
Title	Leading from the middle: Vice-principals in Singapore as boundary spanners
Author(s)	Jeanne Ho, Trivina Kang and Imran Shaari

Copyright © 2020 Emerald Group Publishing Limited

This is the author's accepted manuscript (post-print) of a work that was accepted for publication in Journal of Educational Administration, 59(2), 145-161.

The final publication is also available at <https://doi.org/10.1108/JEA-05-2020-0123>



Leading from the middle: Vice-principals in Singapore as boundary spanners

Journal:	<i>Journal of Educational Administration</i>
Manuscript ID	JEA-05-2020-0123.R3
Manuscript Type:	Research Paper (Qualitative)
Keywords:	leading from the middle, boundary spanner, vice-principal, assistant principal, deputy principal

SCHOLARONE™
Manuscripts

1
2
3 Leading from the middle: Vice-principals in Singapore as boundary spanners
4
5
6
7
8

9 Abstract

10
11
12 **Purpose:** This paper examines leading from the middle, which is consistent with calls to distribute
13 leadership, while expanding the direction of influence, from the normal top-down to include a
14 bottom-up or lateral direction. The paper proposes that the position of the vice-principal enables
15 the role incumbent to lead from the middle as a boundary spanner. The research question was what
16 leadership from the middle looks like for vice-principals.
17
18
19
20
21
22

23
24 **Methodology:** The study consisted of interviews of 28 vice-principals and 10 principals in Singapore.
25 A mixed case and theme-oriented strategy was adapted, with member checking with each vice-
26 principal.
27
28
29

30
31 **Findings:** The findings indicate that in leading from the middle, vice-principals play boundary
32 spanning roles of connecting, translating and brokering: a) connecting between organisational
33 levels, b) translating between vision/direction and actualisation, c) connecting between middle
34 managers, and d) brokering and translating between the ministry and the school.
35
36
37
38
39

40
41 **Originality:** Leading from the middle is a nascent concept which is worth exploring, given the
42 complexity of educational systems with multiple ecological levels, and the need for leadership to
43 create coherence between the levels.
44
45
46
47

48 **Keywords:** leading from the middle, boundary spanner, vice-principal, deputy-principal, assistant
49 principal
50
51
52
53
54
55
56
57
58
59
60

Introduction

This paper examines the concept of leading from the middle, which is consistent with calls to distribute leadership while expanding the direction of influence, from the more typical top-down to a bottom-up or lateral direction. The paper argues that the position of the vice-principal enables the vice-principal to lead from the middle, acting as a boundary spanner.

The vice-principal occupies a unique position in the school's organisational hierarchy: closest to the principal, with the responsibility to deputise for the principal when the latter is away, and with the potential to become a principal, but second in position to the principal. Our proposition is that while the position of the vice-principal might be subordinate to the principal, leading from the second chair (Bonem and Patterson, 2005; Deal, 2015) enables the vice-principal to exert influence upwards, to the first chair, and downwards to the rest of the school staff, effectively leading from the middle. Our research question was "What does this leadership from the middle look like for vice-principals?".

The position of vice/assistant/deputy principal is an established one, starting in the 1940's in the States (Scott, 2011) and in 1979 in Singapore (Ho and Koh, 2017). This study follows from Guihen's (2019) suggestion to research the leadership practice of vice-principals as there is a lack of research on vice-principals, as affirmed by other researchers (Cranston *et al.*, 2004; Harris *et al.*, 2003; Militello *et al.*, 2015).

Literature review

Educational leadership literature suggests vice-principals are subjected to the whims of principals (Arar, 2014; Celik, 2013; Rintoul and Kennelly, 2014), with fewer opportunities to lead in reality than desired (B. G. Barnett *et al.*, 2012; Hausman *et al.*, 2002; Militello *et al.*, 2015), or stuck in the middle between management and teachers (Baker *et al.*, 2018; Kwan and Li, 2016).

1
2
3 While acknowledging that vice-principals can sometimes be stuck in the middle, we suggest
4
5 that the vice-principal's position between the principal and the staff can be an advantage, enabling
6
7 vice-principals to lead from the middle. The unique position of the vice-principal, with its proximity
8
9 to the principal, while simultaneously being accessible to middle managers and teachers,
10
11 accentuates the practice aspect of distributed leadership, in which the leadership that emerges is
12
13 due to the interactions amongst leaders, followers and their situations (Spillane *et al.*, 2004), and the
14
15 same person can be a leader or a follower in different situations. From this perspective, the
16
17 leadership practice of vice-principals is worthy of note, because the vice-principal can be both a
18
19 follower of the principal and a leader to the rest of the staff, with the potential to influence the
20
21 principal in certain circumstances.
22
23
24

25 26 *Leading from the middle* 27

28
29 The concept of leading from the middle is interpreted in two ways. The first, as interpreted by the
30
31 National College for School Leadership in the United Kingdom (2002), sees leading from the middle
32
33 as leadership by those at the 'middle levels' in school, referring mainly to heads of departments. For
34
35 these middle leaders, their role is to translate strategic organisational goals to their unit's operations
36
37 (Farrell, 2014). In a school, the role of heads of department is to translate the macro vision and
38
39 goals of the principal to the teachers' micro functions of teaching students (Timperley, 2005). This
40
41 translation of macro vision and goals into practice is also advocated as one key role of the vice-
42
43 principal (Rutherford, 2003), and of persons leading from the second chair (Deal, 2015).
44
45
46

47
48 The other interpretation of leading from the middle is by Hargreaves and Ainscrow (2015),
49
50 who are concerned with enabling system change, and view districts as leading system change from
51
52 the middle. Although this concept of leading from the middle is from a system perspective, Fullan
53
54 (2015) argues that it can be used at other levels. Depending on the ecological system being studied,
55
56 schools can be in the middle (within a district) or vice-principals can be leading from the middle
57
58 (within a school).
59
60

1
2
3 In both interpretations, the leading agent has the potential to influence both upwards and
4 downwards, and to support changes from the top as well as ideas from the ground (Fullan, 2015; A.
5 Hargreaves and Ainscow, 2015). This notion of influencing upwards is less emphasised in the
6 literature on leadership, which tend to position influence as downwards (from the principal to the
7 staff), though with opportunities for lateral influence (from informal teacher leaders to other
8 teachers). We use the concept of boundary spanning to expand this notion of influencing upward
9 and laterally. Boundary spanning occurs “when individual or collective agents connect entities
10 separated by a boundary by negotiating the meaning and terms of relationship between them”
11 (Kislov, 2018, p. 1).
12
13
14
15
16
17
18
19
20
21
22
23

24 *Boundary spanning*

25
26 The concept of boundary spanning is found in different settings: higher education (Pryor and
27 Henley, 2018; Van Schyndel *et al.*, 2019), the health sector (L. Lee *et al.*, 2014), business (Marrone *et al.*,
28 2007), governance networks (D. H. Hargreaves, 2012; van Meerkerk and Edelenbos, 2018) and
29 schools (Coldren and Spillane, 2007; Ho and Ng, 2017; Mayger and Hochbein, 2019). The literature
30 informs us that boundary spanning involves connecting, brokering and translating. These practices
31 may overlap, particularly brokering across communities, which usually involves some form of
32 translation to enable sense making (Harris, 2003; Toh *et al.*, 2014).
33
34
35
36
37
38
39
40
41
42

