Leadership for Teacher Learning to Support Innovative Pedagogies

Hairon Salleh*
National Institute of Education (NIE)
Singapore
Email: hairon.salleh@nie.edu.sg

*Corresponding Author

Abstract: The need for techers to learn continuosly throughout their career has continued to grow in importance. This is understandable taking into consideration the fast pace of change that is taking place in societies around the world especially in how industries are transformed resulting from technological advances (e.g., robotics, artificial intelligence, etc). The future work places will require workers with a set of competences, and thus new set of knowledge, skills and dispositions. Education reforms must now direct and support transformations in the way teacher deliver their lessons so as to aid in the acquisition of these new set of competences. In the same spirit, school leaders need to provide appropriate structures to initiate and sustain the development of teaching competences along with appropriate innovative pedagogies suitable for the fourth industrial revolution. In this paper, i will propose key strategies that leaders in school can enact in order to support and sustain the right kind of teacher learning that would nurture innovative pedagogies. In terms of leadership, key ideas on distributed leadership, teacher leadership and instructional leadership will be expounded. In terms of teacher learning, teacher learning communities such as Lesson Study and Action Research will be expounded.

Keywords: Leadership, Teacher Learning, Innovative, Pedagogies

1. Introduction

For a long time, schools have been ideal sites for the development of students to become future citizens in cultural, social and economic terms. Schools are thus constantly changing in order to meet the changing needs of students, parents, communities and societies that they serve.

However, the changing world has now grown to become increasingly fluid, disruptive and uncertain – thanks to a large part to the growing accumulated applications of technological advancements and innovations such as in the area of automation, mechanization, robotics, smart devices, artificial intelligence, and nanotech. However, among these, the Internet of things or 'internetization' has been the significant underlying contribution to many of the disruptions. Terror networks have made 'good' use of social media with much success to spread lone-wolf type of terrorism. Organizations are constantly on their toes to prevent cyber hackers from infiltrating their systems. Traditional businesses have to reckon with the sharing economy or collaboration economy such as Uber and Airbnb. Internetization have also had a tremendous contributing role in the rise of individualism and groupism. While the Internet affords the expression of individual voices and identities, it also has been used to garner collective voices and identities – especially in social media spaces.

The adoption of these technological advances have clearly brought about a new set of competences for the future work force across the three basic industries: primary (e.g., agriculture, mining), secondary (e.g., manufacturing) and

tertiary (e.g., services) with the sole purpose of increasing productivity through the accomplishment of higher output with lower input. It is no surprise then that automation and artificial intelligence are increasingly used even in agriculture. The future work force needs to be accomplished in higher cognitive skills (e.g., creativity, critical thinking, decision making, complex information processing), social and emotional skills, and technological skills, and less on physical and manuals skills, and basic cognitive skills (e.g., basic literacy and numeracy) [1]. Schools are therefore increasingly compelled to prepare students in these areas of learning outcomes.

School leaders have to support curricular change and transformations that support teaching and learning experiences that can potentially result in the desired learning outcomes. School leaders would also need to support teacher learning experiences that aid in the development of appropriate pedagogies that teachers themselves can use to bring about the desired learning outcomes in students. However, school leadership can no longer reside in one person or one group of persons. Over the last decade or so, distributed leadership has received increasing attention and popularity – not for anything except the sheer deluge of demands placed on schools coming from different sectors of society including primarily education policymakers, parents and students. The influence of education policymakers on schools is nevertheless highly significant as they not only represent the people whom they serve in the community, but also are the most significant contributor to school financial support and educational policy and accountability framework.

The demands on schools get even steeper when the world environment is increasingly becoming disruptive due to the intertwining of various complexities that exist in all walks of life. The leadership response is even more so needed, especially in a distributed sense so as to cope with the rising demands and complexities placed on organizations. In school contexts, senior school leaders such as principals and vice-principals have traditionally delegated some of the roles and responsibilities to middle leaders (e.g., HODs). As the demands on schools increase in tandem with the rise in complexities of world systems, some of the leadership roles and responsibilities given to middle leaders have been delegated to teacher leaders in both formal and informal roles.

