social etiquette. Although the main working language in the country is English, ML is constitutionalized as Singapore's national language. The Constitution of Singapore 'recognizes the special position of the Malays, who are the indigenous people of Singapore, and accordingly it shall be the responsibility of the Government to protect, safeguard, support, foster and promote their political, educational, religious, economic, social and cultural interests and the Malay language' (Singapore Const. art. 152). Every morning, across all schools in Singapore, the national anthem is sung in ML by all students and teachers, regardless of their ethnicity. In schools, while the main medium of instruction is English, all pupils learn an official Mother Tongue Language (MTL). Students from the three major ethnic groups in Singapore: Chinese, Malay and Indian study their corresponding MTL. This bilingual policy aims to "equip our students with language competencies to access Asian cultures and develop a global outlook." (Planning Division Ministry of Education, Singapore, 2014, p. vii)

In the social context of schools, ML teachers are specially addressed by everyone as *Cikgu.* While other subject teachers are called by their surnames, for example Mrs Lee the Science teacher, ML teachers always have the designation of Cikgu attached to their names. It is also a cultural norm for students to kiss the hands of their Cikgu at the start and end of every ML lesson as a mark of respect and gratitude for the knowledge gained (this does not happen for other subject teachers). In ML classrooms students rarely challenge a *Cikgu*'s decision or give any negative feedback about lessons. A *Cikgu* is always in charge of the teaching and learning that happens the classroom. In such learning environments, where respect for teachers' in authority is highly valued, the philosophy of AfL, which changes the power structure between the teacher and the learner, may be unclear and challenging to implement. This research was initially driven by a deep concern about what effective learning looks like in an ML classroom, what teaching practices support this and what can be done to help ML teachers master such practices. In 2010, based on "external scans of international language assessment systems" (Ministry of Education, Singapore, 2010, p. 52) a committee consisting of experts in ML education and assessment specialists from the Singapore Examinations and Assessment Board (SEAB) noted a strong impetus towards promoting AfL in the teaching of language. The committee recommended that AfL strategies be integrated into the teaching and learning of ML in secondary schools (Ministry of Education, Singapore, 2010, p. 52). AfL was then introduced into the ML (Secondary) syllabus in 2011.

Seemingly substantial effort has been put in to develop AfL practices amongst ML teachers over the past six years. New secondary school ML textbooks published in 2013 contain many activities that support AfL practices such as self and peer assessment. ML teachers are encouraged to share their innovative assessment practices at the national ML seminar 2016 organized by the ML Centre of Singapore (MLCS). However, despite such endeavors by the Ministry of Education (MOE) in Singapore to move towards a more holistic form of assessment, Singapore's education system is often portrayed by local researchers as examination-oriented (Hogan, 2011; Lim-Ratnam, 2013; Ratnam-Lim & Tan, 2015; Tan, 2011a, 2011b). This research is timely and supports efforts by MOE and its ML curriculum experts at the ML Curriculum Planning Development Division (CPDD) to establish the development of assessment knowledge and sustainability of AfL practices amongst ML teachers since its introduction in 2011.

Recent international research indicate an interest in this aspect of AfL implementation (Arimoto, Clark, Yamamoto, & Shinkawa, 2015; Ho, Adie, & Klenowski, 2016). Arimoto et al.'s (2015) research focuses on the importance of cultural context in the implementation of AfL as an assessment reform in the Japanese education system. The research reveals that while practices such as retaining students' focus on learning and conducting peer lesson observations are common in Japanese school culture, other practices such as students' spontaneity and creativity are sometimes discouraged as "language and social customs often emphasize distance" (p.50). Ho et al. (2016) echoes the opinion that emphasis has to be placed on AfL strategies that are situated and culturally relevant. Their research uses a sociocultural lens to examine the assessment practices of three lecturers in a Vietnamese teacher-training institute. The writers argue that Vietnamese values such as respect for harmony and hierarchy can either encourage or suppress AfL practices. My research sheds light on the influences that Malay cultural values have on AfL implementation in the classroom settings of various schools across Singapore. Other than deliberating these cultural factors, an examination of social and historical factors that regulate ML teachers' belief in AfL also contribute to the ongoing discourse in the field of assessment.

### The research

The central research question of the study is:

To what extent do ML teachers practise AfL in their ML classrooms?