43 *Connecting in Boundary Spanning.* Connecting separate entities links boundary spanning to
44 leadership practice because it involves “engaging multiple diversely positioned individuals in a
45 common cause” (Pryor and Henley, 2018, p. 2213). Indeed, Yip and colleagues’ (2016) definition of
46 boundary spanning resonates with developing the organisation’s capacity and commitment to
47 innovate (Leithwood and Duke, 1999) and raising people to “higher levels of motivation and
48 morality” (Geijsel *et al.*, 2003, p. 230):
49
50
51
52
53
54

55
56
57 ... the capacity to establish direction, alignment and commitment across boundaries in
58 service of a higher vision or goal (Yip *et al.*, 2016, p. 3)
59
60

1
2
3 Miller (2008) argues that all educational leaders serve as boundary spanners to some extent,
4
5 including superintendents, principals, and counsellors. Although boundary spanning appears to be
6
7 mainly across organisation boundaries, spanning across internal vertical and horizontal boundaries
8
9 aims to break down functional silos (L. Lee *et al.*, 2014; Prysor and Henley, 2018). In a school context,
10
11 Coldren and Spillane (2007) identified the principal as the boundary spanner who connected
12
13 management to teachers, linking leader and teacher practice. In another study, the principal and
14
15 vice-principal acted as boundary spanners between the heads of department and lower ranking
16
17 middle managers (Ho and Ng, 2017; Ng and Ho, 2012). In brief, leaders as boundary spanners help to
18
19 connect actors across levels to work towards a common cause.
20
21
22

23
24 *Brokering in boundary spanning.* Brokering is about acting as an intermediary across
25
26 boundaries, usually between policies and their implementation (Harris, 2003; Toh *et al.*, 2014). In
27
28 the school context, principals generally are the key persons brokering to reach consensus between
29
30 schools and the wider community, including parents and the ministry (K. Barnett and McCormick,
31
32 2012). Toh and colleagues (2014) observed that principals were able to broker the ministry's policies
33
34 and the teachers' interpretations and implementation of those policies, forging critical connections
35
36 across subsystems. Brokering practices usually go beyond school's organisational boundaries,
37
38 involving leaders in managing relationships between external and internal stakeholders.
39
40
41

42
43 *Translating in boundary spanning.* Translating entails the operationalising of policies and
44
45 high-level management decisions to daily practices (Busher, 2005; Farrell, 2014; Timperley, 2005). In
46
47 translating the policies of senior management into the practice of individual classrooms, the
48
49 department heads also represent their colleagues' views about the challenges they faced to senior
50
51 management. This is an example where brokering is within an organisation, across communities,
52
53 and requires translation of information.
54
55

56
57 The vice-principal's absence from the literature on boundary spanning is conspicuous,
58
59 particularly since the vice-principal, like the principal, represents senior management and thus has
60

1
2
3 the potential to link leader and teacher practice (Coldren and Spillane, 2007). In Singapore's context
4
5 especially, many vice-principals stay in the same school for a longer period than the principals who
6
7 are rotated very six to eight years. This means that vice-principals are likely to have more
8
9 established relationships with the teachers, putting them in a position to connect teachers with a
10
11 new principal or direction. In addition, since the Singapore vice-principal has similar access as the
12
13 principal to the Ministry of Education's policies and thinking, they potentially play a role in brokering
14
15 the Ministry's policies, and in helping their teachers to translate and operationalise these policies in
16
17 the classrooms. Findings from our study suggest that the vice-principal performs boundary spanning
18
19 and that this is possible because of their position in the middle between staff and the principal,
20
21 between ground and policy.
22
23
24
25

26 **Methodology**

27
28
29 This study employed purposive sampling (Miles and Huberman, 1994) to select Singapore vice-
30
31 principals with varied age range, school grade level, years of experience as a school leader and
32
33 number of schools served (Table I). One key selection criterion was the participant's work experience
34
35 as a vice-principal, with a minimum criterion of one year as a vice-principal. We chose 17 vice-
36
37 principals who had served more than 6 years as vice-principals. Of the remaining 11 who had fewer
38
39 years of experience, 7 had served at least two principals.
40
41
42

43 Table I

44
45
46 While this study's focus was on vice-principals, principals were interviewed to triangulate
47
48 the practices reported by vice-principals. To encourage vice-principals to share candidly, we avoided
49
50 recruiting principals and vice-principals from the same school. We interviewed 10 principals, again
51
52 with varied profiles, but with at least five years as a principal so that they could share their
53
54 experience working with vice-principals (Table II). The diversity in vice-principals' profiles and
55
56 experiences and the inclusion of principals to provide the latter's perspectives supported data
57
58 triangulation (Lincoln and Guba, 1985).
59
60

Table II

This exploratory qualitative study employed semi-structured interviews to examine the leadership activities performed by the vice-principals. Each participant participated in a 1 to 1.5-hour interview, which was audio-recorded and transcribed.

Data analysis and validation process

The interview data collected were coded independently by two researchers using Nvivo 12. The analysis was mainly grounded in approach. The concepts of leading from the middle and boundary spanning arose from the generated codes, which included the codes in Table III. There were other codes which indicated that the vice-principals perform more traditional leadership activities like observing lessons, giving feedback on teachers' performance, vetting papers, checking students' files, and developing staff. However, the three sets of codes in Table III stood out in that they suggested leadership practices not usually indicated in the existing literature on vice-principals, and thus the motivation for this paper.

Table III

To minimise the danger of analysing the multiple interviews at too high a level of inference, which may result in the loss of context specific details, we adapted a case-oriented and variable-oriented strategy (Miles and Huberman, 1994). Individual narratives outlining the roles of the vice-principals were constructed for each vice-principal, followed by developing a cross-case narrative based on common themes, then verifying with the individual narratives if and how the common themes were demonstrated. Each narrative was sent to the corresponding interviewee for member checking (Carspecken, 1996). There were 18 responses, which mainly agreed with the analysis or suggested minor changes. The findings from each narrative were input in separate cells in an excel spreadsheet, facilitating easy comparison across the narratives for confirming or disconfirming

1
2
3 evidence. Key findings were discussed during monthly meetings, which involved two other
4
5 researchers, enabling investigator triangulation (Janesick, 1994).
6
7

8 After analysis of the first 20 vice-principals' interviews, in addition to the established interview
9
10 questions, preliminary findings were shared during the interviews of the remaining 8 vice-principals
11
12 to check the transferability of these findings (Denzin and Lincoln, 2003). All 8 vice-principals affirmed
13
14 that the leadership practices were comprehensive and performed by them, though to varying
15
16 degrees depending on the contexts.
17
18

19 20 *Context of study* 21

22
23 As the context in which vice-principals work is key in mediating the leadership they perform, we will
24
25 briefly explain the context for Singapore vice-principals. In Singapore, vice-principals are referred to
26
27 as "school leaders" by the ministry, by staff and in official documents, together with the principals
28
29 (Ho *et al.*, 2019). Vice-principals attend Director of School meetings, monthly Cluster Board
30
31 meetings, and the annual Work Plan Seminar where major ministry policies are discussed, thus
32
33 having access to the ministry's communication of key policies, same as the principals.
34
35
36

37 Second, the bulk of Singapore vice-principals were previously Heads of Departments (HOD)
38
39 and so they are familiar with the roles of these middle managers. If the vice-principal is assigned to
40
41 the school where s/he was previously a HOD, s/he may know the HODs more intimately than the
42
43 principal, particularly if the principal is newly rotated to the school. Another context which is
44
45 noteworthy in Singapore schools is the large number of middle managers, comprising on average of
46
47 10-12 HODs, who form the senior management committee. This includes Year Heads who take care
48
49 of student welfare and a Head who oversees student discipline, relieving Singapore vice-principals of
50
51 what is perceived to be a supervisory function (Celikten, 2001; Hausman *et al.*, 2002; Hernandez *et*
52
53 *al.*, 2016; Oleszewski *et al.*, 2012) . The large middle management layer also suggests a need to
54
55 coordinate, negotiate and mediate between the various middle managers, given evidence that
56
57
58
59
60

1
2
3 departments tend to operate in silo and also exhibit sub-cultures (Bennett, 1999; Ho and Ng, 2017;
4
5 Prysor and Henley, 2018).