The rise in teacher leadership is therefore an immediate product of the rise in distributed leadership. Distributed leadership, which is a multi-dimension construct, consists of four dimensions: (1) bounded empowerment, (2) developing leadership, (3) shared decision, and (4) collective engagement [2]. School leaders who seek to practise distributed leadership would first and foremost be willing to relinquish decision-making powers to other staff members in his/her organization, but within boundaries – that is, only certain decisions which can be delegated, and without abdicating or weakening any responsibility or accountability. In this sense, leaders who distribute their leadership, will still have to be in the know or share the decisions made by others whom he/she has given the authority to make decisions. School leaders who seek to practise distributed leadership would also seek to develop leadership competences of his/her team or organizational members. Finally, school leaders who seek to practise distributed leadership would also encourage and lead other staff members to collaborate with other staff members so as to gain synergistic benefits and well-being. When all these are enacted by school leaders, teacher leaders are inevitably nurtured and developed.

There are three key dimensions of teacher leadership: (1) collegial and collaborative relations, teacher

professional learning and development, and (3) change in teachers' classroom practice [3] [4]. All these dimensions pertain to instructional leadership practices. These practices would either be passed on from middle leaders to teacher leaders, or overlap with middle leaders instructional leadership practices. It is worth noting that one primary area that teacher leaders takes on is promoting Professional Learning Communities (PLCs), where all the three dimensions of teacher leadership practices can be enacted. While the practice of building collegial and collaborative relations among teacher colleagues looks common or understandable, it must be emphasized that strong and healthy relationships set the foundation for trust to be developed, and on which learning from one another – in a collaborative sense, can take place well. The degree of collegial and trusting relationships would therefore affect the degree of collaborative learning that takes place among teachers. Learning among teachers would thus be hampered without a strong, healthy and trusting relationship among teachers. It would therefore be wise for teacher leaders to invest in helping teachers build trusting relationships before they could go deeper into helping teachers learn from one another. Trusting relationships would also help teacher leaders to set the tone in encouraging teachers to open up their classrooms to others. The eventual outcome of teacher leadership practices is to improve classroom teaching en route to student learning – the latter is at the heart of the professional mission of every teacher and educator.