The Assessment Reform Group  $(ARG)^1$  first defined AfL as follows:

Assessment for Learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there. (Assessment Reform Group, 2002, pp. 2-3)

The ARG members also produced ten guiding principles for the use of AfL in practice and these principles situate AfL as intrinsic to teaching and learning. Within the

<sup>&</sup>lt;sup>1</sup> ARG established in 1988 as the Assessment Policy Task Group of the British Educational Research Association (BERA) and funded by the Nuffield Foundation (since 1997), is an independent group that looks into improving assessment in all of its forms (Gardner, 2006, p. 5).

context of ML education in Singapore, the ARG's definition is certainly adopted. The ML (Secondary) syllabus states the following:

Assessment for Learning aims to monitor the progress of pupils continuously and interactively. In the process of learning, the teacher has an opportunity to give continuous quality feedback to the pupils. Hence, the pupils' learning abilities and needs are identified [*decide where the learners are in their learning*]. Subsequently, the teacher can plan suitable teaching activities [*how best to get there*] to increase student achievement [*where they need to go*]. (Curriculum Planning and Development Division, 2011, p. 30)

However, 'deciding where the learners are in their learning, where they need to go and how best to get there', has sometimes been misinterpreted by teachers to mean that they should frequently conduct "mini tests" to ascertain where the pupils are in their learning standards vis-à-vis the national set standards (Klenowski, 2009) whereas authentic AfL should really allude more towards "assessment as a support for learning" (Swaffield, 2011, p. 434). Klenowski in her position paper generated at the Third International Conference on AfL, mentioned that teachers would conduct lessons to bridge gaps of knowledge in order to bring the students' scores closer to the desired high level of performance in national tests and exams, sacrificing real learning along the way (Klenowski, 2009). The conference held in New Zealand, was attended by 31 academics and consultants considered internationally as authorities in assessment. They met to advance the understanding and practices of AfL at all levels of education (Klenowski, 2009). The second definition of AfL was then crafted at this conference:

Assessment for Learning is part of everyday practice by students, teachers and peers that seeks, reflects upon and responds to information from dialogue, demonstration and observation in ways that enhance ongoing learning. (Klenowski, 2009, p. 264)

This definition of AfL no longer mentions an intended target of learning or deciding whether or not a student has achieved a particular learning objective which Harry Torrance and John Pryor (1998) term as convergent assessment (Torrance & Pryor, 1998). Instead it focuses on efforts to make current learning better by taking a divergent approach (Torrance & Pryor, 1998) which seeks to ascertain students' level of understanding. The definition also explicitly clarifies AfL as being part of the usual process of learning and teaching practice. In the case of ML education, this definition will definitely be useful in reifying AfL and grounding it within a regular ML classroom. It is imperative to examine how ML teachers define AfL. Prior to the introduction of AfL in 2011, two types of assessment were outlined in the ML syllabus: formative and summative assessment. ML teachers might be struggling with AfL perhaps because they see it as a term that merely replaces "formative assessment."

Figure 1 depicts the theoretical framework of the research. This framework synthesizes three central tenets of the Vygotskian framework; social sources of individual development, semiotic mediation and genetic analysis (Wertsch, 1993) with Bourdieu's concepts of *habitus*, *field*, *doxa* and *capital* (Bourdieu, 1977a). In

order to better understand the extent to which ML teachers' accept or reject AfL as an innovation, I adopt Fullan's sociocultural perspective on the importance of "reculturing" (Fullan, 2007a, p. 25) which emphasizes the importance of understanding how teachers come to question and change their beliefs and habits in the event of a reform. To date, the ML secondary school syllabus has undergone two revisions since 2000 and AfL was introduced as a key innovation within the syllabus in 2011. Another syllabus revision is slated for 2016. Frustrations with change and resistance to innovation is normal, as asserted in the innovation literature (Fullan, 2007a; Fullan & Miles, 1992).

Looking at Figure 1, in Column A are the core premises for successful assessment reform. The one-way arrows moving from Column A to B signify that these core premises impact teachers' beliefs and practices of AfL. The sociocultural experiences that exist in the various contexts of the teachers are mapped onto Column C. The two-way arrows from Column C to B signify that these experiences affect the teachers' beliefs and practices of AfL as much they are also shaped by the teachers' themselves.