6
7
8 In general, vice-principals in Singapore are chosen from the pool of HODs, based on their
9
10 performance, and a selection process which includes being interviewed by top management in the
11
12 Ministry of Education. All newly appointed vice-principals must attend an induction programme
13
14 which is spread over their first two years. Vice-principals who are assessed as performing well by
15
16 their principals and cluster superintendents may be nominated to attend a Leaders in Education
17
18 Programme, which to date remains the key programme to prepare potential principals (Ho and Koh,
19
20 2017; National Institute of Education, n.d.).
21
22

23
24 With respect to officially defined roles, the Ministry of Education provides a role profile for
25
26 vice-principals. However, this role profile mainly repeats the roles in the principal's role profile, with
27
28 the additional phrase "partners principal in/to", leaving it ambiguous what it is that vice-principals
29
30 do in practice. This is what partly what motivated the design and conduct of this study on vice-
31
32 principals in Singapore, to hear directly from vice-principals what it is that they do in the espoused
33
34 practice of partnering their principals.
35
36

37 38 39 *Limitations*

40
41 Although 28 vice-principal participants constitute a relatively big number for a qualitative study and
42
43 there was a variety of profiles and experiences, this number represents less than one percent of the
44
45 number of vice-principals in Singapore (over 500 in 2018). However, despite slight variations in the
46
47 leadership practices shared by the vice-principals, the key leadership practices highlighted were
48
49 consistent. Finally, interviews of the principal participants affirmed these practices. While no one
50
51 participant provided a complete picture of the vice-principal's leadership practices, we contend that
52
53 the combination of 28 vice-principals and 10 principals provides a sufficiently comprehensive and
54
55 trustworthy picture of how the vice-principals lead from the middle in Singapore.
56
57
58
59
60

Findings

The findings indicate that in leading from the middle, vice-principals perform boundary spanning practices: a) connecting between organisational levels, b) translating between vision/direction and actualisation, c) connecting between and across middle managers, and d) brokering and translating between the ministry and the school. All the boundary spanning practices were corroborated by at least five participants (both vice-principals and principals).

The concept of “leading from the middle” was mentioned by one vice-principal, Kamsida binte Musa, who was familiar with the work of Michael Fullan (2015). She perceived leading from the middle as possible due to the vice-principal’s “proximity” to two constituencies, commenting that when one leads from the middle, one gets “a certain impact and role”. Although Kamsida was the only one who mentioned “leading from the middle”, there were other vice-principals and principals who expressed similar concepts, albeit using different metaphors. The main metaphor used was the vice-principal as a “bridge” (5 vice-principals) to “connect” different stakeholders or information (4 vice-principals), which resonates with boundary spanning. Principal Marie Lim referred to the vice-principal as the “middle person or the communicator, if not the messenger, of the school leadership team” who engages the middle managers and the teachers.

For each boundary spanning practice, we will share at least one vignette, as described by the participant, which illustrates the practice. We have chosen this approach so that readers have access to the raw data and can judge how transferable the boundary spanning practices are to their contexts, and how credible our interpretations are (Lincoln and Guba, 1985). All names mentioned are fictitious.

Connecting Between Organisational Levels

Vice-principal Phang Yee Mun commented that a “pretty obvious” role for a vice-principal was to “support” the principal. This support appeared to be two-pronged; to support the principal in his/her

1
2
3 role as head of the school “to bring the whole school forward”, as explained by vice-principal
4
5 Michelle Palmer; and to support the principal as an individual, with his/her peculiar idiosyncrasies,
6
7 philosophies and leadership styles.
8
9

10 Regarding the first, vice-principals perceived themselves as an important bridge between the
11
12 principal’s vision and the staff who help to realise this vision. To play this bridging role, vice-
13
14 principals had to first be a follower to the principal, accentuating how the situation impacts who
15
16 constitutes the leader and the follower and how these can interchange (Spillane, 2006; Spillane and
17
18 Orlina, 2005). Various vice-principals saw it as their responsibility to try to understand their
19
20 principals, “catch their vision”, “incorporate” and “unpack” messages and ideas from their principals
21
22 into their communication with staff. The principals agreed that the vice-principals play a key role in
23
24 helping the middle managers and staff to connect the dots between what the staff are doing and
25
26 what the principals desire to be done.
27
28
29

30
31 Principal John Ang explained his expectations of the vice-principal:
32
33

34 Plan well and know the pulse of the principal and what we consider important. So, being
35
36 aligned to what I’m doing. being able to build on what I’ve said. For example, I’ve shared
37
38 something at contact time and at every opportunity, contact with other people that I don’t
39
40 have contact with, to be able to make whatever I said come alive and help them to see the
41
42 connect. Because sometimes they don’t see the connect, so we need different layers of
43
44 people, and so, alignment is number one [role of the vice-principal].
45
46
47

48 While vice-principals articulate their role in supporting the principal in fulfilling the latter’s role as
49
50 head of the school, it is perhaps revealing that the stories they tell seem to be more about helping
51
52 staff to adapt to a new principal or to a principal whose leadership style or thinking was not aligned
53
54 to the staff’s thinking. Tan Siew Lian shared how she had to spend effort engaging her staff to work
55
56 with a new principal:
57
58
59
60

1
2
3 You need to understand your principal. So when she [the principal] does that, when the
4
5 staff don't understand, you got to learn how to ...engage that teacher to explain...more of
6
7 influencing them individually if they have problem with the new principal. ... I mean I always
8
9 tell them, I may not agree with her [the principal] totally hundred percent, but I will still
10
11 bring my point across to her and after that, it's her call. She is still the principal.
12
13

14
15 However, the influence is not unidirectional. While vice-principals try to influence their staff
16
17 to understand the principal's thinking and direction, they also try to influence upwards their
18
19 principals, such as by using data and statistics to "try to impact" the principal's thinking and
20
21 decisions (5 vice-principals). Nur Azli Binte Johan explained that she kept her principal updated so
22
23 that her principal trusted her and left her to independently lead.
24
25

26
27 In addition, vice-principals view their ability to sense the ground and to advise the principal
28
29 based on this sensing as important in enabling the principal to make decisions which, as Mohamed
30
31 Razali put it, are "closely related to what the teachers wanted". Consistent with the practice of a
32
33 boundary spanner, vice-principals view themselves as representing a constituency, serving as "a
34
35 voice of the teachers" (2 vice-principals) to bridge the needs of the teachers and of the school.
36
37

38
39 Vice-principal Jeffrey Ong shared how "I will give my piece, my advice [to the principal], on
40
41 the ground, what are the sentiments like? Because what you have in mind, while it is very beautiful,
42
43 there are certain parts may not gel so well. I will advise my principal." Hayati binte Munir explained
44
45 how when it comes to dealing with student discipline and wellbeing, because "that's the part where
46
47 I know more about the students, because I work directly with the teachers and the year heads, ...So
48
49 that's when I feel a little bit like I am a partner [to the principal] rather than just taking the cue from
50
51 the principal...Rather than, he says, and I carry it out". In such cases, Hayati feels that she influences
52
53 her principal with her more intimate knowledge of the students and she co-makes decisions with
54
55 him.
56
57
58
59
60

