

Chapter 1

Centralised-Decentralisation in Singapore Education Policymaking



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Abstract Centralised-decentralisation refers to the calibrated application of the forces of centring and calibrated release of the force of centring (resulting in decen-tring) in order to achieve coherence and optimal results and outcomes for a system. While the phenomenon of centralised-decentralisation is not unique to the Singapore education system, the fact that it is deployed pervasively across all policy contexts and that it recurs in the various levels of the education system (from the Ministry down to the teacher level) might make the phenomenon of centralised-decentralisation—from the perspective of implementation—uniquely Singaporean. This empirical paper, with data collected via interviews from a range of respondents (i.e. policy academics, school leaders, and middle managers), provides, amongst other things, evidence of the fractal nature of centralised-decentralisation, which speaks of the ingrained disposition of this habitual thinking in the daily policy and life of schools. Efforts have been made to ensure the trustworthiness of the findings arising from the research. Other findings of the research include the differentiated nature of centralised-decentralisation, the pragmatic motivation of the notion of centralised-decentralisation, and the need for calibrated trust between the Ministry and schools for the maintenance of the delicate balance between centralisation and decentralisation.

1.1 Context and Rationale

Decentralisation has been variedly defined. Mintzberg (1979) defines decentralisation as a phenomenon in which there is a “distribution of power in the organisation” (p. 184). Adapting it, Brown (1990) defines decentralisation as “the extent to which authority to make decisions is distributed among the roles in an organisation” (p. 36). Patrinos and Fasih (2009) characterise decentralisation as a process that

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gives “a voice and decision-making power to local stakeholders who know more about the local education systems than do central policy makers” (p. 2). To Patrinos and Fasih (2009), the devolving of power to make decisions at the local level could be analysed in terms of “Who to devolve it?” and “What to devolve?”. Under the “Who to devolve?” category, power could be devolved to the professionals, i.e. principals and teachers (the professional-control model); community, i.e. parents and the community (the community-control model); or both the professionals and community (the balanced-control model).

In terms of the “What to devolve?” category, Caldwell and Spinks (1988), in one of the earliest educational books on the subject of decentralisation that spawn the trilogy of books on the self-managing schools, note that “resources” that are increasingly being devolved from the centre include technology (the means of teaching and learning), knowledge (the curriculum and the aims of schooling), material (the supplies in support of teaching and learning), people, time, and finance. Bullock and Thomas (1997), as well as Patrinos and Fasih (2009), enumerated areas of the schooling enterprise that could be devolved to the local entities: curriculum, pedagogy and assessment issues, human and physical/infrastructural resources, finance and funding matters, and issues pertaining to admission as well as those relating to what school information needs to be publicly published.

However, the central authority such as the central government will not decentralise the resources or areas of schooling to the local entities en bloc. Hanson (2006) rhetorically asks, “Is there really such a thing as a decentralised system?” Therefore, concomitantly with decentralisation, the central government will retain authority to make decisions over some areas of the schooling enterprise. This is not surprising as Goodlad in 1984 argues that although schools should be given more power (“rebalancing of power”, p. 273), aspects of school-district partnerships should be maintained, e.g. the district having an oversight function through consultation, monitoring, and evaluation. Furthermore, Hanson (2006) argues that all decisions pertaining to the schooling enterprise, e.g. finance, personnel, and curriculum, “retain degrees of centralisation and decentralisation” (p. 11). Bullock and Thomas (1997) argue that reality is made up of a “mixed economy of allocative mechanisms” (p. 30) of centralisation and decentralisation and the issue is to find the “appropriate balance” (Hanson, 2006, p. 11) between them. In the Organisation for Economic Co-operation and Development (OECD) (2011) continuum of school autonomy (cited in Caldwell, 2015), ranging from one end of complete centralisation and the other end of complete school autonomy, there is a part-centralisation and part-decentralisation configuration of schools acting within the framework set by a higher authority.

Therefore, one expects to have decentralisation existing simultaneously with centralisation. For instance, the United Kingdom’s (UK) Department of Education

and Science in its Parent Charter (Department for Education, 1991) articulates its educational strategy as one that involves retaining centralisation of the curriculum (through the National Curriculum) and assessment systems while devolving, amongst other things, finance to schools. In Singapore, a similar approach has been advanced by the Ministry to implement the curriculum of the future, dubbed C2015; the approach is known as “tight-loose-tight” (Ministry of Education [MOE], 2008, p. 3). Under this approach, there will be clearly defined (or “tightness”) educational philosophy, strategic intents, and direction to guide the formulation of the national curriculum; school autonomy (or “looseness”) to innovate at school and classroom level; and a comprehensive and clear mechanism (or “tightness”) to evaluate if students have acquired the learnings translated from the intents and direction of the national curriculum.