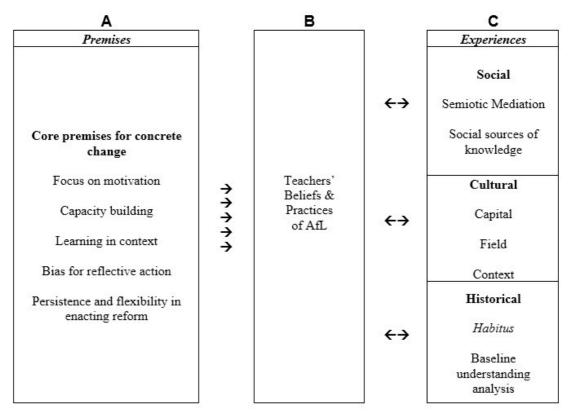


Figure 1: Theoretical framework of research

The methodology of the study takes a pragmatic orientation (Tashakkori & Teddlie, 1998) utilizing the collective "picture-drawing" (Bassey, 1999, p. 62) case study as an overarching approach. Pragmatists believe that decisions regarding the use of qualitative or quantitative methods (or both) depend upon the research question and the phase of the ongoing research cycle (Tashakkori & Teddlie, 1998). The case to be investigated here are secondary school ML teachers and their AfL practices in the ML classroom. According to Yin (2009) a case study inquiry depends on multiple sources of evidence, with data needing to converge in a triangulating manner. I am employing the use of various methods of data collection and analysis in order to achieve

triangulation. The research involves three stages of data collection. The first stage is a cross-sectional survey questionnaire electronically distributed for completion by ML teachers across secondary schools in Singapore. The second stage involved classroom observations of eight ML teachers to examine their AfL practices within a real classroom setting. The last stage consisted of in-depth interviews with 20 ML teachers, including the eight teachers.

In Singapore, schools are clustered according to the geographical areas that they are in. These clusters are known as the North, South, East and West school clusters. In total there are approximately 150 secondary schools offering ML (Ministry of Education, Singapore, 2013). In each school, there are typically three to four ML teachers making the total population of secondary school ML teachers in Singapore approximately 450 to 600 teachers. For this study, a purposive sampling (Opie, 2004) procedure is undertaken for the cross-sectional online survey.

Initially, I had planned to invite principals and subject heads of ML in all the 150 schools to participate in the survey. However in an email exchange with MOE during the application for data collection MOE requested for the number of schools involved to be decreased while maintaining the sample size of 150 teachers. Hence I have decided to include 20 secondary schools from every cluster making it a total of 80 schools altogether.

The choice of the 20 schools was based on the number of ML teachers within the school. Preference was given to schools that have a higher number of ML teachers. Based on my experience as an ML teacher, a large ML department is a good indication of better workload distribution amongst teachers and a wider coverage of various ML programmes. I believed that schools with an ML department that had better workload distribution were more inclined to participate in the research as the existing demands on the teachers might be lesser. Hence such schools should be more accommodating to my request to involve their ML teachers in the research. A link to the online survey via an email to principals and subject heads of ML in these 80 schools was sent together with an explanation and invitation to participate in the study. The aim was for at least two ML teachers per school to participate in the survey in order to obtain a sample that was representative of the population. In order to increase the response rate and encourage schools to participate, I offered each school that was able to submit responses from all their ML teachers, a full breakdown analysis of their assessment values-practice gaps, as a department.

Initially I wanted to carry out "within-case" sampling (Punch, 2005, p. 188) to select the next sample of 20 teachers from the pool of respondents to the cross-sectional survey. In order to generate rich information from the sample yet maintain feasibility in terms of amount of data collected I initially decided to purposively sample 20 teachers across the different group profiles (based on the survey results) for in-depth interviews at the end of the research. These teachers would be contacted via email and given an option of participating in both the interview and classroom observations. They would have been informed that only eight teachers will be chosen for classroom observations and the rest approached for in-depth interviews only. They would also have needed to seek consent from their principals to be part of the research. However, during the process of contacting principals for permission to access their ML teachers, some principals replied that they were only willing to allow their teachers to participate in the survey only and I was not to proceed to involve them in classroom observations or in-depth interviews due to the teachers' busy schedules. Others who were agreeable for their teachers to proceed to later phases of the research were also particular with regards to which teachers I could interview or observe, again depending on the teachers' timetable. This limited my choice of teachers for observations and interviews. However, within the eight teachers that I secured for lesson observations and 20 for interviews, I was fortunate that there was a good mix of teachers with different AfL survey profiles and years of teaching experience. Figure 2 depicts the sampling process of the research from the online survey to the interviews and classroom observations. Given the constraints imposed, I believe I have done my best to increase the trustworthiness of the data collected by ensuring that samples from different phases of research were representative of the population.