1
2
3 Tan Lee Yong provides an example of the vice-principal influencing downwards and upwards,
4
5 from the middle. Lee Yong spoke to the Humanities head about the need to enhance the students'
6
7 general knowledge. Having secured the head's agreement to give his suggestion "a thought", Lee
8
9 Yong then shared the idea with his principal who gave the "go ahead to work with the head".
10
11

12 *Translating Between Vision/Direction and Actualisation*

13
14
15 Although the role of the vice- principal is to support the principal, the Singapore vice-principal is
16
17 acutely aware of his/her simultaneous role as school leaders who need to drive the school's
18
19 direction. Thus, the vice-principals shared having to influence and motivate their staff to understand
20
21 "why" there is a need for change (5 vice-principals), by reminding staff of what Albert Tan referred
22
23 to as "the strategic picture, the bigger picture". Vice-principals unanimously expressed concern to
24
25 "secure [staff's] buy in" to the school's/ ministry's vision and initiatives (5 vice-principals). As
26
27 explained by vice-principal Dennis Aw, this boundary spanning practice is two-pronged, involving the
28
29 vice-principal in simultaneously doing strategic planning with the principal and working with the
30
31 ground, 'connecting' the two.
32
33
34

35
36 Vice-principal Suhaimi bin Hassan explained this bridging between vision and actualisation,
37
38 comparing it to the work of grassroot leaders who have a duty to influence upwards, by providing
39
40 members of parliament with realistic feedback on what is happening at the ground:
41
42

43
44 We also say this, we are the bridge. You take us out, then there will be this break in terms of
45
46 communications. Usually for principals..., they talk about envisioning and so on, they have a
47
48 lot of ideas what they want to do. We as vice-principals, we try to make this vision into
49
50 reality. ... Sometimes you are the planner, you plan, but you don't have someone who
51
52 communicate in terms of how it should be enacted... Sometimes MP [Member of
53
54 Parliament] thinks everything is okay with the constituency, because grassroots leaders
55
56 always feed with the good things. Then when comes to election, they [MPs] are not voted in.
57
58
59
60

1
2
3 They don't know there are a lot of unhappiness on the ground. So there must be really trust
4 and honesty and openness about what is really happening. So basically, that's our role.
5
6

7
8 However, this boundary spanning practice is not a simple matter of breaking down the
9 school's/ principal's vision and operationalising it by dictating what staff should do, thus the word
10 'actualisation' instead. Actualisation indicates that effort needs to be taken to turn something into
11 action (dictionary.com). Suhaimi alludes to this effort in pointing out that a plan is simply a plan
12 until someone "communicate[s] how it should be enacted". Denise Lim expresses a similar
13 sentiment in noting that "when the principal says certain things, it's like broad directions, ... but then
14 how is it going to work in your context, as a classroom teacher, as a department head, I think that is
15 our job to contextualise [the directions] for them".
16
17
18
19
20
21
22
23
24
25

26
27 Beyond leading staff to translate and contextualise a given direction, the vice-principal may
28 also influence the direction through negotiating with the middle managers and proposing changes in
29 direction to the principal, as shared by Denise:
30
31
32

33
34 The big ideas will come from the principal, like what directions you know, she wants us to
35 take, but because I'm so called the expert in this area [on formative assessment] ... So I am
36 the one that actually provides all the flesh, the meat, and the key directions. ... so for
37 example, I collated all the plans, and then I realised that there are certain direction that we
38 need to take with regards to assessment....So I will have a consensus with all my HODs to say
39 that this is a stand that we should take in the true spirit of formative assessment, are we
40 together on this? So then when I hear from all of them, that I know that ... they are
41 agreeable to go towards this direction, I will bring back to my P and explain the rationale and
42 then she agrees, and then we will go ahead.
43
44
45
46
47
48
49
50
51
52
53

54
55 Principals commented that vice-principals need to use their creativity to think through how
56 to translate the broad directions and goals of the school. Principal Gerard Tan stressed that the vice-
57 principal's role is not just about operationalisation, management or just being a "postman".
58
59
60

Connecting Between Middle Managers

In the literature, it is usually the middle managers who act as the bridge between top-down initiatives and implementation by teachers in the classroom (Busher and Harris, 1999; Gunter, 2001; Timperley, 2005). This is likely the case when the initiative concerns mainly one department. A ministry initiative on the teaching of algebra, for instance, is likely to involve the Head of Mathematics in playing a boundary spanning role. However, many ministry or school initiatives are broad and involve many subject areas. For example, a school may decide to implement differentiated instruction or Harvard's thinking routines, which can be applied across subjects. If each department works in silo to interpret and implement these school-wide initiatives, this can result in a lack of coherence.

While the two earlier boundary spanning practices involve the vice-principal in crossing mainly vertical boundaries, boundary spanning between middle managers involve the vice-principal in crossing the horizontal boundaries of departments (L. Lee *et al.*, 2014) to build inter-disciplinary or multi-functional alliances (Pryor and Henley, 2018). As a vice-principal, who has a higher status in the hierarchy compared to middle managers, the vice-principal works to influence middle managers to look beyond their silos: working together "towards the same direction" as explained by Chua Kim Ho, or like a conductor coordinating the various section leaders as described by Gerard Tan. Principal Bernard Lim agreed that one key role of the vice-principal is to ensure that the departments "all work in sync".

As vice-principal Dennis Aw explained, middle managers focus on their job scope whereas the vice-principal looks across departments and committees, to "connect the dots" for coherence and optimise the use of resources and effort:

I think for vice-principals, you able to see the bigger picture, definitely. As a [department] head..., most of the time you are focusing on your job scope. But as a vice-principal, you are looking across, you are looking across the departments, across the committees, and from

1
2
3 there, how do you integrate, how do you innovate, ... if you are looking at your own
4
5 department, or your own committee, it is difficult to understand what other committees are
6
7 doing.... But as a vice-principal, at least you can draw the alignment. ... for vice-principals, we
8
9 are looking at the bigger areas. How to connect the dots, how to streamline the events. If
10
11 I find that there are so many common things they are doing, then ask them to do some
12
13 pruning.
14
15

16
17 A good example of connecting between middle managers is shared by Zoe Tay who
18
19 explained how she had to oversee and standardise practice across the three Year Heads, who were
20
21 in charge of different levels of students, to create “one coherent SDT [student development team]”.

22
23
24 So right now since I am working with my year heads. Sure, they are very clear this is what
25
26 they are supposed to do, but if you don't have somebody overseeing them or standardising
27
28 practice across, it is going to be very difficult for the three of them to work together as a one
29
30 coherent SDT. There could be a possibility of each of them doing their own thing, then we
31
32 have different practices at the different levels.... They are more concerned with their own
33
34 levels.... So to pull it together, erm requires someone. So I supposed I mean that is the role
35
36 that I play.
37
38
39
40

41 The boundary spanning capacity of the vice-principal is especially helpful to a middle
42
43 manager who oversees an area that requires the collaboration of different heads. In Singapore, for
44
45 example, the information communication technology head and the school staff developer need to
46
47 garner the support of the heads of the different subject areas, which can sometimes be difficult. In a
48
49 high-power distance culture (Hofstede, 2003) like Singapore, this is where the vice-principal can play
50
51 a role in negotiating amongst the HODs or helping a HOD to push for a particular agenda. Principal
52
53 Sarah Sahib observed that the vice-principal's “leadership is [demonstrated] when they make the
54
55 connection with other heads and said OK, this group needs this, what do you think you can do about
56
57 it?”.
58
59
60

Brokering and Translating Between the Ministry and the School

The vice-principal's boundary spanning role between the ministry and the school is likely shared with the principal, since in the literature the principal is usually identified as the person who brokers the ministry's policies with the school's implementation of these policies (Rutherford, 2003; Toh *et al.*, 2014). Principal Ashikin binte Sazali suggested this role is shared between the principal and the vice-principal:

I think the role of the principal and the vice-principal is to translate the policy in a language - in a way that the HODs and the teachers can understand why we are doing what we are doing.