While the phenomenon of centralised-decentralisation is not unique to the Singapore education system, the fact that it is deployed pervasively across all policy instantiations and that it recurs in the various levels of the education system (from the Ministry down to the teacher level)—as demonstrated in a section called “fractal nature” in this paper—speaks of the ingrained disposition of this habitual thinking in the daily policy and life of schools. That school leaders, Heads of Departments (HODs), and teachers are willing to adhere to the spirit of centralised-decentralisation might make the phenomenon of centralised-decentralisation uniquely Singaporean, i.e. from the perspective of implementation (L. W. Teh, personal communication, March 14, 2016). A paper setting out the formation of this ingrained habitual thinking or Bourdieu’s habitus (Bourdieu, 1977, 1990) can be found in Chua, Toh, Jamaludin, He, and Hung (2016).

Although there is a number of Singapore education literature written on this subject of the simultaneous existence of centralisation and decentralisation of educational policies (e.g. Chua, Hatch, & Faughey, 2014; Ng, 2010; Tan, 2006; Tan & Ng, 2007)—a phenomenon called centralised-decentralisation by Chua et al. (2014)—they are mainly literature reviews in nature. This chapter attempts to advance the local literature in this field through the provision of empirical data on the nature of this phenomenon of centralised-decentralisation in the manner in which education policies are made and implemented in Singapore. Specifically, the research attempts to address the following research questions:

1. What is the nature and characteristics of the practice of centralised-decentralisation in Singapore schools, and how could one possibly attempt to account for the motivation of this practice of centralised-decentralisation?
2. Given the tensions involved in the co-existence of centralisation and decentralisation, how is the balance in centralisation-decentralisation (Hung & Chua, 2015) maintained?

1.2 Literature Review

1.2.1 *School Autonomy*

School autonomy, which results from decentralisation, can be understood in general terms as the delegation of a task or tasks by a local authority to agents, namely, the schools (cf. Wößmann, Lüdemann, Schütz, & West, 2007). Specifically, the OECD (2011) defines school autonomy around these two measures of delegated tasks:

1. School autonomy in allocating resources where schools have the authority to (i) select teachers, (ii) hire and dismiss teachers, (iii) establish teachers' starting salaries and determine teachers' salary increases, and (iv) formulate and allocate budgets.
2. School autonomy in (i) making decisions about curricula and assessments in determining curricula and assessment practices, (ii) establishing student-assessment policies, (iii) choosing which textbooks are used, and (iv) deciding which courses are offered (OECD, 2011).

In Singapore, school autonomy shares some of the characteristics set out by OECD (e.g. responsibility for school-based budgeting (Ng & Chan, 2008) and in determining school-based curriculum and assessment practices (Gopinathan & Deng, 2006). In addition, school autonomy in Singapore is characterised by school leaders being empowered to broadly set their own direction, vision, and mission (Ng, 2003); autonomy over a discretionary percentage of students to be enrolled into the school via school-based merit criteria (MOE, 2016a); as well as full autonomy over choice of pedagogy to deliver the national curriculum (MOE, 2008).

1.2.2 *A More Nuanced Understanding of the Benefits of School Autonomy*

Instead of just autonomy alone, research has shown that autonomy, when combined with accountability, is most beneficial to schools (OECD, 2011). The Programme for International Student Assessment (PISA) results have suggested that when autonomy and accountability are combined intelligently, the resultant mixture of autonomy and accountability does lead to better student performance. In particular, the analysis showed that when there is greater autonomy in decisions relating to curricula, assessments, and resource allocation, better student performance could be expected, particularly when schools operate in a culture of accountability (OECD, 2011).

1.2.3 School Autonomy and Centralisation in Singapore

The Singapore government has been described as pragmatic and paternalistic (e.g. Neo & Chen, 2007; Trocki, 2006). The education system has always been a critical vehicle for supporting political agenda and economic strategies (Ng, 2005). Despite its intention for more autonomy to be given to schools, the government still ensures that schools remain rooted to a system of central coordination by the Ministry in ensuring that the ends are met (Ng, 2010). Relative to other jurisdictions such as Finland, school autonomy in Singapore does not mean being given a *carte blanche* in having a free reign in implementing reforms, without cognizance of higher societal needs and imperatives. It seems that a simultaneous existence of centralisation and school autonomy is very much pronounced in the Singapore education system, leading to some authors, for example, Tan and Ng (2007) and Chua et al. (2014) to theorise about the phenomenon called “centralised-decentralisation”.