Embedded in the three teacher leadership practices is the importance of collective learning. Collective learning can be defined as learning that takes place between individuals within a pair, group, organization, society or system so as to develop shared knowledge either in the form of practice (i.e., embodied in performance, rituals, etc), ideas (i.e., subjective knowledge evidenced only through oral means), or artifacts (i.e., products of the mind such as manuals, encyclopedia, journals, etc). The concept of collective learning [5] [6] [7] can be understood as multi-dimensional, which includes the following: (1) storing knowledge, (2) sharing knowledge, reflecting knowledge, (4) interrogating knowledge, (5) applying knowledge, (6) transferring knowledge, and (7) innovating knowledge. 'Storing knowledge' involves collective learning practices that store knowledge in the form of collective practices (e.g., routines, rituals), conceptual tools (e.g., learning cycles), and materials (e.g., manuals, lesson plans, etc). 'Sharing knowledge' involves collective learning practices that transmit knowledge from one individual to another which could be in the form of practices (e.g., demonstrations), conceptual tools (e.g., teaching strategies) and materials (e.g, lesson plans, shared folders). 'Reflecting knowledge' involves collective learning practices that engage individuals to think about and articulate their knowledge on practices in the past or future to others (e.g., articulating ideas and concepts pertaining to what was taught in previous lessons). 'Interrogating knowledge' involves collective learning practices that enable individuals to question and test the veracity of their assumptions and theories (e.g., inductive and deductive thinking, inquiry). 'Applying knowledge' involves learning practices that enable individuals to collectively apply the knowledge that has been collectively developed in practice. 'Transferring knowledge' involves the collective learning practices of transferring the knowledge developed in one context to another (e.g., the strategy of cooperative learning in science being applied to math curricula). 'Innovating knowledge' involves collective learning practices that enable individuals create new knowledge which are not currently absent (e.g., abduction).
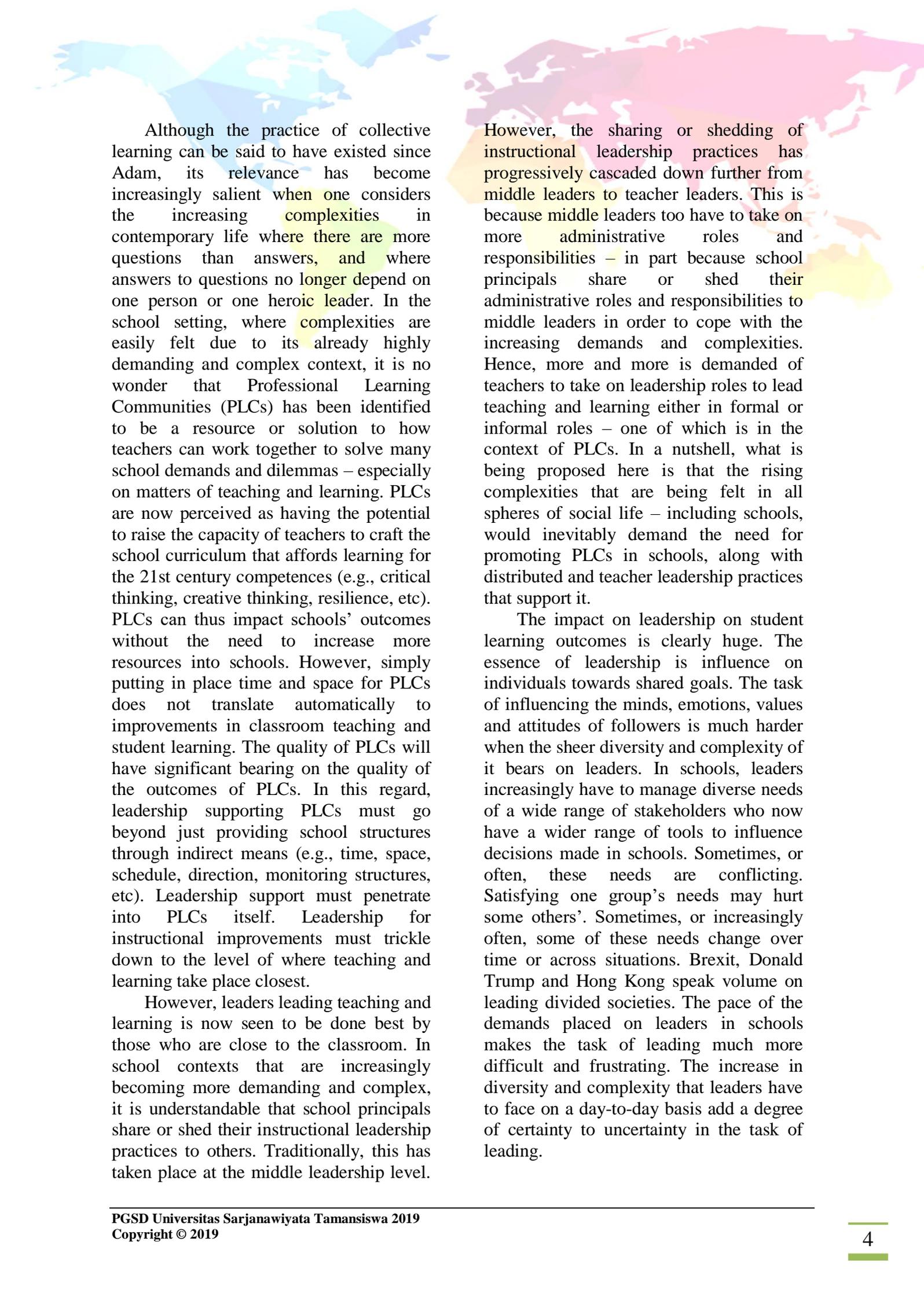
Although the practice of collective learning can be said to have existed since Adam, its relevance has become increasingly salient when one considers the increasing complexities in contemporary life where there are more questions than answers, and where answers to questions no longer depend on one person or one heroic leader. In the school setting, where complexities are easily felt due to its already highly demanding and complex context, it is no wonder that Professional Learning Communities (PLCs) has been identified to be a resource or solution to how teachers can work together to solve many school demands and dilemmas – especially on matters of teaching and learning. PLCs are now perceived as having the potential to raise the capacity of teachers to craft the school curriculum that affords learning for the 21st century competences (e.g., critical thinking, creative thinking, resilience, etc). PLCs can thus impact schools' outcomes without the need to increase more resources into schools. However, simply putting in place time and space for PLCs does not translate automatically to improvements in classroom teaching and student learning. The quality of PLCs will have significant bearing on the quality of the outcomes of PLCs. In this regard, leadership supporting PLCs must go beyond just providing school structures through indirect means (e.g., time, space, schedule, direction, monitoring structures, etc). Leadership support must penetrate into PLCs itself. Leadership for instructional improvements must trickle down to the level of where teaching and learning take place closest.