A few vice-principals shared about the need to influence teachers' thinking and mindsets about ministry's policies/initiatives, to help teachers find meaning in and connect the ministry's policies/initiatives to existing initiatives. As explained by Dennis Aw

Because we are the one connecting the schools and what is happening up there. ... So we have to draw the connection for them, ... the [ministry's] every good school movement actually is linked to our [existing] thinking school learning nation. So, we have to draw and connect the dots for them, or else they find that "hey it's something new, we have to restart the engine, ... we have to re-design what we are doing again". So our job is really to try to mitigate all this tension they have and all these misconceptions, misapprehensions.

However, it is not just about the principal and vice-principal unpacking the ministry's policies on their own and getting the teachers to implement. As vice-principal Kamsida said, while it would be easy for her to say "Ok, so let's do this [this policy/initiative] but no lah, you know..., you're *not communicating*. You're *communicating*, but you are *not communicating*" [emphasis by Kamsida]. Kamsida explained how, as a follower of the Ministry, she had to first understand the rationale for the national policy and what it meant for her school's unique context, and then as a school leader,

1
2
3 she had to think through the best timing and method to communicate and discuss the policy with
4
5 her school staff:
6
7

8 But I think now [as a vice-principals] it's a lot more of I've to know why the national
9
10 aspiration is like that, ... and then I've also got to process it, what exactly does this aspiration
11
12 translate to into my own school context, and then bear in mind my people and the team,
13
14 how this messaging ought to be communicated and translated into. So that complexity I
15
16 didn't have when I was a HOD. I just have to know that my principal said certain things, ...
17
18 you kind of follow certain guidelines. ... But as a school leader, ... you need to give that
19
20 weight or that thinking ... while they [the Ministry] tell me this is the message, I've got to
21
22 think in a very oblique manner like when's the right time to do this, ... how many percentage
23
24 of the messaging do they get? If it's an exam period, stay away from it [communicating the
25
26 policy]. ... And the thing is, we need to process it because that's what we do. The teachers
27
28 have other things so that's our job you know.
29
30
31
32

33 It is revealing that Kamsida differentiated her role as a vice-principal from her previous role
34
35 as a head of department. While both vice-principal and department head can be seen as leading
36
37 from the middle in translating policies to practice, Kamsida realised that the vice-principal also plays
38
39 an important role as senior management in facilitating her heads to understand the rationale behind
40
41 the policy and strategise how to communicate the policy to the teachers. It is not simply top-down
42
43 sense-making by school leaders and telling staff what to do –staff need to be involved in the sense-
44
45 making process.
46
47
48
49

50 One example of the vice-principal performing boundary spanning between the ministry and
51
52 implementation in the classroom was vice-principal Jennifer Ho working with her middle managers
53
54 to break down the Ministry's desired outcomes of education into outcomes to achieve at each grade
55
56 level and translating these into a lesson observation template so that teachers are "very clear
57
58 whether or not your lesson plan is achieving those desired outcomes".
59
60

Constraints to Leading from the Middle

Although there was evidence of vice-principals leading from the middle, some constraints were raised. The main constraint is posed by a micromanaging principal who works directly with the middle managers, bypassing the vice-principal. In such a context, instead of leading from the middle, the vice-principal “disappear[s]”, s/he is “not needed, because all the decisions will be made by the principal”. As Nur Azli Binte Johan elaborated, “You don’t exist. Or it’s harder to exist”. Tan Lee Yong provided a similar example in which an ex vice-principal shared he had been “cold stored, inverted commas” by his principal, observing that “in the school context, I think the principal holds the key” to empowering, or not, the vice-principal.

Another major constraint is when what the vice-principal believes needs to be changed is different from the principal believes in. In such a situation, as Jennifer Ho explained “it was very hard to propose those changes and get those changes accepted at Exco level because the principal didn’t have the same beliefs”. Dennis Tay explained how although his teachers were tired of doing community work and he tried to negotiate on their behalf with the previous principal, the latter insisted the teachers still had to do it. Dennis observed that “this [previous] principal, the values are a bit different...so I find it’s much easier to work with the current principal because we have the same philosophy”.

Constraints may also arise when the principal does not trust a middle manager, whom the vice-principal has no problem working with. As Siew Lian explained, this leaves the vice-principal stuck in a “kind of a struggle between these two [the principal and the middle manager], with the principal accusing her of “favouritism” and the middle manager accusing her of “siding the principal”, lamenting that “it’s that kind of struggle that as a vice-principal I think I am facing”.

Summary of Findings

1
2
3 The boundary spanning practices that Singapore vice-principals perceived themselves as performing
4 are captured in Figure 1. Figure 1 illustrates how in leading from the middle, vice-principals connect
5 different groups and functions, influencing upwards, downwards as well as laterally across middle
6 managers, translating visions or policies into actions and brokering between the Ministry and
7 schools. Figure 1 can be explored further through the gathering of survey data to operationalise the
8 brokering, connecting, and translating dimensions and to determine the level of spanning involved.
9
10
11
12
13
14
15
16

17 Figure 1
18
19

20 **Discussion and Conclusion**

21
22

23 In boundary spanning, three activities are highlighted: interpret environmental conditions and relay
24 that information to those who make decisions (Farrell, 2014; Leifer and Huber, 1977); represent a
25 particular constituency within the organisation or represent the organisation; negotiate and
26 coordinate the performance of tasks to achieve common goals (Kislov, 2018). Based on our study,
27 vice-principals interpret what is happening on the ground and share that information with the
28 principal to support the latter in making decisions which consider staff's needs. However, vice-
29 principals also help stakeholders make sense of and act on information from the top (the principal)
30 or from beyond the school boundary (the ministry). As leaders in the middle, vice-principals
31 represent both senior management and the rest of the staff, connecting leader and teacher practice,
32 linking direction with actualisation of the direction. In addition, vice-principals negotiate and
33 coordinate amongst the various heads of departments to ensure that different departments work
34 towards common goals. The vice-principal's boundary spanning practices are more than just about
35 managing people and co-ordinating task performance. Leadership is required since there is a need
36 to influence people's thinking and practice, with the further need to influence upwards and
37 downwards.
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55

56
57 This study indicates how the vice-principal can lead from the middle as a boundary spanner
58 and still serve his/her role as supporter of the principal, without being relegated to being just an
59
60

1
2
3 administrator or manager (B. G. Barnett *et al.*, 2012). Admittedly, the degree to which the vice-
4
5 principal can lead from the middle depends on several factors, including the degree to which the
6
7 principal is willing to relinquish authority and empower the vice-principal, the vice-principal's
8
9 expertise and exercise of agency, and the vice-principal's capacity to make sense of and
10
11 communicate contextual information on both sides of the boundary (Farrell, 2014). Based on our
12
13 study, the principal is the main enabler and inhibitor of vice-principals' effort to lead from the
14
15 middle, which is similar to findings in other studies on vice-principals (Celikten, 2001; Hernandez *et*
16
17 *al.*, 2016; J. C. K. Lee *et al.*, 2009)
18
19