1.2.4 Centralised-Decentralisation

Centralised-decentralisation, as defined by Chua et al. (2014), refers to the calibrated application of the forces of centring and calibrated release of the force of centring (resulting in decentering) in order to achieve coherence and optimal results and outcomes for a system. This phenomenon is premised on the idea that ground personnel such as principals and the school leadership team need to make the various student-centric and school-centric decisions (Chua et al., 2014). But they do so within parameters such as the rationale and intent and other governing matrix (e.g. student-teacher ratio, as explicated in the following sections) of the policies. This is done so that while diversity and innovation are spawned, it is engendered within the broad direction of the Ministry, thereby maintaining some semblance of coherence as a school system. “Ultimately, the approach is designed to enable the system to reap all the benefits associated with tight coupling and a strong central authority without overly constraining the local actors, which would deprive the system of innovation and creativity” (Chua et al., 2014). An example would be useful here. For many years, a relatively high class size of about 40 students per teacher has been in operation. When the Ministry decided to reduce class size several years ago, it did not implement a specific teacher-student class size for all schools; instead, it created a new matrix of student-teacher ratios for each type of school (MOE, 2014), which in turn determined the overall allocation of teachers to schools. Within the total number of teachers allocated, each school has the flexibility to determine the appropriate class sizes (MOE, 2014). Therefore, some schools have decided to set larger classes for higher ability students while creating smaller sizes for students who are progressing more slowly (e.g. 20 students per teacher or even smaller, like 10–15 students per teacher).

1.3 Research Method

1.3.1 Data Collection

Recognising the contextual and complex nature of leadership (Bryman, Stephens, & Campo, 1996; Conger, 1998), qualitative methods were adopted to study the contextually rich and socially embedded centralisation-decentralisation phenomenon. Specifically, qualitative interviews (semi-structured, dialogic, and in-depth) were conducted with education policy-oriented academics and practitioners for the purpose of investigating the nature and tenets of centralisation-decentralisation characterising the Singapore education system. A pragmatic, convenience sampling strategy to recruit informants for policy-related research was adopted. Six academics and practitioners were identified based on the position of their leadership. These seven respondents comprised two academics from an institute of higher learning, with expertise in areas of educational leadership; two school-level leaders who were recent former principals and vice-principals; and two HODs (one current and one who is on secondment to an institute of higher learning.) Sample interview questions to unpack nuances of the education system in relation to the centralisation-decentralisation phenomenon can be found in Appendix.

At least three interviewers from the research team were involved in each interview session with each informant. Such an approach enabled corroboration of the interpretation of interviewee responses. In addition, the multi-interviewer approach enabled the dialectic between semi-structured interview questions and the impromptu asking of follow-up clarification and probing questions. All interviews were audio-recorded and transcribed after each interview session. After each interview, we wrote analytic memos based on our impressions and reflections to capture more nuanced information.

1.3.2 Data Analysis

An iterative process, based on the constant comparative method (Corbin & Strauss, 2008), was employed in analysing the transcripts. A coding scheme based on patterns emerging from the interviews was developed. Successive rounds of coding to reveal themes and broader themes were conducted.

1.3.3 Trustworthiness of Research

Efforts were made to ensure trustworthiness (Lincoln & Guba, 1985) of the research. For instance, to ensure credibility—one of the most important factors in research trustworthiness (Lincoln & Guba, 1985)—the analysed data was collected via

interviews, a well-established data collection method; and one of the authors was very familiar with the culture of the institution from which data was to be collected (Shenton, 2004). Additionally, we checked possible factual errors in our interview data and the thematic categories by cross-checking with each research team member (Shenton, 2004). Furthermore, our observations and analytic memos were used in triangulating the interview data (Shenton, 2004). Transferability is built into the research as the interviews were in-depth which enabled adequately “thick descriptions” (Geertz, 1973) of the phenomenon of centralised-decentralisation to be written (Shenton, 2004). To ensure dependability and confirmability, a systematic documentation was made of the research procedures and interview questions used, raw data collected, and evidence of data analyses leading from research questions to conclusions (Yin, 2014) so that these could be subjected to external audit if needed. With the methodology narrated, the paper will transit to the findings of the research that is aligned to each research question.