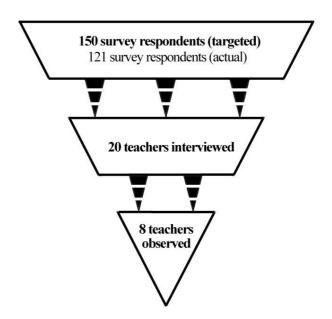


Figure 2: Research Sampling Process

The main aim of the survey is to examine the extent of pragmatic knowledge regarding AfL amongst the ML teachers and to begin mapping out the field of ML assessment. The survey questionnaire design is largely adapted from Section A of the Staff Questionnaire administered by the team from the LHTL project (Pedder, 2006). The LHTL questionnaire was designed to collect systematic data on teachers' views regarding classroom assessment, professional learning and school management. Section A, which I adapted for my research contained 30 statements about classroom assessment. Within these 30 statements seven describe processes having to do with performance oriented assessment practices while the rest allude to practices more in line with AfL principles of making learning explicit, promoting learner autonomy and focusing on learning (James et al., 2007). I excluded the other two sections in the original LHTL questionnaire that contain statements about teachers' professional learning and school management practices and systems as these do not directly address my research questions.

The ML teachers were asked to make two kinds of responses to each of the 30 questionnaire items. The first response on Scale X focuses on assessment *practices*. It asks respondents to share, in relation to their own teaching, whether the particular assessment practice mentioned in each statement was true, rarely true, often true or mostly true. They then made a second response on Scale Y with regards to their *values*. On this scale, respondents indicated how important they felt the particular assessment practice was for students' learning, regardless of how often they actually practise it in their teaching. The response categories here are: not at all important, of limited importance, important, crucial and bad practice. The 'bad practice' category is provided to enable respondents to flag out practices that they consider to be particularly unacceptable. The survey uses a dual Likert-type scale design with the assessment practice statement placed in the middle (see Figure 3).

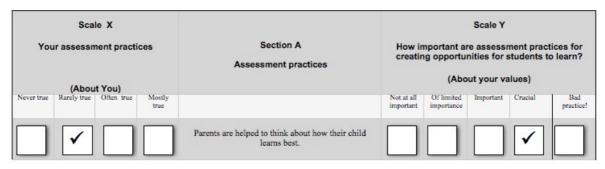


Figure 3: Dual Likert-type scale format for online questionnaire

The classroom observations provided me important opportunities to immerse myself within real classroom and school contexts where assessment activities were taking place. These non-participatory unobtrusive observations took place over Term 2 of the school year. I observed each teacher at least three times within a space of two weeks. Suurtamm, Koch, and Arden (2010) in their case studies of teachers' assessment practices in mathematics classrooms in Ontario, utilized such an observation schedule to ensure that they could observe how teachers developed their lessons and avoid merely observing selected "best lessons" (p.405). The observation dates were negotiated with the teacher so as to avoid interference with any school events but I requested to observe the teacher on at least two consecutive days. I have chosen to conduct the observations at least three months after the collection of survey data to avoid any priming effect. Also, in all three observations, the teachers are not obliged to hand in their lesson plans to me and are free to choose which classes are to be observed. All these are to avoid any priming effect where the teachers are sensitized to my research questions. Short discussions before and after the observations clarified any questions I have about the teacher's actions in class but indepth interviews were only carried out after the third observation session.