However, leaders leading teaching and learning is now seen to be done best by those who are close to the classroom. In school contexts that are increasingly becoming more demanding and complex, it is understandable that school principals share or shed their instructional leadership practices to others. Traditionally, this has taken place at the middle leadership level.

However, the sharing or shedding of instructional leadership practices has progressively cascaded down further from middle leaders to teacher leaders. This is because middle leaders too have to take on more administrative roles and responsibilities – in part because school principals share or shed their administrative roles and responsibilities to middle leaders in order to cope with the increasing demands and complexities. Hence, more and more is demanded of teachers to take on leadership roles to lead teaching and learning either in formal or informal roles – one of which is in the context of PLCs. In a nutshell, what is being proposed here is that the rising complexities that are being felt in all spheres of social life – including schools, would inevitably demand the need for promoting PLCs in schools, along with distributed and teacher leadership practices that support it.

The impact on leadership on student learning outcomes is clearly huge. The essence of leadership is influence on individuals towards shared goals. The task of influencing the minds, emotions, values and attitudes of followers is much harder when the sheer diversity and complexity of it bears on leaders. In schools, leaders increasingly have to manage diverse needs of a wide range of stakeholders who now have a wider range of tools to influence decisions made in schools. Sometimes, or often, these needs are conflicting. Satisfying one group's needs may hurt some others'. Sometimes, or increasingly often, some of these needs change over time or across situations. Brexit, Donald Trump and Hong Kong speak volume on leading divided societies. The pace of the demands placed on leaders in schools makes the task of leading much more difficult and frustrating. The increase in diversity and complexity that leaders have to face on a day-to-day basis add a degree of certainty to uncertainty in the task of leading.

2. Discussion

The position of leadership is increasingly becoming less attractive to many laypersons, and perhaps highly attractive only for a few egotistical, idealist or foolhardy lot. With great powers come with great responsibility – indeed. But do all these eclipse the power of leadership? Not at all. On the contrary, leadership is integral to societies' preservation and progress. While some sociologists and organizational theorists predict chaos due to the inevitable rise of complexities in societies, some argue the inevitable rise of leadership to give structure, stability and sense- making to and in societies. In the remaining section of this paper, I will propose several key leadership practices for leaders at all levels of the school organizations including senior leaders (e.g., principals, vice-principals), middle leaders (e.g., department heads, year heads), and teacher leaders: formal and informal teacher leaders.

2.1. Senior Leaders

School leaders such as school heads or principals are highly significant people in school organizations – simply because all responsibility and accountability stop at this level. In order to support and sustain teachers coming together to learn from one another through PLCs, school leaders can do the following:

2.1.1. Communicate the importance of PLCs

The messaging that school leaders give to teachers to come together to support one another's learning to improve teaching and learning is highly critical to the success PLCs. Besides verbal communications, communications via symbols (e.g., pictures, photos, banners, etc) are important too. Last but not least, the modelling that school leaders provides matter too. It would only be advantageous to them if they model – specifically, exhibit the values of PLCs (e.g., curiosity, problem-solving, creativity, resilience, risk- taking, learning from failures, etc).

2.1.2. Provide structured time for PLCs

Teachers' work has generally increased manifold over the years, and if no allocated time is made for PLCs, no PLCs will take place, School leaders will have to work with teachers on the specific day and time for PLCs, frequency of PLCs, and time duration for each PLCs, which are all dependent on schools' needs, and most importantly, teachers' needs.