1.4 Findings

1. What is the nature and characteristics of the practice of centralised-decentralisation in Singapore schools, and how could one possibly attempt to account for the motivation of this practice of centralised-decentralisation?

1.4.1 Evidence of Centralised-Decentralisation

Empirical evidence supporting the notion of centralised-decentralisation was uncovered in the research; academic G argues for its existence thus:

... our [system] is a hybridised one. That is...I think, take this phrase “tight-loose-tight”. Okay. Obviously you must look at the School Excellence Model (SEM) because this is the school’s self-evaluation and if teachers and principals are going to be judged by the quality of learning that they provide their students, then the School Excellence Model is the Ministry tool for judging. What does “tight-loose-tight” here mean? The Ministry sets out its policy objectives for education. That is the “tight”. What is the last “tight”? Last “tight” is exam [and the SEM]. ... So it is a uniquely Singapore thing.

Consistent with this notion, recent developments in education reflect this idea of centralised-decentralisation as evidenced in the slogan of “Top-down support for bottom-up initiatives” (MOE, 2005), where innovations from the ground are encouraged but within bounded directives from the Ministry. In this sense, centralised-decentralisation as a phenomenon is also termed as “guided autonomy” by School Leader Z. This cautious and pragmatic approach to education policies indicates that the Ministry maintains a considerable degree of power and authority at the top to guide the decentralised implementation of national directives, assuring that policy’s rationales are realised.

Another manifestation of this phenomenon of centralised-decentralisation is “tactical empowerment and strategic alignment”, as termed by Academic P. The latter has this to say about centralised-decentralisation:

Singapore is both centralised and decentralised, both sides of the same coin—it is not a contradiction but a paradox. It is centralised at the strategic level but decentralised at the tactical level.

Under this characteristic, schools agree to strategically align with national strategies. The alignment with the Ministry and national strategies derives a certain level of synergy at a national level. Then, at a local level, tactical empowerment exists in that the principal, together with the staff, has the autonomy to adapt policies (but still in fidelity to the policy’s rationales and other strategic objectives) within the broad remit of the strategic alignment, and customise education to the needs of the students, to best fit the profile of the students and meet their needs.

1.4.2 Motivation for Formulating Educational Policies in a Centralised-Decentralisation Manner

A philosophy of pragmatism (The Straits Times, 2015) is possibly the root rationale for the centralised-decentralised nature of school autonomy in the system. This pragmatism is directed towards allowing innovation and diversity to flourish to deliver the best student-centric education and yet to achieve coherence and direction at the national policy level.

According to Academic P, tactical awareness gives the school sufficient autonomy to tailor education (with fidelity to the policy’s rationale) that suits their own student profile, since schools are most aware of their pupils’ needs. Consequently, the education delivered is able to meet the diverse needs of students. The result is that, on the ground, certain levels of diversity and innovativeness are created, since schools have the leeway to serve their stakeholders in a way that best serves them. Despite these innovations and diversity, there is a sense of overall coherence and synergies at the system level with the assurance of attainment of the policy’s rationales. This overall coherence serves to facilitate the ease of structured policy refinement and the attainment of high academic achievement on a system-wide basis with the corresponding space for talent development. Academic P further notes: “[Centralised-decentralisation] also allows, at a national level, a much more coherent picture because synergy can be derived and there is a national direction”.

According to School Leader Z, choice that is afforded through the decentralisation aspect of centralised-decentralisation is needed to maximise the children’s education, and she puts it this way:

The school principal understands the school situation best especially in regards to readiness in taking on any initiatives. [It is] help[ful that] principals... bear in mind the constituents in our school community, like is it useful for the students. Therefore, principals pick and

choose initiatives based on the suitability to the school... For instance schools can't do everything from the toolkit as it is designed for a whole range of schools. The assumption is that you know the students' needs, what are the gaps in the school. Then you try to do things to help the students [based on] the kind of student profile that you have.

The HODs involved in the research share this viewpoint. For instance, HOD M says "generally top-down approach does not work as students have different needs and autonomy is important because there is no one-size-fits-all [approach]". Relating, HOD S says: "In different schools, because of the different profiles of the students, the emphasis is different, so autonomy helps to... customise certain programmes to better match the needs of the students".

1.4.3 Guidance to the Implementation of Decentralisation

In short, schools are not given 100% freedom; they operate on guided autonomy. School Leader Z has this to say: "So in a way, if you stand back and look at it, school autonomy is not freedom 100%. It is a sort of guided autonomy". HOD M sums it up neatly, "Firstly they must really understand the rationale of what is happening, why we are doing this. The rationale. Then if you believe in it, then you come on". As such, school decisions are made or guided by the bigger picture or policy imperatives and rationales set by the Ministry.