20
21
22 The other significant finding is the close link between the concepts of leading from the
23
24 middle and boundary spanning. Leading from the middle is a particularly powerful concept if one
25
26 considers that one plausible reason why initiatives from the top have not been successful is because
27
28 of the many intervening ecological levels, and the likelihood that there were leadership gaps in the
29
30 middle. For any initiative to impact the micro level of the classroom, there are multiple ecological
31
32 levels which need to provide leadership, interact and create coherence (Toh *et al.*, 2014): minimally
33
34 the principal, the vice-principal, and the heads of departments. It is no longer enough for influence
35
36 to percolate downwards; influence also needs to percolate upwards (A. Hargreaves and Ainscow,
37
38 2015) or even sideways.
39
40

41
42
43 With respect to the capacity building of vice-principals, this study suggests that vice-
44
45 principals need to be equipped with an understanding of national policies if they are to assist in the
46
47 translation of these policies. Vice-principals need to possess systems thinking (Senge *et al.*, 2015)
48
49 since they need to operate at a higher level than heads of departments and co-ordinate various
50
51 heads to work towards a common direction. In addition, vice-principals need to be able to
52
53 communicate with empathy for their teachers and be able to motivate their teachers to adopt
54
55 desired changes. They also need to be able to manage their boss, the principal, so that they can
56
57 influence upwards.
58
59
60

1
2
3 Finally, this paper focused on vice-principals leading from the middle. It would be useful to
4
5 investigate how vice-principals work with middle managers to lead from the middle, and how
6
7 leadership is distributed between the vice-principals and the middle managers. There has been
8
9 interest in team leadership in the literature but the focus has been on how senior management
10
11 teams of middle managers worked with principals (K. Barnett and McCormick, 2012; Bush and
12
13 Glover, 2012; Day *et al.*, 2004; Liljenberg, 2015). Understanding how the senior management teams
14
15 work with vice-principals in leading from the middle to support the principal and the teachers would
16
17 enable schools to optimise the leadership capacity in our schools, and thus maximise the potential
18
19 for school improvement (Muijs and Harris, 2003).
20
21
22

23 24 **References**

25
26
27 Arar, K. (2014), "Deputy-principals in Arab schools in Israel: an era of reform", *International Journal*
28
29 *of Educational Management*, Vol. 28 No. 1, pp. 96-113.

30
31
32 Baker, A. M., Guerra, P. L. and Baray, S. (2018), "Assistant principal dilemma: Walking the line
33
34 between compliance and leadership", *Journal of Cases in Educational Leadership*, Vol. 21 No. 1, pp.
35
36 66-77.
37

38
39 Barnett, B. G., Shoho, A. R. and Oleszewski, A. M. (2012), "The job realities of beginning and
40
41 experienced assistant principals", *Leadership and Policy in Schools*, Vol. 11 No. 1, pp. 92-128.
42

43
44 Barnett, K. and McCormick, J. (2012), "Leadership and team dynamics in senior executive leadership
45
46 teams", *Educational Management Administration & Leadership*, Vol. 40 No. 6, pp. 653-671.
47

48
49 Bennett, N. (1999), "Middle management in secondary schools: Introduction", *School Leadership and*
50
51 *Management*, Vol. 19 No. 3, pp. 289-292.
52

53
54 Bonem, M. and Patterson, R. (2005), *Leading from the Second Chair: Serving Your Church, Fulfilling*
55
56 *Your Role, and Realizing Your Dreams*, Jossey-Bass, San Francisco, SF.
57
58
59
60

1
2
3 Bush, T. and Glover, D. (2012), "Distributed leadership in action: leading high-performing leadership
4 teams in English schools", *School Leadership & Management*, Vol. 31 No. 1, pp. 21-36.
5
6

7
8 Busher, H. (2005), "Being a middle leader: Exploring professional identities", *School Leadership and
9 Management*, Vol. 25 No. 2, pp. 137-153.
10
11

12
13 Busher, H. and Harris, A. (1999), "Leadership of school subject areas: Tensions and dimensions of
14 managing in the middle", *School Leadership and Management*, Vol. 19 No. 3, pp. 305-317.
15
16

17
18 Carspecken, P. F. (1996), *Critical Cthnography in Educational Research: A Theoretical and Practical
19 Guide*, Routledge, New York, NY.
20
21

22
23 Celik, K. (2013), "The effect of role ambiguity and role conflict on performance of vice principals: The
24 mediating role of burnout", *Eurasian Journal of Educational Research*, Vol. 51, pp. 195-213.
25
26

27
28 Celikten, M. (2001), "The instructional leadership tasks of high school assistant principals", *Journal of
29 Educational Administration*, Vol. 39 No. 1, pp. 67-76.
30
31

32
33 Coldren, A. F. and Spillane, J. P. (2007), "Making connections to teaching practice: The role of
34 boundary practices in instructional leadership", *Educational Policy*, Vol. 21 No. 2, pp. 369-396.
35
36

37
38 Cranston, N., Tromans, C. and Reugebrink, M. (2004), "Forgotten leaders: what do we know about
39 the deputy principalship in secondary schools?", *International Journal of Leadership in Education*,
40 Vol. 7 No. 3, pp. 225-242.
41
42

43
44 Day, D. V., Gronn, P. and Salasc, E. (2004), "Leadership capacity in teams", *The Leadership Quarterly*,
45 Vol. 15, pp. 857-880.
46
47

48
49 Deal, N. M. (2015), *Is Leading from the Second Chair a New Leadership Theory: Examining the
50 Theoretical Underpinnings*, unpublished Master of Business Administration dissertation, Saint Mary's
51 University, Halifax, Nova Scotia.
52
53
54
55
56
57
58
59
60

1
2
3 Denzin, N. K. and Lincoln, Y. S. (2003), *Strategies of Qualitative Inquiry* (Second ed.), Sage, California,
4
5 CA.

6
7
8 Farrell, M. (2014), "Leading from the Middle", *Journal of Library Administration*, Vol. 54 No. 8, pp.
9
10 691-699.

11
12
13 Fullan, M. (2015), "Leadership from the middle: a system strategy", *Education Canada*, Vol. 55 No.4,
14
15 pp. 22-26.

16
17
18 Geijsel, F., Slegers, P. and Leithwood, K. and Jantzi, D. (2003), "Transformational leadership effects
19
20 on teachers' commitment and effort toward school reform", *Journal of Educational Administration*,
21
22 Vol. 41 no. 3, pp. 228-256.

23
24
25
26 Guihen, L. (2019), "The career experiences and aspirations of women deputy head teachers",
27
28 *Educational Management Administration & Leadership*, Vol. 47 No. 4, pp. 538-554.

29
30
31 Gunter, H. (2001), *Leaders and Leadership in Education*, Paul Chapman Publishing, London.

32
33
34 Hargreaves, A. and Ainscow, M. (2015), "The top and bottom of leadership and change", *Phi Delta*
35
36 *Kappan*, Vol. 97 No. 3, pp. 42-48.

37
38
39 Hargreaves, D. H. (2012), "A self-improving school system: towards maturity", available at:
40
41 <http://dera.ioe.ac.uk/15804/1/a-self-improving-school-system-towards-maturity.pdf> (accessed 23
42
43 August 2020).

44
45
46 Harris, A. (2003), "Teacher leadership as distributed leadership: heresy, fantasy or possibility?",
47
48 *School Leadership & Management*, Vol. 23 No. 3, pp. 313-324.