2.1.3. Deploy teachers in the right PLC groups

For PLCs to work effectively, school leaders have to ensure that PLC group members share common interests, concerns and agenda. This is to strengthen the synergies in PLCs' work. Teachers need to experience the value-adding that PLCs can bring through their involvement and commitment. School leaders also play the important role of choosing the right team leaders for PLC groups.

2.1.4. Integrate PLCs' work with the school's vision, mission and goals

For PLCs to work effectively, school leaders should also guide and align PLCs' work with that of the overall school's vision, mission and goals. Resources provided to schools can thus be optimized to support PLCs's work, rather than seeing and treating PLCs' work as another add-on to their already busy day-to-day schedule. When PLCs' work is centrally aligned to the school's vision, mission and goals, all the other school processes will also integrate the work of PLCs. For example, if the school aspires to help every student be successful in problem-solving, PLCs' work can look into enhancing problem-solving in classroom teaching across all subjects.

2.1.5. Monitor PLCs' work

Although the term 'monitoring' may have negative connotations, the term used in this context is more positive and sanguine. Monitoring describes how school leaders are aware about what is going on in PLCs, and seeks to provide timely and quick feedback and support if

and when PLC group members needs help. The support could be in the form of more teaching resources, or external expert staff members to join in the PLC discussions. The monitoring enacted by school leaders are, however, more indirect – that is, they do not have to sit in during PLCs' discussions or communicated directly with PLC team members to gain specific information. They can gain information on PLCs' work through the middle leaders, who are more on the ground. Besides the practical or technical aspect of monitoring, the enactment of monitoring can also be at the same the enactment of care for teachers. The underpinning value of monitoring is the spirit of care for teachers, and not the kind of 'big brother watching over you' attitude, and that the school leaders care enough for teachers, that they want to know what is going on in PLCs, and would want to give as much support as possible to teachers so that they can do the good job of caring for students. The spirit of care also promotes the culture of care, which is indeed needed for innovation to flourish. A culture of care would thus support teacher agency, commitment and resilience towards innovative teaching practices.

2.2. Middle Leaders

Besides school leaders, middle leaders too have significant roles to play in terms of instructional leadership support to PLCs' work. Middle leaders in school are usually heads of department to specific subjects (e.g., Mathematics) or year heads who oversee the student development for each grade level or several grade levels. Middle leaders can do the following to support and sustain teachers coming together to learn from one another:

2.2.1. Monitor PLCs' work

As middle leaders are closer to the teachers than school leaders, they do a very job in monitoring the work PLCs. They do after all play the intermediary role between teachers and school leaders. The information that they gather directly from teachers can then be fed to school leaders or his or her necessary response. The key principle in monitoring is to provide timely feedback, support and guidance to the work of PLCs – all in the spirit of caring for teachers' professional work.

2.2.2. Coordinate support for PLCs' work

The middle leader also play the role of coordinating the support provided by different school staff members. Support for PLCs' work can come in many fronts – school leaders, teacher leaders, external expert, and parents. Middle leaders need to coordinate these flows of support to PLCs. The work of coordinating become more salient when schools are also faced with increasing complexities and disruptions in day-to-day work and life.

2.2.3. Integrate PLCs' work with the school curriculum

The work of PLCs cannot be anything else except innovating and improving the school's curriculum – that is, every learning experience/s that each student go through in their day-to-day school life. Middle leaders are ideal people to guide and support teachers in their work at innovating and improving the learning experiences of their students – usually in classroom teaching practices, albeit there is an obvious and increasing recognition that learning takes place beyond the classroom. The curriculum can also include the learning that students take back home. As stated earlier, once the work PLCs' centers on the school's curriculum, all the school's resources and processes will lend support for PLCs' work.

2.2.4. Analyze student learning data

As middle leaders have oversight over the curriculum within and across departments, they would be ideal people to provide support in analyzing data on student learning. The analysis of data on student learning can then be channeled back to teachers as a form of feedback on teachers' teaching, and as a means by which teachers can innovate and improve their classroom learning.

2.2.5. Provide teaching resources

The middle leader also plays a critical role in providing the appropriate resources on teaching and learning to PLCs, which would then be used in classroom teaching. Providing teaching resources to teachers is akin to increasing teacher capacity for effective teaching.