Other factors that could shape the exercise of autonomy include the Ministry's desired outcomes of education (viz. developing self-directed learners, confident persons, concerned citizens, and active contributors), student needs, school profile, and level of expertise in the schools. These disparate considerations are ultimately tied to the objective of implementing the policies in the manner that will benefit the students, i.e. to deliver a student-centric education. HOD M says:

I think we are given some leeway [in terms of MOE's directives and school needs]. Because there are a lot of initiatives, so we can't do everything. So it's based on school needs and also governed by our school's makeup. We've got to pick, we can't do everything, but what will benefit our pupils – that is what we want... It cannot be [MOE] dictate – you are going to do this, you are going to do that, because it also depends on expertise.

HOD H mentions the Ministry's Desired Outcomes of Education as the source of guidance for the operationalising of autonomy at the school level:

You have the freedom to choose from a variety of available choices, but these choices must be guided by guiding principles and most of the time guiding principles like the Desired Outcomes of Education, what we hope to achieve in nurturing the future and of course MOE from time to time will be sharing their policies so all these must be taken into account, in the context of autonomy.

1.4.4 *The Fractal Nature of Centralised-Decentralisation*

It was found that centralised-decentralisation is not a monolithic concept. That is, there is centralised-decentralisation at play at every level of the system. A useful metaphor to describe this phenomenon is “fractal” in the sense that there is a sort of self-similarity (Hutchinson, 1981; Song, Havlin, & Makse, 2005) of the existence of centralised-decentralisation at the various levels of the school system. For this research, based on the evidence, centralised-decentralisation has been found to exist at least at the school, department, and teacher levels.

Given the narrative thus far that centralised-decentralisation exists at the school level is already a foregone conclusion. Nonetheless, evidential quotations could be advanced here to reinforce the point: “And I think [school] autonomy also means that you have a certain level of understanding with your superintendent; principals pick, choose and customise initiatives based on needs of the school,” says School Leader Z. School Leader H articulates school-level autonomy in terms of choice: “Schools have the autonomy to decide which MOE initiatives to adopt and not follow ‘blindly’ and not take on too many irrelevant roles”. Relating, School Leader Z uses the choice metaphor in a buffet restaurant:

If I use the analogy of the 10 dishes, usually it's HQ who say these are the 10. But then it could mean for all the schools and system but then mine is a secondary school. Then mine is an... autonomous school. Then there will be several things of the 10 which is not so relevant. This is what it means... So I must look at it.

In these examples, the Ministry and the superintendent represent centralised forces as they exist to provide direction, and the school leaders' ground-level decisions represented autonomy or decentralisation at play.

At the department level, centralised-decentralisation also exists. According to HOD M: “The autonomy [at the department level] comes in where the Middle Managers work on their plans and see how they achieve this [the school's decision]”. At the teacher level, centralised-decentralisation also exists; according to HOD S, “within the classrooms teachers have the autonomy to make decisions ‘within their own area’... teachers have the autonomy to do things differently, i.e. the way they want to motivate the students. Teachers are encouraged to use their own methods to motivate their students”. Again, in these examples, the school represents the centralised force as it makes guiding decisions for teachers, who in turn use the autonomous space given to them via the notion of centralised-decentralisation to customise their teaching approaches to meet the needs of students.

In sum, Academic P says:

Centralised-decentralisation, if you just use that phrase – can be applied to different levels so on the one hand, if you are talking at the national levels, there is the relationship between school and MOE HQ... But the same can be said of the principal and the rest of the staff at the school level. School department. So, up and down [the system], you can use the same concept.

The quotation demonstrates that the non-monolithic nature of centralised-decentralisation exists at the various levels of the Ministry-school system, i.e. a

pattern of self-similarity or fractal phenomenon exists (Hutchinson, 1981; Song et al., 2005). The non-monolithic nature of centralised-decentralisation is a layered notion, and we will explicate the other layer next.

1.4.5 The Differentiated Nature of Centralised-Decentralisation

Within the school's departmental level, decentralisation or tactical empowerment to HODs and teachers is not issued *carte blanche* style; instead, within the school department level, there is differentiated autonomy. Empowerment is provided by principals to middle managers based on factors such as competence, experience, and past success. HOD S notes that he "exercised less autonomy as a beginning HOD. Autonomy given is dependent on the individual's skills; on his/her track record, if the person is already competent in his basic roles and responsibilities". Other considerations include the importance and level of publicity of the programme, and decentralisation is provided in "measured proportion". That is, differentiated empowerment/autonomy exists within the local school departmental level.