The interviews provided in-depth information pertaining to the teachers' experiences and viewpoints regarding AfL. Through the interview protocol, I sought to address all the research questions. Together with data collected from the online survey and classroom observations, the interviews provided a well-rounded collection of information for analysis. A specific aim of the interviews was to discover the teachers' *habitus* and degree to which they internalized AfL concepts and regard it as *capital*. These were issues which could not be addressed using the online survey. Further information on the *field* and *doxa* within ML assessment was also sought, especially with regards to distinct social and cultural factors within the teachers' context that affected their beliefs and practices of AfL.

# Conclusion

The survey findings examine the extent of pragmatic knowledge and reported practice of AfL amongst the ML teachers. Respondents were grouped based on the Values-Practice scores. The level of importance they attached to AfL statements was the defining criteria for the final grouping of respondents. Based on the criteria applied, four distinct profiles emerged.

These profiles (from the largest to smallest clusters) are:

- 1. Respondents with Higher AfL values scores **but** Lower AfL practice scores
- 2. Respondents with Lower AfL values scores and Lower AfL practice scores
- 3. Respondents with Higher AfL values scores and Higher AfL practice scores
- 4. Respondents with Lower AfL values scores **but** Higher AfL practice scores

The highest possible total values and practice score for statements alluding to AfL practices was 60. The highest reported score for both Values and Practice was 59 while the lowest score was 41. In terms of grouping the 121 respondents according to their scores, for Values, I considered a score above 48 as high while scores of 48 and below was considered low. For Practice, I considered a score above 50 as high while scores of 50 and below were considered low. These benchmarks are based on the mean scores derived from the survey that was 48 for Values and 50 for Practice. Table 1 shows a breakdown of the various groups of teachers and the scores.

69% of respondents had low AfL practice scores. The HVLP group formed the largest profile cluster of respondents. 44% of respondents (53 teachers) valued AfL highly but reported that they did not practise AfL as often despite considering it important. Within this group 12 teachers had Values-Practice gaps scores larger than +10. The teacher with the biggest Values-Practice gap scored 59 for Values and only 44 for Practice (Values-Practice gap: +15). She clarified that AfL is "no doubt important" and understood the value it had for advancing students' learning. However, she was not confident in her ability to enact AfL in her classroom, citing her preference for "drill and practice". She also felt that time management was her main challenge:

Honestly, when it comes to assessing students, it is better to follow the old method of drill and practice. To truly put AfL into practice, a lot of work needs to be done and to me the problem is time management. (Ainul)

One the other hand, the smallest percentage of respondents belonged to the LVHP profile. Only 7% of respondents reported that despite not seeing much value in AfL, they still carried out AfL practices in their classrooms. One of the teachers who belonged to this profile, Saufi, scored 45 for Values and 51 for Practice (Values-Practice gap: - 6). He clarified why he still attempted AfL in his classroom regardless of his lack of belief in it:

I see AfL as a gateway to further students' learning and not just to get marks for promotion only...I think it is important to practise AfL more than just knowing it n theory. (Saufi)

AfL Profile	Score	Number of respondents	Percentage of respondents
Higher Values + Lower Practice (HVLP)	Values Score > 48 Practice Score $\leq 50$	53	44%
Lower Values + Lower Practice (LVLP)	Values Score ≤48 Practice Score ≤ 50	31	26 %
Higher Values + Higher Practice (HVHP)	Values Score >48 Practice Score > 50	28	23%
Lower Values + Higher Practice (LVHP)	Values Score ≤ 48 Practice Score > 50	9	7 %
Total		121 respondents	

Table 1: Breakdown of various groups of teachers and scores

The lowest Values-Practice scores among the LVLP respondents were 2 teachers with V(44)-P(42) and V(41)-P(43). Both these teachers had more than 5 years of teaching experience. Within their schools a majority of survey respondents had low practice ( $P \le 50$ ) scores too, as shown in Table 2:

Score of teacher with LVLP profile	Values: 44	Practice: 42
Score of other colleagues in same	49	45
school	52	43
	55	45
Score of teacher with LVLP profile	41	43
Score of other colleagues in same	53	49
school	51	50

Table 2: Scores of teachers with LVLP profile and scores of their colleagues

11 teachers interviewed mentioned that having supportive colleagues who shared their AfL practices was an important element to inculcating AfL in their classrooms. Two teachers belonging to the same school spoke of how they participated in discussions regarding AfL knowledge with their peers:

Because one topic can be taught by many teachers, so amongst us we discuss and in the lesson plan the teachers are supposed to put into place how they include AfL. (Aisha, Green Vista School)