49
50
51 Harris, A., Muijs, D. and Crawford, M. (2003), "Deputy and Assistant Heads: Building leadership
52
53 potential", National College for School Leadership, available at:
54
55 <https://www.rtuni.org/uploads/docs/Deputy%20and%20Assistant%20Heads.pdf> (accessed 23
56
57 August 2020).
58
59
60

1
2
3 Hausman, C., Nebeker, A., McCreary, J. and Donaldson Jr, G. (2002), "The worklife of the assistant
4 principal", *Journal of Educational Administration*, Vol. 40 No. 2, pp. 136-157.

5
6
7
8 Hernandez, F., Murakami, E. T., Mendez-Morse, S., Byrne-Jiménez, M. and McPhetres, J. (2016),
9
10 "Latina/o assistant principals - vague and ambiguous roles in K-12 administration: findings from the
11 national Latina/o leadership project", *National Forum of Educational Administration & Supervision*
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

"Latina/o assistant principals - vague and ambiguous roles in K-12 administration: findings from the national Latina/o leadership project", *National Forum of Educational Administration & Supervision Journal*, Vol. 33 No. 2 &3, pp. 4-28.

Ho, J.-M. and Koh, T.-S. (2017), "Historical development of educational leadership in Singapore", in *Leadership For Change: The Singapore Schools' Experience*, World Scientific, Singapore, pp. 29-83.

Ho, J., Hairon, S. and Chua, P. H. (2019), "Local evidence synthesis on school leadership", available at: <https://www.nie.edu.sg/research/publication/local-evidence-syntheses> (accessed 23 August 2020).

Ho, J. and Ng, D. (2017), "Tensions in distributed leadership", *Educational Administration Quarterly*, Vol. 53 No. 2, pp 223-254.

Hofstede, G. (2003), *Culture's Consequences: Comparing Values, Behaviours, Institutions and Organizations Across Nations*, Sage, Thousand Oaks, CA.

Janesick, V. (1994), "The dance of qualitative research design: Metaphor, methodology, and meaning", in Denzin, N. K. and Lincoln, Y. S. (Eds.), *Handbook of Qualitative Research*, Sage, California, CA, pp. 209-219.

Kislov, R. (2018), "Selective Permeability of Boundaries in a Boundary Spanning Team", paper presented at the Academy of Management Proceedings, Chicago.

Kwan, P. and Li, Y.-m. B. (2016), "Striving for a way out from a rock and a hard place: vice-principals' development in Hong Kong", *International Journal of Mentoring and Coaching in Education*, Vol. 5 No. 3, pp. 239-252.

1
2
3 Lee, J. C. K., Kwan, P. and Walker, A. (2009), "Vice-principalship: their responsibility roles and career
4 aspirations", *International Journal of Leadership in Education*, Vol. 12 No. 2, pp. 187-207.
5
6

7
8 Lee, L., Horth, D. M. and Ernst, C. (2014), "Boundary spanning in action: tactics for transforming
9 today's borders into tomorrow's frontiers", Centre for Creative Leadership, available at:
10
11 [https://www.ccl.org/articles/white-papers/boundary-spanning-in-action-tactics-for-transforming-](https://www.ccl.org/articles/white-papers/boundary-spanning-in-action-tactics-for-transforming-todays-borders-into-tomorrows-frontiers/)
12 [todays-borders-into-tomorrows-frontiers/](https://www.ccl.org/articles/white-papers/boundary-spanning-in-action-tactics-for-transforming-todays-borders-into-tomorrows-frontiers/) (accessed 23 August 2020).
13
14
15
16

17
18 Leifer, R. and Huber, G. P. (1977), "Relations among perceived environmental uncertainty,
19 organization structure, and boundary-spanning behaviour", *Administrative Science Quarterly*, Vol.
20
21
22 22, pp. 235-247.
23
24

25
26 Leithwood, K. and Duke, D. L. (1999), "A century's quest to understand school leadership", in
27
28 Murphy, J. and Louis, K. S. (Eds), *Handbook of Research on Educational Administration* (2nd ed.),
29
30 Jossey-Bass, San Francisco, CA, pp. 45-72.
31
32

33
34 Liljenberg, M. (2015), "Distributing leadership to establish developing and learning school
35 organisations in the Swedish context", *Educational Management Administration & Leadership*, Vol.
36
37 43 No. 1, pp. 152-170.
38
39

40
41 Lincoln, Y. S. and Guba, E. G. (1985), *Naturalistic Inquiry*, Sage, Beverly Hills, C.A.
42

43
44 Marrone, J. A., Tesluk, P. E. and Carson, J. B. (2007), "A multilevel investigation of antecedents and
45 consequences of team member boundary-spanning behaviour", *Academy of Management journal*,
46
47 Vol. 50 No. 6, pp. 1423-1439.
48
49

50
51 Mayger, L. K. and Hochbein, C. D. (2019), "Spanning boundaries and balancing tensions: a systems
52 perspective on community school coordinators", *School Community*, Vol. 29 No. 2, pp. 225-254.
53
54

55
56 Miles, M.B. and Huberman, M.A. (1994), *Qualitative Data Analysis: an Expanded Sourcebook*, Sage,
57
58 California, CA.
59
60

1
2
3 Militello, M., Fusaerlli, B. C., Mattingly, A. and Warren, T. (2015), " 'We do what we're told': how
4 current assistant principals practice leadership and how they wish they could", *Journal of School*
5
6
7
8 *Leadership*, Vol. 25 no. 2, pp.194-222.

9
10
11 Miller, P. M. (2008), "Examining the work of boundary spanning leaders in community contexts",
12
13 *International Journal of Leadership in Education*, Vol. 11 No. 4, pp. 353-377.

14
15
16 Muijs, D. and Harris, A. (2003), "Assistant & Deputy Heads: key leadership issues and challenges",
17
18 *Management in Education*, Vol. 17 No. 1, pp. 6-8.

19
20
21 National College for School Leadership. (2002), "New perspectives on middle level leadership in
22
23 secondary schools", available at: <https://dera.ioe.ac.uk/51110/1/D51110.pdf> (accessed 23 August
24
25 2020).

26
27
28 National Institute of Education. (n.d.), "Leaders in Education Programme", available at:
29
30 [http://www.nie.edu.sg/leadership-professional-development/leadership-programmes/leaders-in-](http://www.nie.edu.sg/leadership-professional-development/leadership-programmes/leaders-in-education-programme)
31
32 [education-programme](http://www.nie.edu.sg/leadership-professional-development/leadership-programmes/leaders-in-education-programme) (accessed 23 August 2020).

33
34
35
36 Ng, D. F. S. and Ho, J. (2012), "Distributed leadership for ICT reform in Singapore", *Peabody Journal*
37
38 *of Education*, Vol. 87 No. 3, pp. 235-252.

39
40
41 Oleszewski, A., Shoho, A. and Barnett, B. (2012), "The development of assistant principals: a
42
43 literature review", *Journal of Educational Administration*, Vol. 50 No. 3, pp. 264-286.

44
45
46 Prysor, D. and Henley, A. (2018), "Boundary spanning in higher education leadership: identifying
47
48 boundaries and practices in a British university", *Studies in Higher Education*, Vol. 43 No. 12, pp.
49
50 2210-2225.

51
52
53 Rintoul, H. M. and Kennelly, R. (2014), "The vice principalship: the forgotten realm", in *Pathways to*
54
55 *Dxcellence: Developing and Cultivating Leaders for the Classroom and Beyond*, Emerald Group
56
57 Publishing Limited, Bingley, UK, pp. 43-68
58
59
60

- 1
2
3 Rutherford, D. (2003), "The Green Paper and beyond: how primary headteachers see their
4
5 deputies", *School Leadership & Management*, Vol. 23 No. 1, pp. 59-74.
6
7
8 Scott, V. M. (2011), *An examination of expected versus actual tasks of public school secondary*
9
10 *assistant principals throughout Indiana*, unpublished doctoral dissertation, Ball State University,
11
12 Indiana.
13
14
15 Senge, P., Hamilton, H. and Kania, J. (2015), "The dawn of system leadership", *Stanford Social*
16
17 *Innovation Review*, Vol. 13 No. 1, pp. 27-33.
18
19
20
21 Spillane, J. P. (2006), *Distributed Leadership*. Jossey-Bass, San Francisco, SF.
22
23
24 Spillane, J. P., Halverson, R. and Diamond, J. B. (2004), "Towards a theory of leadership practice: a
25
26 distributed perspective", *Journal of Curriculum Studies*, Vol. 36 No. 1, pp. 3-34.
27
28
29 Spillane, J. P. and Orlina, E. C. (2005), "Investigating leadership practice: exploring the entailments of
30
31 taking a distributed perspective", *Leadership and Policy in Schools*, Vol. 4 No. 3, pp. 157–176.
32
33
34 Timperley, H. S. (2005), "Distributed leadership: developing theory from practice", *Journal of*
35
36 *Curriculum Studies*, Vol. 37 No. 4, pp. 395–420.
37
38
39 Toh, Y., Jamaludin, A., Hung, W. L. D. and Chua, P. M.-H. (2014), "Ecological leadership: going beyond
40
41 system leadership for diffusing school-based innovations in the crucible of change for 21st century
42
43 learning", *The Asia-Pacific Education Researcher*, Vol. 23 No. 4, pp. 835-850.
44
45
46 van Meerkerk, I. and Edelenbos, J. (2018), "Facilitating conditions for boundary-spanning behaviour
47
48 in governance networks", *Public Management Review*, Vol. 20 No. 4, pp. 503-524.
49
50
51 Van Schyndel, T., Pearl, A. J. and Purcell, J. W. (2019), "Extending Our conceptualization of boundary-
52
53 spanning leadership for community engagement", *Journal of Higher Education Outreach and*
54
55 *Engagement*, Vol. 23 No. 2, pp. 63-78.
56
57
58
59
60

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Yip, J., Ernst, C. and Campbell, M. (2016), "Boundary spanning leadership: mission critical perspectives from the executive suite", Centre for Creative Leadership Organizational Leadership White Paper.

Journal of Educational Administration

Table I. Vice-principal (VP) participant profile

ID	Age Bracket	Sex	Years as VP	Years in Current School	Schools Served As VP	Principals Worked With	School Level	No. of teachers in current school
VP01P*	45-54	M	3.5	3.5	1	1	Pri	80
VP02S#	45-54	F	6.5	4	2	4	Sec	120
VP03P	45-54	M	5.5	1.5	2	3	Pri	80
VP04S	55+	M	12	6	4	3	Sec	91
VP05S	45-54	M	9	9	1	3	Sec	80
VP06S	55+	M	9.5	4	3	5	Sec	100
VP07S	45-54	F	3.5	3.5	1	2	Sec	105
VP08P	45-54	F	4	4	1	2	Pri	105
VP09P	45-54	M	8	8	1	2	Pri	100
VP10S	45-54	F	8	3	2	2	Sec	100
VP11P	45-54	F	9.5	5.5	2	4	Pri	98
VP12S	55+	M	13	5	3	5	Sec	125
VP13S	35-44	M	6	3	2	3	Sec	103
VP14P	35-44	M	4	1	2	2	Pri	89
VP15P	55+	M	19	12	2	5	Pri	80
VP16P	45-54	F	9	7	2	4	Pri	75
VP17P	45-54	F	2	2	1	1	Pri	80
VP18S	45-54	F	4	4	1	1	Sec	90
VP19P	35-44	F	2	2	1	1	Pri	85
VP20S	45-54	F	9	5	3	4	Sec	102
VP21P	55+	F	9	9	1	2	Pri	80
VP22S	35-44	M	3	3	1	2	Sec	100
VP23S	35-44	M	7.5	1	3	3	Sec	100
VP24P	35-44	M	6	1	2	3	Pri	80
VP25S	45-54	F	5	5	1	2	Sec	110
VP26P	35-44	M	7	1	3	6	Pri	80
VP27P	35-44	F	7	1	3	5	Pri	120
VP28S	35-44	M	1.5	1.5	1	2	Sec	80

* P indicates Primary School (grades 1-6);
S indicates Secondary School (grades 7-10)

Table II. Principal (P) participant profile

ID	Age Bracket	Sex	Years as P	Years at Current School	Schools Served as a P	School Level	No. of VPs worked with as P
P01P	45-54	F	7	(just joined)	2	Pri	4
P02P	35-44	F	5	5	1	Pri	4
P03S	55+	M	15	3	3	Sec	8
P04S	55+	F	18	4	4	Sec	6
P05P	55+	M	18	4	3	Pri	7
P06P	35-44	F	5	5	1	Pri	2
P07S	45-54	M	12.5	1.5	3	Sec	7
P08P	45-54	F	11.5	6.5	2	Pri	3
P09P	55+	F	14	7	2	Pri	10
P10S	55+	F	17.5	3.5	4	Sec	12

Table III. Codes which suggest boundary spanning

Name of codes	Examples	No. of interviews (no. of references)
Link between principal and other stakeholders	<p>“the bridge between the middle managers and the new principal” (VP07S)</p> <p>“sensing the ground...and giving her [the principal] the correct information” (VP27P)</p>	16 (41)
Communicate or contextualise MOE or school policies	<p>“they [VPs] are responsible for cascading [the school’s direction]” (P09P)</p> <p>“to unpack it [a ministry policy] for my teachers” (VP01P)</p>	14 (34)
Mediating between key personnel	<p>“you play the role of the conductor” (VP3P)</p> <p>“the job is to try to bring them [the KPs] together (VP12S)</p>	21 (48)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

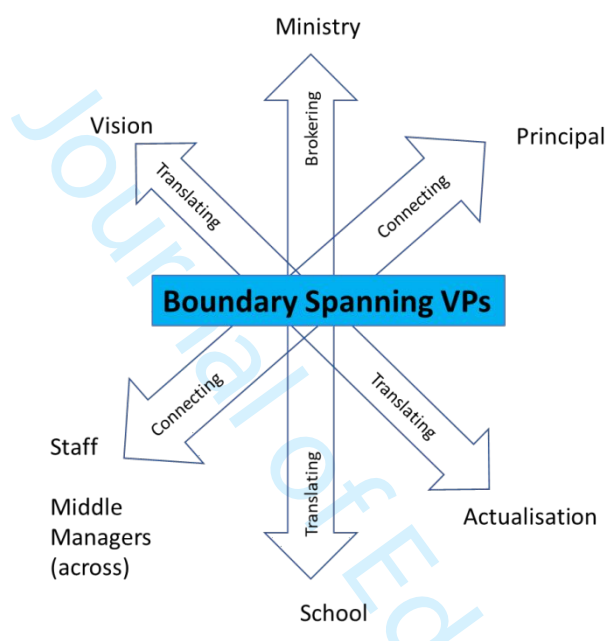


Figure 1. Vice-principals leading from the middle as boundary spanners