2.3. Teacher Leaders

Besides middle leaders providing instructional leadership to PLCs, teacher leaders – both formal and informal – also play a key role in supporting PLCs' work. The following are key ways in which they can support the work of PLCs:

2.3.1. Lead PLC discussions

Teacher leaders take the lead in PLC discussions. They provide the conducive environment for teachers to learn together. They establish a trusting and collegial culture. They coordinate the work of PLCs. They mentor fellow colleagues, support teachers' monitoring of student learning, and have vested interests in improving their colleagues' teaching practices in a non-threatening manner. Teacher leaders also optimize inquiry-bases teacher learning platforms such as Lesson Study or Action Research in order to help teachers have a conceptual and operational frameworks to improve their day-to-day teaching. Both Lesson Study and Action Research are suitable to enhance a whole range of teachers' dispositions which are consistent with the future work: critical thinking, problem-solving, reasoning, argumentation, adaptive learning, using research evidence, oral and written communication, creativity, innovation, adaptability, appreciation of diversity, continuous learning, initiative, self-direction, self-reflection, self-regulation, teamwork, perspective taking, trust, conflict resolution, negotiation, leadership, responsibility, social influence) [8]. Essentially, the teachers must acquire and model these dispositions before their own students can acquire and model them.

2.3.2. Provide expertise

Teacher leaders are pedagogical leaders. They share their expertise to their fellow colleagues including PLC settings. They also share their expert knowledge, skills and values to their fellow colleagues through professional development platforms such as workshops, mentoring, and even PLCs. Through this, they are essentially developing their colleagues knowledge of teaching, which includes subject content, pedagogy, instruction, assessment, and understanding students and their learning. The breadth and depth of student learning is indeed much dependent on the breadth and depth of teacher learning throughout their career. Teacher leaders are the knowledge builders of the teaching fraternity. Besides guiding teachers' cognitive development in teaching, they can potentially also support teachers' intra-personal (e.g., adaptability, agency, ethics) and inter-personal (e.g., responsibility, teamwork, social influence) competencies [9].

2.3.3. Share teaching resources

Besides sharing their expert knowledge, skills and values to their colleagues through professional development platforms, teacher leaders also share their own teaching resources to their colleagues. This too is done out of a trusting relationship that they develop with their fellow colleagues.