2. Given the tensions involved in the co-existence of centralisation and decentralisation, how is the balance in centralisation-decentralisation (Hung & Chua, 2015) maintained?

1.4.6 A Delicate Balance Between Centralisation and Decentralisation

From the research, it was found that there is a delicate balance between the forces of centralisation and decentralisation at work. Academic P likens the centralisation-decentralisation tension to a mother-daughter relationship to illustrate the delicateness of the relationship:

A concerned mother [has]... a teenage daughter, you are quite worried. Eh you go out, you better start setting some boundaries. You better come back at 11 pm. And if certain boys call you, you better tell me I want to know. Things like that. But there is always that very delicate balance, right?

Because of the delicate nature between centralisation and decentralisation, Academic G says: "So I think balancing centralisation and decentralisation is always going to be dynamic, always a work in progress".

Before transiting to the next section on how such a balance could be maintained, an authors' note on the nature of the balance is in order. As the rationale and other strategic dictates are determined by the Ministry, naturally, the balance is calibrated

by the Ministry, and it might be a moot point on whether there is still a balance of centralisation and decentralisation in the first place. It is the authors' argument that a balance could still be said to exist, or at least, an *enlightened* balance, since if the forces of centralisation are too strong, the system will not be able to benefit from the initiative and innovation arising from the school ownership of the policies. As a result, it is to the advantage of the Ministry that while it dictates the strategic rationale, intents, and other strategic parameters of the policies, it does give space for schools to own aspects of the policies and to adapt the implementation of the policies.

The delicate balance between centralisation and decentralisation (Hung & Chua, 2015) needs maintenance, and it depends on a number of factors, one of which is the calibrated trust from the centralised powers to the school leaders to practice their craft.

1.4.7 Trust

A relationship of trust is needed to negotiate the autonomous space between the Ministry and school. For instance, School Leader Z acclaims: "So autonomy comes with trust". Academic P unpacks the need for trust in more analytical terms:

But there is always that very delicate balance right. That delicate balance is precisely one of — where do you draw? Where exactly should you draw the line. Second, the line is not a static line, it depends also on the trust level, but trust in itself is not a static concept either. Critical incidents affect certain things. So one of the things that we have found in this situation is of course how much can one trust and how much one can handle one's anxiety.

The Ministry needs to trust schools to exercise school autonomy responsibly. In addition, being highly contextualised, i.e. it is not "a one-size-fits-all" situation, autonomy is perceived differently by schools because of their different contexts, visions, missions, and pupil and staff profiles. As such, the Ministry needs to have a broad overview of the various school typologies and having put in place safeguards, trust in a calibrated manner, that schools will play their role responsibly in tactically manoeuvring within the strategic imperatives of the Ministry. There is another shade to the relationship of trust between the Ministry and schools. HOD M articulates thus: "Autonomy based on professional trust is given but monitoring is important". That is, with autonomy, there is the need for monitoring. The feedback systems reflected in the previous section also serve the purpose of gathering data and knowledge for monitoring, besides learning.

At a level below, i.e. at the interface between school leaders and teachers, the issue of trust plays out again. To HOD S, "the interpersonal relationship and trust between teachers and school leaders is very valuable. With that, then the idea of autonomy can be approached in a genuine way". Furthermore, since the understanding of autonomy varies from generation to generation of teachers, e.g. younger generation vs older generation of teachers, the issue of trust between school leaders and teachers is just as important, if not more important.

1.5 Discussion

1.5.1 *A Role for Everyone*

To operationalise the tactical empowerment within strategic alignment to national perspectives, or “to coordinate the good intentions” as how respondent P has put it, one could possibly advance a-role-for-everyone concept, similar to the Confucian concept of *Jun Jun, Chen Chen, Fu Fu, Zi Zi* (君君, 臣臣, 父父, 子子). That is, there are specific roles that everyone can take at every level of the system, together with the associated proper conduct, for social order to occur (Fairbank & Goldman, 2006). According to Academic P:

I think the government ought to still do the government thing but they would restrict themselves to more strategic things. Then on the ground the people will also do their own things, but will restrict to the things they found strategic for themselves. Then this system will probably work.

Juxtaposing the earlier ideas, the people on the ground will need to align themselves to the rationales and policies in question and so in a way find their own responsibilities. The same respondent noted that if the good intentions are uncoordinated resulting in the absence of clear direction, then chaos will result, leading to the suboptimal functioning of the system. The a-role-for-everyone concept might explain why despite the bounded freedom of centralised-decentralisation, evidence from the research suggests that teachers seem to be comfortable in supporting the direction given by leadership at the school level and at the Ministry level.

1.5.2 *Do Teachers Really Want Autonomy?*

Though teachers may support the leadership direction, it is not the same thing as wanting more autonomy. Intuitively it is taken for granted that with increased autonomy, teachers will claim more ownership of their work, which might possibly lead them to be more willing to contribute and to put in more effort; this is the natural expectation of ours. However, it was found in the research that not every teacher appreciates the provision of school autonomy to him or her. Actually, the situation is more nuanced, i.e. teachers themselves are not a monolithic bloc. According to HOD S, “while some teachers want autonomy, some [would] rather not have [it]”. According to School Leader Z:

They [teachers] don’t want to be accountable to people outside, you know. Right so, with autonomy there is responsibility. They don’t want the responsibility. They don’t want to be held accountable for something.

The apprehension of autonomy experienced by these teachers can be perceived as a result of the culture of conformity and aversion to accountability, which was largely absent during a more centralised system where responsibility lies mainly

upon the upper echelons of the whole system. This unexpected finding thus suggests that while autonomy has cascaded downwards to schools, the fruits of autonomy can only be more fully realised if autonomy is accompanied by a culture of risk-taking. While we mention about fractals in terms of policy implementation in the preceding sections, the most challenging aspect for leaders is perhaps to create fractals in terms of motivation for actors within and across the different layers of ecology. Perhaps only then will the notion of autonomy be fully embraced and harnessed. Recent developments in the Ministry have worked in the direction of encouraging teachers to embrace and harness the autonomous space to work for their students. Examples of such developments include the setting up of the Singapore Teachers Academy to nurture a “teacher-led culture of professional excellence centred on the holistic development of the child” (MOE, 2016b), as well as the establishment and enhancements made to the teaching track of career development, to make it attractive for teachers to assume teacher leadership roles.

1.6 Implications for Practice

In the implications section, the authors will focus on the qualities that school leaders and teachers need to possess in order to successfully negotiate and manoeuvre around the tension-fraught space of centralised-decentralisation. Two qualities are posited to be necessary: ecological leadership and teacher professionalism.

1.6.1 *Ecological Leadership*

In negotiating and manoeuvring the oxymoronic situation of centralisation and decentralisation, leadership will be critical. School Leader H comments: “School autonomy is dependent on the leadership...”. Similarly, HODs S and M share the same sentiments as School Leader H.

A corollary is the question: “What kind of leaders or leadership would be needed?” The idea of ecological leaders (Toh, Jamaludin, Hung & Chua, 2014)—who move and function at multi-perspectival levels of the system—is advanced as possibly a suitable view of leadership for operating within this environment of centralised-decentralisation nature of school autonomy. Ecological leaders possess an awareness of what is happening at every level of the system and are able to appreciate the impetus and motivation for the policy rationale and content. Besides making sense of the demands associated with the various levels of a system, ecological leaders need to be able to make connections and manage the tensions and the dilemmas inherent in the demands of the various levels of the system. Besides, ecological leaders can take effective actions to address the situation at hand by expanding the resource space (like staff and time) within the school or ecosystem. For example, if the situation calls for it, the ecological leader is able to bring the

special qualities of staff to the forefront because of their potential to actualise the tactical plans within the strategic vision of the Ministry or is able to persuade the Cluster Superintendent to delay the implementation of the policy to another year.

Another characteristic of such leaders is one who is not only aware, appreciative of, and is able to connect the multi-perspectival view of the system, but also one who could mitigate both top and bottom expectations and needs through fostering and engaging in dialogue with the various levels of people in order to bring about coherency and co-ordination between the demands of the top and the needs of the bottom. For example, ecological leaders will be able to align the schools' and teachers' directions to the vision of the Ministry, or the ecological leader is able to give feedback to the Cluster Superintendent with regard to the issues and challenges faced on the ground in the course of the policy implementation. Two evidential quotations provide a reality check on the concreteness of the two examples just offered. HOD M says that in such a leadership stance, there is "a lot of dialogic process going on. Suggestions are valued and discussed. The background/big picture is given". Academic P emphasises: "As centralised-decentralisation [involves]... strategic alignment... [and]... tactical empowerment, so you must be courageous to interpret as appropriate... and yet have the wisdom to know exactly how to do it so that you can fulfil the best of both worlds".

To conclude this section, ecological leaders look for suitable opportunities to expand the resource space (e.g. capacity and time) within the school. Ecological leaders could also develop a shared and coordinated understanding and coherency of top-down policy rationales and other imperatives and bottom-up schools' and teachers' needs and challenges. If people without the right ecological competencies are in place, breakdowns can occur, and the system will not function properly as there might not be alignment and the envisaged synergies in a centralised-decentralisation system.

1.6.2 *The Professionalism of Teachers*

Besides leadership, the professionalism of teachers also matters in enabling the whole school to confidently and effectively negotiate the tensions and dilemmas of a centralised-decentralisation space in which Singapore schools are located. Teacher capacity, which is a constituent of teacher professionalism (Evans, 2008; Hargreaves, 2000; Whitty, 2000), is the angle of our discussion. For instance, given the autonomous space to choose suitable pedagogies to enact the curriculum, *capable* teachers *could* implement suitable pedagogies to successfully reach out to the students. HOD M notes "training is important, for mastery". In the interviews, the HODs cited many instances and examples of training in their schools, such as the learning of best practices from other schools, school-based professional development sessions on co-operative learning, and training conducted by the Ministry on, for example, holistic assessment to enable teachers to implement the holistic assessment policy.

Academic G provides another perspective on the importance of teacher professionalism by situating in notions connected with empowerment (Hargreaves & Goodson, 1996) and being reflective professionals (Schön, 1983): “There is a conscious effort to professionalise the teacher and to professionalise the teacher means to empower... teachers... to treat them as professionals, it is to treat them as capable reflective individuals”. That is, the associated empowerment and reflectiveness of teachers that come with professionalism will enable them to take advantage of the autonomous space created by centralised-decentralisation to deliver a quality education to students.

1.7 Conclusion

Although centralised-decentralisation might not be a uniquely Singaporean approach, the demonstration of the existence of self-similarity or fractal-like repetition across the various levels of the Ministry-school system might suggest that centralised-decentralisation is actually practiced at the ground level. It is not just an abstract construct to guide the planning of educational policies but that the spirit of centralised-decentralisation is adhered to by school leaders, HODs, and teachers. The latter is arguably the uniqueness of the centralised-decentralisation phenomenon in Singapore. That such a spirit is so strongly held could be accounted for via the tight and self-locking assemblage of performance appraisal policies and practice, as well as the continuous reinforcements of the messages of centralised-decentralisation at the cluster meetings and in the different policies formulated (Chua et al., 2016). Implicitly embedded in the messages is one, as elaborated in Chua et al. (2016): the Confucian cultural value of a role for everyone, which serves for the orderly development of the Singapore education system.

Besides this characteristic of fractals, the research has also uncovered a few other characteristics of the centralised-decentralisation in the Singapore education system: pragmatism as a driving philosophy for the practice of centralised-decentralisation, differentiation in the practice of the phenomenon by school leaders, and the need to balance the tensions of centralisation and decentralisation through the exercising of calibrated trust by the Ministry.

Finally, as evidenced by the voices of the research subjects, a balance between centralisation and decentralisation allows, at a national level, for overall policy coherence (Mahbubani, 2013) to emerge, thus enabling synergies to be derived. Yet, the innovative agency of the ground could be tapped. In a way, it allows the system to achieve the best of both worlds, of agency and creativity, and of governmental guidance (Chua et al., 2016). This best of both worlds could arguably help to mitigate the “duality... [of]... market imperfections and government imperfections” that plague the effectiveness of many instances of public (or educational) policies (Wu & Ramesh, 2014, p. 305) planning and implementation. In other words, imperfections or less-than-optimal outcomes will result when either the people (or market) or the government is too dominant at any one point in time; a synergistic partnership needs to be calibrated between the government and people (or market).

Appendix: Sample Interview Questions

1. Based on your understanding of the academic literature and/or your work experience, how does the Singapore education system approach the giving of autonomy to schools?
2. What are some of the key characteristics of Singapore's approach to school autonomy?
3. What would you say are the key approaches of the Singapore education system to maintaining centralisation?
4. Do you think the system tries to balance decentralisation and centralisation forces at the same time? If so, how do you think this is played out?
5. What are some of the approaches that the Singapore education system takes for the reform of the curriculum?
6. How are the different approaches similar or distinct from one another?

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