So for AfL, there is sharing [sessions] with different people. We brainstorm with one another...what are the structures we know, then after that we look through our lesson plan, which parts we need to focus on and we share lesson plan exemplars with teachers within and across department. (Azimah, Green Vista School)

One subject head from a particular school who used to carry out in-house AfL workshops for her teachers reminisced about how important it was to have leadership support in order for AfL to gain momentum amongst teachers. Under a new school leadership, this particular subject head felt that the direction was no longer the same with regards to developing teachers' capacity in AfL:

Ever since the new principal arrived this year, our professional learning committee (PLC) has taken a different direction. If it was last year, we can see that with every teaching activity that they shared, they could highlight the AfL aspect of it. Teachers can share resources, so last year I saw a lot of AfL. But this year, I have yet to see anything much because there has not been much professional sharing [sessions]. (Erfa)

From a sociocultural perspective, the actions and thoughts of the interviewed and observed ML teachers are dynamic, interconnected and situated within the social and cultural context of their classroom practice. ML teachers mediate their perception and practice of AfL with the social, cultural and historical experiences they bring.

Teachers' perception that peer support is crucial for the advancement of their AfL practice could be associated with the social dynamics of the working environment within schools in Singapore and specifically within the ML department of a school. Typically a secondary school ML department consists of two to four teachers working closely together to determine the scheme of work, assessments and how much of the curriculum is to be covered within the school year. In such a compact working environment, peer support for AfL seems even more important as ML teachers share teaching plans, assessment materials and also play the role of peer observers in one another's classroom. In the wider school setting, having teachers from other subjects who put AfL into practice within their classrooms is also essential because collectively these teachers make AfL a normal everyday classroom assessment practice that students experience. The resistance that teachers like Hanim faced due to students' lack of familiarity with AfL strategies could be related to the lack of a school-wide approach towards AfL. Peer support in this instance is vital as it has the twofold function allowing peers to exchange ideas with one another and to also share the frustrations they might experience when implementing AfL strategies.

Indeed, a significant number of respondents identified leadership support as being essential. This is related to the level of autonomy given to principals regarding the implementation of initiatives rolled out by MOE. While MOE is clear on which initiatives have to be introduced within schools, the fervour of the execution and the extent of capacity building that occurs is usually at the principals' discretion. When AfL was introduced in the ML syllabus in 2011, some principals may have taken the opportunity to fully invigorate the practice of AfL across all other subjects. However some others may have left it to the responsibility of the heads of department or the teachers themselves. Fundamentally, when there is no clear vision for an initiative such as AfL within heritage language classrooms, it is likely that the initiative does not develop and full reform is not achieved.

### References

Arimoto, M., Clark, I., Yamamoto, S., & Shinkawa, M. (2015). Cultural perspectives on classroom assessment: A path toward the "Japanese Assessment for Learning Network." *Annual Bulletin, Graduate School of Education, Tohoku University, 1*(41–62). Retrieved from http://www.sed.tohoku.ac.jp/library/nenpo%20english/v.1/eng.1-04.pdf

Assessment Reform Group. (2002). *Assessment for Learning: 10 Principles*. Retrieved from https://www.aaia.org.uk/content/uploads/2010/06/Assessment-for-Learning-10-principles.pdf

Bassey, M. (1999). *Case study research in educational settings [electronic resource]*. Buckingham [England]; Philadelphia: Open University Press,.

Bourdieu, P. (1977a). *Outline of a theory of practice*. Cambridge: Cambridge University Press.

Curriculum Planning and Development Division. (2011). *Malay Language Secondary School Syllabus*. Retrieved from http://www.moe.gov.sg/education/syllabuses/mother-tongue-languages/files/malay-secondary-2011.pdf

Fullan, Michael. (2007). The New Meaning of Educational Change. Routledge.

Fullan, Micheal, & Miles, M. (1992). Getting Reform Right: What Works and What Doesn't. *Phi Delta Kappan*, 73, 744–752.

Gardner, J. (2006). Assessment and Learning. SAGE.

Gopinathan, S. (2001). Globalisation, the state and education policy in Singapore. In J. Tan, S. Gopinathan, & W. K. Ho (Eds.), *Challenges facing the Singapore education system today* (pp. 3–17). Singapore: Prentice Hall. Government of Singapore. *Minorities and special position of Malays* (2015). Retrieved from http://statutes.agc.gov.sg/

Ho, N., Adie, L., & Klenowski, V. (2016). The Prospects of Assessment for Learning in Higher Education in Asian Settings: The Case of Vietnam. *Assessment Matters*.

Hogan, D. (2011). Yes Brian, at long last, there is pedagogy in England – and in Singapore too. A response to TLRP's Ten Principles for Effective Pedagogy. *Research Papers in Education*, *26*(3), 367–379. https://doi.org/10.1080/02671522.2011.595548

James, M., McCormick, R., Black, P., Carmichael, P., Drummond, M.-J., Fox, A., Wiliam, D. (2007). *Improving Learning How to Learn: Classrooms, Schools and Networks*. Routledge.

Klenowski, V. (2009). Assessment for Learning revisited: An Asia-Pacific perspective. *Assessment in Education: Principles, Policy & Practice, 16*(3), 263–268. https://doi.org/10.1080/09695940903319646

Lim-Ratnam, C. (2013). Tensions in defining quality pre-school education: The Singapore context. *Educational Review*, 65(4), 416–431. https://doi.org/10.1080/00131911.2012.707641

Luke, A., Freebody, P., Shun, L., & Gopinathan, S. (2005). Towards Research-based Innovation and Reform: Singapore schooling in transition. *Asia Pacific Journal of Education*, *25*(1), 5–28. https://doi.org/10.1080/02188790500032467

Ministry of Education, Singapore. (2010). *Report by Mother Tongue Languages Review Committee* (pp. 1–132). Singapore.

Ministry of Education, Singapore. (2013, March 6). School Information Service (SIS). Retrieved from School Information Service website: sis.moe.gov.sg

Opie, C. (2004). Research Procedures. In C. Opie (Ed.), Doing educational research.

Pedder, D. (2006). Organizational conditions that foster successful classroom promotion of Learning How to Learn. *Research Papers in Education*, *21*(2), 171–200. https://doi.org/10.1080/02671520600615687

Planning Division Ministry of Education, Singapore. (2014, August). *Education Statistics Digest 2014*. Retrieved from http://www.moe.gov.sg/education/education-statistics-digest/files/esd-2014.pdf

Punch, K. F. (2005). *Introduction to Social Research: Quantitative and Qualitative Approaches*. SAGE.

Ratnam-Lim, C. T. L., & Tan, K. H. K. (2015). Large-scale implementation of formative assessment practices in an examination-oriented culture. *Assessment in Education: Principles, Policy & Practice, 22*(1), 61–78. https://doi.org/10.1080/0969594X.2014.1001319

Suurtamm, C., Koch, M., & Arden, A. (2010). Teachers' assessment practices in mathematics: Classrooms in the context of reform. *Assessment in Education: Principles, Policy & Practice, 17*(4), 399–417. https://doi.org/10.1080/0969594X.2010.497469

Swaffield, S. (2011). Getting to the heart of authentic Assessment for Learning. *Assessment in Education: Principles, Policy & Practice, 18*(4), 433–449. https://doi.org/10.1080/0969594X.2011.582838

Tan, K. (2011a). Assessment for learning in Singapore: Unpacking its meanings and identifying some areas for improvement. *Educational Research for Policy and Practice*, *10*(2), 91–103. https://doi.org/10.1007/s10671-010-9096-z

Tan, K. (2011b). Assessment for Learning Reform in Singapore-Quality, Sustainable or Threshold? In R. Berry & B. Adamson (Eds.), *Assessment reform in education: Policy and practice: Vol. v. 14* (pp. 75–88). Dordrecht ;London: Springer,.

Tashakkori, A., & Teddlie, C. (1998). *Mixed Methodology Combining Qualitative and Quantitative Approaches*. Thousand Oaks, CA: SAGE.

Torrance, H., & Pryor, J. (1998). *Investigating Formative Assessment: Teaching, Learning and Assessment in the Classroom.* 

Wertsch, J. V. (1993). *Voices of the mind: A sociocultural approach to mediated action* (First Harvard University Press paperback). Cambridge, Mass.: Harvard University Press,.