3. Conclussion

As described above, there are many leaders in the school organization. The notion of one solo strong leader in the school context is no longer viable in view of the increasing demands placed on schools from all parts of society (i.e., students, parents, communities, policymakers, etc) along with the increasing complexities and disruptions in the current era. Leadership cannot rest only on one person in the school organization, and must therefore be distributed at all levels of the school organization. Hence, the need to synergize
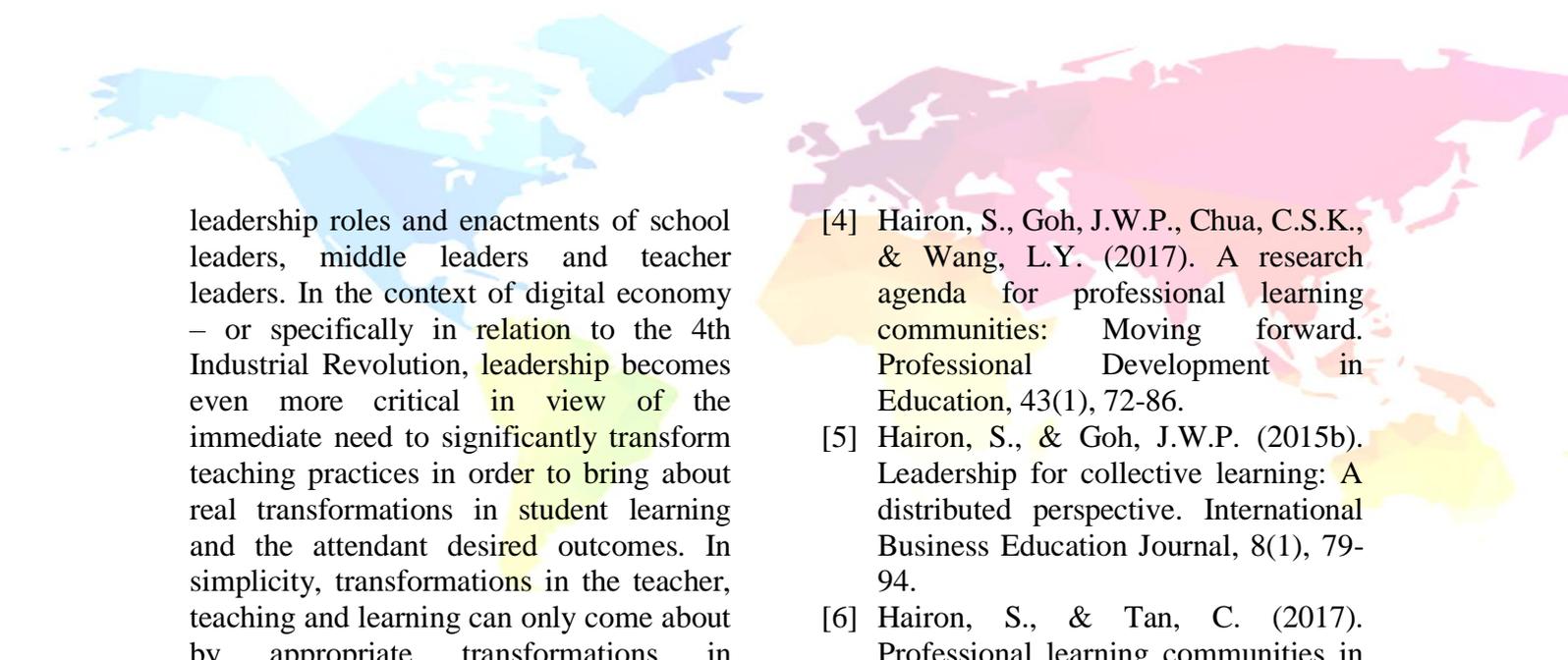
leadership roles and enactments of school leaders, middle leaders and teacher leaders. In the context of digital economy – or specifically in relation to the 4th Industrial Revolution, leadership becomes even more critical in view of the immediate need to significantly transform teaching practices in order to bring about real transformations in student learning and the attendant desired outcomes. In simplicity, transformations in the teacher, teaching and learning can only come about by appropriate transformations in leadership.

References

[1] Bughin, J., Hazan, E., Lund, S., Dahlstrom, P., Wiesinger, A., & Subramaniam, A. (2018). Skill shift: Automation and the future of the workforce. Retrieved from https://www.mckinsey.com/featured-insights/future-of-work/skill-shift-automation-and-the-future-of-the-workforce.

[2] Hairon, S., & Goh, J.W.P. (2015a). Pursuing the elusive construct of distributed leadership: Is the search over? Educational Management Administration and Leadership, 43(5), 693-718.

[3] Hairon, S., Goh, J.W.P., & Chua, C.S.K. (2015). Teacher leadership enactment in PLC contexts: Towards a better understanding of the phenomenon. School Leadership and Management, 35(2), 163-182.

[4] Hairon, S., Goh, J.W.P., Chua, C.S.K., & Wang, L.Y. (2017). A research agenda for professional learning communities: Moving forward. Professional Development in Education, 43(1), 72-86.

[5] Hairon, S., & Goh, J.W.P. (2015b). Leadership for collective learning: A distributed perspective. International Business Education Journal, 8(1), 79-94.

[6] Hairon, S., & Tan, C. (2017). Professional learning communities in Singapore and Shanghai: Implications for teacher collaboration. Compare: A Journal of Comparative and International Education, 47(1), 91-104.

[7] Hairon, S. (2016). Facilitation for professional learning community conversations in Singapore. Asia Pacific Journal of Education, 36(2), 285-300.

[8] [9] Pelligrino, J.W. & Hilton, M.L. (2012). Education for life and work: Developing transferable knowledge and skills in the 21st century. Washington, DC: The National Academic Press.

[9] World Economic Forum (2018). *The future of jobs report 2018. Centre for the New Economy and Society*. Switzerland, Cologny/Geneva: World Economic Forum. Retrieved from http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf.