



DE ROL VAN CULTURELE SCHOOLKENMERKEN EN SCHOOLLEIDERSCHAP VOOR STRATEGISCH PERSONEELSBELEID

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Voorwoord

In dit rapport worden de resultaten van een onderzoek naar ‘Personeelsbeleid vanuit schoolperspectief’ gerapporteerd. Dit onderzoek kadert binnen het Steunpunt voor Onderwijsonderzoek. De dataverzameling werd uitgevoerd door onderzoekers aan de Universiteit van Gent van augustus 2017 tot september 2019. In dit onderzoeksrapport gaan we dieper in op onderzoeksvraag 4 uit het meerjarenprogramma: Hoe ziet de wisselwerking tussen schoolkenmerken en het schoolbeleid in scholen eruit? Hierbij gaan we specifiek in op de relatie tussen culturele schoolkenmerken en schoolleiderschap en het strategisch personeelsbeleid in Vlaamse basis- en secundaire scholen.

Dit rapport bevat de resultaten van een kwalitatieve studie en bestaat uit twee onderdelen. In een eerste gedeelte wordt een korte Nederlandstalige beleidsamenvatting voorzien waarin de hoofdpunten van de onderzoekspaper worden toegelicht. Er wordt zowel aandacht besteed aan theorie, onderzoekopzet, resultaten en discussie. In het tweede onderdeel is de integrale Engelstalige paper terug te vinden.

In een eerder onderzoeksrapport SONO/2019.OL2.3/2 (Tuytens, Vekeman & Devos, 2019) werd ingegaan op hoe scholen de strategische planning en het personeelsbeleid op elkaar afstemmen. We gebruiken de resultaten van dit voorgaande rapport om de scholen uit onze steekproef in twee groepen in te delen op basis van hun personeelsbeleid: excellent strategische scholen en matig strategische scholen. Deze twee groepen scholen worden vergeleken met elkaar m.b.t. de culturele schoolkenmerken en schoolleiderschap.

Na dit onderzoeksrapport zullen binnen deze onderzoekslijn ook nog rapporten volgen die ingaan op de link tussen strategisch personeelsbeleid en bepaalde uitkomsten (bvb. Welbevinden van leerkrachten). Op basis van alle onderzoeksresultaten uit deze verschillende onderzoeksrapporten zullen aanbevelingen voor het beleid en de praktijk geformuleerd worden aan het einde van het onderzoeksproject.

Beleidssamenvatting

Inleiding en theoretisch kader

Om kwaliteitsvolle leerkrachten aan te trekken, te ontwikkelen en aan de slag te houden, wordt internationaal meer en meer nadruk gelegd op strategisch personeelsbeleid. Dit betekent dat personeelsbeleid enerzijds afgestemd is op de strategische planning van scholen (i.e. missie, visie, organisatiedoelen) en anderzijds op de individuele noden van leerkrachten (Boselie, 2014). Dit blijkt evenwel een uitdaging voor scholen omdat schoolleiders een systematische aanpak van personeelsbeleid moeilijk vinden (Runhaar, 2017) en de verschillende personeelspraktijken vaak fragmentarisch en weinig proactief aanpakken (Rebore, 2010). Meer onderzoek naar de relatie tussen culturele schoolkenmerken, schoolleiderschap en strategisch personeelsbeleid in scholen is echter nodig. Onze studie wenst hieraan tegemoet te komen.

Verschillende studies hebben gewezen op het belang van schoolkenmerken voor leerkracht- en schoolontwikkeling (bvb. Tuytens & Devos, 2017; Sarafidou & Chatziioannidis, 2013). Verschillende auteurs benadrukken ook dat HRM ingebed moet zijn in de schoolcontext (Leisink & Knies, 2019). Onze eerdere reviewstudie (Vanblaere, Tuytens & Devos, 2017) identificeerde ook de schoolkenmerken die in empirisch onderzoek aangeduid zijn als belangrijk voor verschillende personeelspraktijken in onderwijs (i.e. selectie/rekrutering, opdrachttoewijzing, professionele ontwikkeling, leerkrachtevaluatie en waardering/beloning). In dit onderzoek baseren we ons op deze reviewstudie bij de selectie van culturele schoolkenmerken door die kenmerken in rekening te brengen die in de review belangrijk bleken voor minstens drie verschillende personeelspraktijken. Zo worden volgende variabelen geselecteerd in deze studie: professionele leergemeenschappen (PLG), participatieve besluitvorming en leerkrachtautonomie. Daarnaast toonde de review ook dat zowel onderwijskundig als transformationeel leiderschap belangrijk zijn voor verschillende personeelspraktijken. Ook deze leiderschapskenmerken worden dus meegenomen in dit onderzoek. Hieronder gaan we kort dieper in op de conceptualisering van deze verschillende kenmerken in deze studie.

Professionele leergemeenschappen worden gekenmerkt door een collaboratieve werkcultuur door systematische samenwerking en ondersteunende interacties. Het uiteindelijke doel van PLG's is om het onderwijs voor alle leerlingen te verbeteren (DuFour, 2004; Stoll, et al., 2006). Eerder onderzoek wees uit dat drie kenmerken van PLG's van belang zijn: 1) reflectieve dialoog (leerkrachten voeren reflectieve en diepgaande gesprekken omtrent hun praktijk), 2) collectieve verantwoordelijkheid (leerkrachten accepteren hun deel in de verantwoordelijkheid voor het leren van leerlingen) en 3) gedeprivatiseerde praktijk (leerkrachten delen hun lespraktijk en laten collega's toe in hun klas) (Vanblaere & Devos, 2016).

Participatieve besluitvorming verwijst naar de mate van betrokkenheid van leerkrachten in de besluitvorming binnen verschillende beleidsdomeinen (Ho, 2010). Dit kan gaan van curriculum tot ontwikkeling van leerkrachten en de generieke administratie (Pashiardis, 1994).

Leerkrachtautonomie wordt in deze studie gezien als een persoonlijk gevoel van vrij te zijn van inmenging of het gevoel als leerkracht controle te hebben over schoolzaken (Wilches, 2007).

Onderwijskundig leiderschap omvat een focus op de kerntaak van onderwijs: lesgeven, leren en klaspedagogie (Hallinger, 2003). Hierbij definieert de schoolleider de schoolmissie, volgt deze het leerplan op en promoot een positief leerklimaat in de school.

Transformationeel leiderschap omvat een focus op het selecteren van doelen en het ondersteunen van de verbetering van de onderwijskwaliteit - (Hallinger, 2003). Een transformationeel leider investeert tijd in de communicatie van een duidelijke en gedeelde visie, plaats motivatie en betrokkenheid van leerkrachten centraal, toont begrip voor de noden van leerkrachten om zich te ontwikkelen en creëert een ondersteunende cultuur in de school om te leren.

De focus van deze studie is dan ook om deze culturele schoolkenmerken en leiderschapskenmerken te bestuderen in de context van strategisch personeelsbeleid. Eerder onderzoek heeft uitgewezen dat deze schoolkenmerken voor individuele personeelspraktijken belangrijk zijn, maar er is nood aan onderzoek dat ingaat op het gehele strategische personeelsbeleid binnen scholen. We stellen dan ook volgende onderzoeksvraag voorop: Welke school- en leiderschapskenmerken, of combinatie van kenmerken, houden verband met de mate waarin personeelsbeleid strategisch is in scholen?

Onderzoeksmethode

Om onze onderzoeksvraag te beantwoorden gebruiken we een tweeledig onderzoeksdesign. Ten eerste werd een casestudie-onderzoek gebruikt. Ten tweede benutten we Qualitative Comparative Analysis (QCA) om onze data systematisch te analyseren.

Casestudie onderzoek. Diepgaande casestudies werden uitgevoerd in 12 basisscholen en 12 secundaire scholen. Scholen werden bewust gekozen in functie van de onderzoeksdoelstelling. Enerzijds werd een oproep gelanceerd aan alle Vlaamse scholen. In deze oproep werd gevraagd om scholen aan te melden die reeds een specifieke aanpak hanteren met betrekking tot 1 of meerdere personeelspraktijken. Op basis van deze oproep konden zo 14 scholen geselecteerd worden. Anderzijds, selecteerden we 10

scholen op basis van eerdere onderzoekservaring die we hadden binnen de school m.b.t. personeelsbeleid. Verder werden deze scholen gestratificeerd op basis van een aantal demografische kenmerken zoals onderwijsnet, schoolgrootte, leerlingpopulatie (OKI), ligging van de school en onderwijsvorm (voor de secundaire scholen). Deze 24 scholen werden gedurende één volledig schooljaar onderzocht op basis van verschillende databronnen. In totaal werden 194 semigestructureerde interviews afgenomen met verschillende actoren binnen de school (bv. schoolleiders en leerkrachten) en (indien relevant) ook op bovenschools niveau (bv. coördinerend directeur van de scholengemeenschap). Verder werden in totaal 66 observaties uitgevoerd van relevante gebeurtenissen voor het personeelsbeleid en de strategische planning binnen de school (bv. personeelsvergadering) en werden verschillende relevante schooldocumenten opgenomen in de analyse (bv. visieteksten). Deze dataverzameling liet ons toe om een zo volledig mogelijk beeld te krijgen op het strategisch- en personeelsbeleid van scholen, schoolkenmerken en schoolleiderschap. Om de verzamelde data te verwerken werd stapsgewijs te werk gegaan. In een eerste stap werden alle afgenomen interviews systematisch getranscribeerd en gecodeerd. Daarna werd op basis van de interviewleidraad een set van categorieën gecreëerd die gebruikt werd om de interviews te coderen. Verder werd telkens na het coderen van een interview (of een reeks van interviews) een samenvatting gemaakt per case (cf. ‘interim case summary’ (Miles & Huberman, 1994)). Deze samenvatting werd systematisch na het uitvoeren van verdere interviews aangevuld. In een volgende stap werd op basis van de samenvatting en de gecodeerde citaten een caserapport uitgewerkt per school waarin de resultaten van de verticale analyse gedetailleerd werden gerapporteerd. Indien relevant, werd ook aanvullende informatie uit de observaties en verzamelde documenten gerapporteerd in het caserapport.

Qualitative Comparative Analysis. Om te onderzoeken welke school- en leiderschapskenmerken geassocieerd zijn met de mate van het strategisch zijn van het personeelsbeleid in scholen, voerden we een Qualitative Comparative Analysis (QCA) uit. Dit is een vergelijkende, kwalitatieve analyse gebaseerd op cases. QCA laat toe om op basis van een klein aantal cases condities te identificeren die gelinkt zijn met eenzelfde uitkomst (Ragin, 1987). Het aantal condities dat in de analyse opgenomen kan worden, is afhankelijk van het aantal cases (Marx, Cambré & Rihoux, 2013). Er moet ook een uitkomstvariabele gedefinieerd worden. Condities en uitkomstvariabelen vastleggen is een iteratief proces dat beïnvloed wordt door de literatuur en de cases in de studie (Thomann & Maggetti, 2017). In onze studie betrekken we school- en leiderschapskenmerken als condities: professionele leergemeenschap, participatieve besluitvorming, leerkrachtautonomie, onderwijskundig leiderschap en transformationeel leiderschap. Wanneer er 5 condities opgenomen worden, moeten er minstens 17 cases zijn (Marx, et al., 2013). In onze studie betrekken wij 24 cases, dus voldoen we aan deze voorwaarde. We kenden een score van 0 of 1 toe per schoolkenmerk en leiderschapskenmerk waarbij 0 betekent dat het

schoolkenmerk of het leiderschapskenmerk niet (voldoende) aanwezig is binnen de school en 1 betekent dat dit wel het geval is. Meer informatie omtrent deze score per kenmerk kan in onderstaande tabel (Tabel a) gevonden worden. Daarnaast gebruiken we de mate waarin het personeelsbeleid in scholen strategisch is als uitkomstvariabele. Hiervoor baseren we ons op de analyse van het personeelsbeleid in onze 24 cases die we maakten in een eerdere studie (Tuytens, Vekeman & Devos, 2020). Op basis van deze studie identificeren we ‘excellent strategische scholen’ en ‘matig strategische scholen’¹. Het verschil tussen deze twee groepen van scholen zit hem in de mate waarin personeelspraktijken afgestemd zijn op de strategische planning en de individuele noden van leerkrachten. Matisch strategische scholen zijn scholen die maximaal 2 personeelspraktijken afstemmen op de strategische planning binnen de school én de individuele noden van leerkrachten. Excellent strategische scholen worden daarentegen gekenmerkt door het afstemmen van minstens 3 personeelspraktijken met de strategische planning binnen de school én de individuele noden van leerkrachten.

Tabel a. Scoring van de school- en leiderschapskenmerken

Een score 1 versus score 0	
Professionele leergemeenschap	De data tonen aan dat leerkrachten binnen de school: 1) engageren in reflectieve en diepgaande gesprekken omtrent onderwijskundige zaken (bvb. Instructie, curriculum en leerlingenresultaten); 2) delen hun lesgeven en laten collega’s toe in hun klaspraktijk en 3) nemen hun deel van de verantwoordelijkheid voor de dagdagelijkse praktijk, verbetering ervan, en het leren van leerlingen en beschouwen dit niet als een eenzijdige verantwoordelijkheid van het leidinggevend team. Gebaseerd op: Stoll et al. (2006); Wahlstrom & Louis (2008); Printy (2008); Vanblaere & Devos (2016); De Neve, Devos & Tuytens (2015)
Participatieve besluitvorming	De data tonen aan dat leerkrachten binnen de school betrokken worden in de besluitvorming met betrekking tot verschillende gebieden (gaande van curriculum, de coördinatie van de lespraktijk, het beleid omtrent klasmanagement, de (professionele) ontwikkeling van leerkrachten, het toekennen van middelen tot de generieke administratie. Gebaseerd op: Pashiardis (1994); Smylie (1992)
Leerkrachtautonomie	De data tonen aan dat leerkrachten een persoonlijk gevoel van vrijheid hebben en geen inmenging of controle ervaren omtrent schoolse zaken. Gebaseerd op: Wilches (2007)

¹ Op basis van de voorgaande kwalitatieve studie werd aan elke afzonderlijke personeelspraktijk een score per school toegekend. Deze score bestond uit 3 niveaus: 0, 0.5 en 1. Een score ‘0’ betekent dat de personeelspraktijk niet is afgestemd op de strategische planning van de school noch op de individuele noden van leerkrachten. Een score ‘0.5’ wijst erop dat de personeelspraktijk is afgestemd op de strategische planning van de school of de individuele noden van leerkrachten. Een score ‘1’ houdt in dat de personeelspraktijk is afgestemd op de strategische planning van de school én de individuele noden van leerkrachten. Meer details over hoe de scholen werden gescoord kunnen teruggevonden worden in het eerdere onderzoeksrapport.

Onderwijskundig leiderschap	De data tonen aan dat de schoolleider focust op het leren en de instructie door duidelijke schooldoelen voorop te stellen, het onderwijskundig programma te managen en een positief leerklimaat te creëren.
	Gebaseerd op: Day, Gu & Sammons (2016); Hallinger (2003; 2011), Marks & Printy (2003); Leithwood (1992)
Transformationeel leiderschap	De data tonen aan dat de schoolleider genoeg tijd investeert in het communiceren van een duidelijke en gedeelde visie, het motiveren en ondersteunen van individuele leerkrachten en het creëren van een ondersteunende cultuur voor leren in de school.
	Gebaseerd op: Day, Gu & Sammons (2016); Hallinger (2003; 2011), Marks & Printy (2003); Leithwood (1992)

Resultaten

In wat volgt bespreken wij drie zaken. Ten eerste bekijken we de resultaten m.b.t. hoe scholen scoren op de condities (school- en leiderschapskenmerken). Ten tweede rapporteren we de score op de uitkomstvariabele. Ten derde gaan we in op de relatie tussen de condities en de uitkomstvariabele.

De school- en leiderschapskenmerken. Tabel b geeft weer in hoeveel scholen de school- en leiderschapskenmerken aanwezig zijn. Hierbij valt op dat PLG's in een minderheid van scholen aanwezig zijn. Slechts in 8 scholen vinden we evidentie voor de drie kenmerken van PLG's, namelijk reflectieve dialoog, gedeelde verantwoordelijkheid en gedeprivatiseerde praktijk. In de andere 16 scholen vonden we deze 3 kenmerken niet samen terug. We zien hier echter wel vaak één of twee van deze kenmerken, waarbij het kenmerk 'gedeprivatiseerde praktijk' echter het vaakst afwezig is.

In een meerderheid van de scholen is er sprake van participatieve besluitvorming. Daar waar dit kenmerk afwezig is, is dit vaak omdat leerkrachten minder betrokken zijn bij het schoolbeleid zelf. Bijna alle scholen (op één school na) vertonen het kenmerk 'leerkrachtautonomie'. Wat leiderschap betreft, zien we dat in de helft van de scholen sprake is van onderwijskundig leiderschap. We zien hierbij dat in die scholen waar we geen onderwijskundig leiderschap vaststellen, schoolleiders vaak aangeven dat ze hier geen tijd voor hebben of dat dit niet past bij hun persoonlijke leiderschapsstijl. Transformationeel leiderschap wordt in meer scholen vastgesteld. Veel schoolleiders getuigen van een duidelijke visie, een motiverende, ondersteunende aanpak van leerkrachten en creëren actief een leercultuur in de school. In de scholen waar dit moeilijker loopt, merken we dat er vaak sprake is van de afwezigheid van het vooropstellen van een duidelijke visie door de schoolleider of dat het motiveren en ondersteunen van leerkrachten door de schoolleider minder gebeurt.

Tabel b. Conditie en uitkomstvariabele

	Totaal basis- scholen	Totaal secundaire scholen	Totaal	Percentage van aantal cases
Conditie				
PLG				
Afwezig (0)	7	9	16	66.7%
Aanwezig (1)	5	3	8	33.3%
Participatieve besluitvorming				
Afwezig (0)	5	5	10	41.7%
Aanwezig (1)	7	7	14	58.3%
Leerkrachtautonomie				
Afwezig (0)	0	1	1	4.2%
Aanwezig (1)	12	11	23	95.8%
Onderwijskundig leiderschap				
Afwezig (0)	5	7	12	50%
Aanwezig (1)	7	5	12	50%
Transformationeel leiderschap				
Afwezig (0)	4	4	7	29.2%
Aanwezig (1)	8	8	17	70.8%
Uitkomst: excellent strategische school				
Afwezig (0)	7	7	14	58.3%
Aanwezig (1)	5	5	10	41.7%

Uitkomstvariabele. Onze steekproef omvat 10 van 24 scholen die als excellent strategisch gescoord worden en dus drie of meer personeelspraktijken strategisch invullen. Meer specifiek, zien we dat slechts drie scholen alle personeelspraktijken afstemmen op de strategische planning én de individuele noden van leerkrachten. Er zijn daarnaast 14 van 24 scholen die matig strategisch zijn en dus twee of minder personeelspraktijken strategisch invullen. Concreet betekent dit dat deze scholen vaak de personeelspraktijken wel afstemmen OF op de strategische planning OF op de individuele noden van leerkrachten maar dat de combinatie van beiden ontbreekt.

De relatie tussen condities en uitkomstvariabele. De QCA toont aan dat er twee combinaties van condities zijn die gerelateerd zijn aan excellent strategische scholen (zie Tabel c). Er zijn dus twee mogelijke paden om tot dezelfde uitkomst te komen (Ragin, 1987).

Tabel c. Oplossing voor uitkomst [1]: excellent strategische school

	PLG	participatie	autonomie	onderwijskundig leiderschap	transformationeel leiderschap	coverage
Oplossing 1	•	•			•	0.60
Oplossing 2	⊗			•	•	0.40

Noot. De aanwezigheid van een significante conditie is gemarkeerd met: •, afwezigheid van een significante conditie is gemarkeerd met: ⊗, als een conditie niet betrokken wordt in een oplossing dan is er geen aanduiding. Coverage slaat op hoeveel cases met uitkomst '1' betrokken zijn in de oplossing.

De eerste oplossing toont PLG, participatie en transformationeel leiderschap als noodzakelijke condities om ook excellent strategisch personeelsbeleid te hebben in de school. Hierbij zien we dat 6 van de 10 excellent strategische scholen onder deze oplossing vallen (coverage: 0.60). Hierbij stellen we vast dat vijf van deze scholen hoog scoren op alle school- en leiderschapskenmerken (dus ook op onderwijskundig leiderschap en autonomie). Slechts in één school van deze zes was er geen evidentie voor onderwijskundig leiderschap door de schoolleider zelf, maar dit werd wel opgenomen door anderen binnen de school. Deze oplossing toont dus aan dat onderwijskundig leiderschap door de schoolleider niet per sé een noodzakelijke conditie is binnen scholen om excellent strategisch te zijn zolang er een PLG, participatieve besluitvorming en transformationeel leiderschap is binnen de school. We menen dat deze resultaten aantonen dat onderwijskundig leiderschap ook door anderen dan de formele leider kan opgenomen worden (bijv. door vakgroepvoorzitters of door collega-leerkrachten in een PLG). In lijn met eerder onderzoek die aantoont dat een PLG een belangrijke katalysator kan zijn voor bepaalde personeelspraktijken (bijv. professionele ontwikkeling (Geijssels et al., 2009) of leerkrachtevaluatie (Zhang & Ng, 2011)), stellen we in deze studie vast dat PLG een belangrijke voorwaarde kan zijn voor strategisch personeelsbeleid. Hierbij stellen we bovendien vast dat de combinatie met participatieve besluitvorming nodig is. Deze vaststelling is in lijn met de resultaten van een vorig onderzoeksrapport (Vekeman, Tuytens & Devos, 2020) waarin we vaststelden dat de betrokkenheid van leerkrachten een onderdeel is van de teamcultuur in excellent strategische scholen. Een laatste noodzakelijke conditie in deze oplossing omvat transformationeel leiderschap. Hieruit blijkt dus dat een leider die een duidelijke visie vooropstelt en communiceert en die individuele leerkrachten ondersteunt, noodzakelijk is om tot een excellent strategisch personeelsbeleid te komen.

De tweede oplossing die uit onze QCA naar voren komt, geeft aan dat de combinatie van beide leiderschapskenmerken (instructioneel én onderwijskundig leiderschap) én de afwezigheid van PLG ook gelinkt kan worden aan de uitkomstvariabele 'excellent strategische school'. Deze oplossing wordt in 4 van de 10 excellent strategische scholen gevonden (coverage: 0.40). Ook in de literatuur wordt vaak gewezen op het belang van geïntegreerd leiderschap (= combinatie van onderwijskundig én transformationeel leiderschap). In deze oplossing komt echter ook expliciet de afwezigheid van een PLG naar voren. We zien immers dat in de vier scholen die tot deze oplossing behoren, er nog geen sprake is van een PLG op dit moment. Wel merken we in deze scholen dat de schoolleider expliciet zowel een sterk transformationeel als onderwijskundig leider is die de afwezigheid van een PLG in de school mogelijks kan compenseren. Daarnaast stellen we ook vast dat schoolleiders in deze scholen wel streven naar een PLC, maar dit nog niet (helemaal) gerealiseerd hebben. Hierbij merken we ook op dat 3 van de 4 scholen in deze oplossing secundaire scholen zijn waar het komen tot een PLG voor de gehele school (met

een groter lerarenteam en een diversiteit aan vakgebieden) minder evident is (Huberman, 1993).

Discussie

Het doel van deze studie was om een beter inzicht te verwerven in de relatie tussen school- en leiderschapskenmerken en de mate waarin scholen een strategisch personeelsbeleid hanteren. We vonden hierbij twee combinaties van factoren die in verband staan met excellent strategisch personeelsbeleid: enerzijds PLG, participatieve besluitvorming én transformationeel leiderschap en anderzijds onderwijskundig en transformationeel leiderschap in afwezigheid van PLG. Deze resultaten lijken te suggereren dat daar waar geen PLG aanwezig is, dit opgevangen kan worden door onderwijskundig leiderschap en dit nog steeds gepaard kan gaan met excellent strategisch personeelsbeleid. Omgekeerd is het zo dat daar waar wel een PLG aanwezig is, onderwijskundig leiderschap door de schoolleider niet meer noodzakelijk blijkt om gepaard te gaan met excellent strategisch personeelsbeleid.

Deze studie toont aan dat de noodzakelijke condities om tot excellent strategisch personeelsbeleid te komen niet noodzakelijk eenduidig zijn, maar dat het een complex samenspel is van kenmerken. Hierbij stellen we wel vast dat transformationeel leiderschap een erg belangrijk leiderschapskenmerk blijkt te zijn om excellent strategisch personeelsbeleid in scholen te bekomen. Dit kenmerk komt immers in beide oplossingen naar voren als noodzakelijk. Zoals we hierboven aangeven is dit niet verwonderlijk daar transformationeel leiderschap het communiceren en vooropstellen van een duidelijke en gedeelde visie door de schoolleider combineert met het ondersteunen van individuele leerkrachten (Hallinger, 2003). Ook bij excellent strategisch personeelsbeleid is een combinatie tussen een gerichtheid op de strategische planning van de school én de individuele noden van leerkrachten cruciaal (Boselie, 2014). Onze studie toont dus aan dat de schoolleider cruciaal is om dit te bekomen en meer bepaald via transformationeel schoolleiderschap.

Uiteraard omvat onze studie ook beperkingen. Zo is deze exploratief van aard en kleinschalig kwalitatief. Toekomstige studies zouden onze analyses kunnen uitbreiden in een meer grootschalige en kwantitatieve studie. We willen ook benadrukken dat we met onze studie geen uitspraken kunnen doen omtrent de causaliteit tussen de bestudeerde variabelen. Niettemin menen we dat deze studie bijdraagt tot ons begrip van strategisch personeelsbeleid in Vlaamse scholen en de school- en leiderschapskenmerken die hierbij van belang zijn.

Research paper: The role of school cultural characteristics and school leadership in strategic human resource management

Abstract

In many countries different policy measures are taken which should stimulate schools to implement strategic human resource management (SHRM). Yet, previous research shows HRM in schools is often non-strategic. This study examines which school organisational characteristics and characteristics of school leadership, or combinations of characteristics, are associated with the extent to which HR practices are strategic in schools. Based on case study research in 24 schools (12 primary, 12 secondary), a crisp-set qualitative comparative analysis was conducted. The results of this study reveal that in excellent strategic HRM schools a professional learning community (PLC), a participative decision making culture and a transformational leader is present. Moreover, the analysis shows that when no PLC is present in these schools a combination of instructional and transformational leadership is noticed. Implications and limitations of this study are discussed.

Introduction

Internationally, strategic human resource management (SHRM) has gained attention with the intent to attract, develop and retain high quality teachers in education. In many countries different policy measures are taken which should stimulate schools to work on their human resource management (HRM) (e.g. the implementation of teacher evaluation policies; obligation to develop a professional development plan) and strategic planning. Moreover, based on HR literature, voices have raised to align HRM with strategic planning, on the one hand, and the individual needs of teachers, on the other hand, which are actually two basic fundamentals of SHRM (Boselie, 2014; Vekeman, Devos & Valcke, 2016a). Yet, the educational literature until now points to the fact that in many schools current HRM is anything but strategic (DeArmond, 2013; Smylie et al., 2004; Rebore, 2010; Vekeman, Devos & Valcke, 2016a). It is stated that educational leaders lack a systematic and comprehensive viewpoint on HRM (Runhaar, 2017) and it has been viewed as narrowly construed, built around a limited range of disconnected practices and approached in a reactive way instead of forward-looking and proactive (Keep, 1993; Rebore, 2010). However, little is known on the linkages between HRM in schools and schools' cultural characteristics, on the one hand, and school leadership on the other hand. In this regard, our study wishes to investigate the relation between HRM and the broader school organization. By concentrating on how school characteristics and school leadership jointly contribute to the implementation of strategic HRM in schools, we want to further the understanding on what it takes to make HRM in schools as a means to accomplish strategic planning in the school and a means to pay attention to the individual needs of teachers.

Conceptual framework

SHRM in the context of education²

Strategic human resource management (SHRM) can be defined as an approach of human resource management which is ‘explicitly’ aimed at achieving individual, organisational and societal goals (Boselie, 2014). First, in order to achieve individual goals, different authors state that schools should invest in their ‘resources’ in line with the resource-based view (RBV) (Barney, 1991; Leisink & Boselie, 2014; Smylie, Miretzky & Konkol, 2004). The RBV paradigm states that organisations achieve value through HR practices that are aligned with employees’ characteristics and needs (Wright, Dunford, & Snell, 2001) or as Smith (2001) states in the context of education: ‘schools should take into account the needs of faculty across careers’. Second, in order to achieve organisational goals, it is important for schools to develop meaningful school goals, which are essential, sufficiently operationalised, and take the school’s context into account (Leisink & Boselie, 2014). In other words, an essential point to develop SHRM is that schools stipulate goals on their own and that schools work yield oriented. Yet, in line with Leisink and Boselie (2014) we believe the term "goals" and "outcomes" should not be interpreted narrowly in economic terms and specific school goals can also contribute to the development of certain school values. Therefore, we choose to focus in this study not only on school goals but look at the articulation of widely shared ownership and commitment to purpose in schools (i.e. mission, vision, values, and goals). Building on the work of Gurley and colleagues (2015), we refer with the term ‘strategic planning’ to the process of developing a clear school mission, shared vision, articulated values, and specific goal statements. Taken together, based on previous literature outside and inside education, we believe a balanced approach in HRM is necessary (Boselie, 2014). In this regard, SHRM in education is explicitly aimed at achieving individual goals, on the one hand, by taking into account the needs of individual teachers, and organisational and societal goals, on the other hand, by aligning HR practices with strategic planning in the school.

In the past years, various researches have put forward different HR practices and an awareness has grown that the relevance of HR practices and their effectiveness is context-specific. In this regard, recently is stressed that the difference between the profit and non-profit organizations should not be ignored when studying SHRM (Knies, Boselie, Gould-Williams & Vandenabeele, 2015). In this context, Runhaar (2017) conceptualized HRM in the context of schools. According to her this conceptualisation helps schools to create a high-quality and committed teacher team. Relying on her work a set of common HR practices in education can be identified: staffing, professional development,

² This section also is included in Tuytens, M.; Vekeman, E. & Devos, G. (2020). *Strategisch personeelsbeleid in Vlaamse scholen*. Een exploratieve studie. Steunpunt Onderwijsonderzoek, Gent.

performance appraisal and reward systems. The first HR practice, 'staffing' deals with the 'recruitment and selection' of new teachers from outside the school. Moreover, it includes the 'assignment' of teachers within the organization to specific tasks (Runhaar, 2017). In this study, we approach recruitment and selection, on the one hand, and assignment on the other hand as two separate HR practices. This choice was made as previous research (e.g. Donaldson, 2013) has shown that principals approach these practices differently. It seems that principals pay less attention to assignment compared to recruitment and selection (Donaldson, 2013). In order to capture these differences also in this study, assignment was studied as a separate HR practice. Professional development, here seen as a third HR practice, aspires the stimulation of continuous professionalization of teachers. Performance appraisal (or teacher evaluation which is a synonym) has both formative and summative objectives. In essence, it holds teachers accountable, but it is also a mean to improve teachers' practice. Both objectives require accurate assessments of teachers' performance based on a clear description of teacher standards. Reward systems can be financial (e.g. merit pay), although this is still rare in the educational context, or non-financial. Research has shown that teachers are highly intrinsically motivated. Hence schools should pay attention to teachers' intrinsic motivators in order to stimulate such intrinsic motivators such as providing positive feedback, allocating of a challenging project or creating development opportunities.

SHRM and the importance of school characteristics and school leadership

Different studies stress the crucial role of school characteristics (or school factors) in the context of teacher and school development (De Neve, Devos & Tuytens, 2015; Sarafidou & Chatziioannidis, 2013; Stoll et al., 2006; Tuytens & Devos, 2017; Vanblaere & Devos, 2016). As a result, also in the context of HRM in schools, increased attention is paid to that. Different authors acknowledge HRM should be embedded in the school context. If SHRM wants to lead to teacher improvement or change, then the school as an professional organization should be taken into consideration as an influential factor (Leisink & Knies, 2019). Based on an earlier review on different HR practices in education (Vanblaere, Tuytens & Devos, 2017), we choose to focus in this study on three cultural school characteristics and two school leadership characteristics which have been showed to be important in the context of HRM in education. Actually, this review provides a synthesis of both quantitative and qualitative studies on four common HR practices in education (i.e. staffing (including 'selection and recruitment' and 'assignment'), professional development, teacher evaluation and rewards) and maps variables that are described as influential. For each HR practice the review resulted in a summary of the key antecedents and outcomes for that specific HR practice. Based on the results of this review we choose to focus on the following cultural school characteristics: 'professional learning community' (PLC), 'participative decision-making' and 'autonomy' as these characteristics have been described as influential variables for 2 or more HR practices. In addition, this

review showed that school leadership characteristics popped up as important in the HR literature. More specifically, this review showed that both instructional and transformational leadership are crucial for three or more HR practices. Hence, in this study we also included both leadership characteristics. In what follows, the three cultural characteristics and characteristics of school leadership will be conceptualised and discussed in the context of SHRM.

Cultural school characteristics

Professional learning community. The essence of a PLC lies in a collaborative work culture characterized by systematic collaboration and supportive interactions. Teachers in a PLC strive to improve their instruction with the ultimate goal of teaching all students in the best possible way (DuFour, 2004; Stoll et al., 2006). PLCs has been a hot topic in the educational literature for a considerable amount of time. As a result it has become a umbrella term to cover a number of different dimensions (e.g. personal, interpersonal and organizational dimension) (Sleegers et al., 2013; Vangrieken et al., 2015). Yet, because the interpersonal dimension - referring to learning and collaborating as a team, grounded on shared expectations and a focus on learning- recurs in the vast majority of studies covering PLCs, it can be considered a common denominator in the multiplicity of descriptions (Bolam et al., 2005; Olivier, Hipp, & Huffman, 2003; Sleegers et al., 2013; Stoll et al., 2006). Therefore, this study focuses on the interpersonal aspect of PLCs. A first interpersonal PLC characteristic is *reflective dialogue*, which implies that teachers engage in reflective and in-depth conversations about educational matters, such as instruction, curriculum, and student achievement (Stoll et al., 2006; Wahlstrom & Louis, 2008). A second characteristic refers to teachers sharing their teaching and allowing their colleagues to enter their classrooms. This *deprivatized practice* enables observation of each other's practices and methods (Hord, 1997; Wahlstrom & Louis, 2008). The last dimension of the interpersonal PLC characteristics points to the central importance of *collective responsibility* in PLCs. Teachers accept their share of responsibility for general operations, improvement, and student learning, rather than considering this the sole responsibility of the leadership team (Stoll et al., 2006). While some scholars also consider shared norms to be a PLC characteristic, its position as a separate characteristic is contested in the literature and empirical validations (Bryk et al., 1999; Lomos, Hofman, & Bosker, 2011; Wahlstrom & Louis, 2008). Hence, in this study we do not include 'shared norms' as a PLC characteristic.

Earlier research shows that a PLC (or teacher collaboration) has been studied in combination with HR practices such as 'professional development', 'teacher evaluation' and 'rewards' (Vanblaere et al., 2017). A study by Geijsel and colleagues (2009) shows for example that collaboration among teachers has a direct effect on participation in professional learning activities and Zhang & Ng (2011) found that a focus on collaboration, good relationships and sharing can support teacher evaluation. Moreover, although the development of PLC's in the context of SHRM is recently stressed (Leisink & Boselie, 2014;

Leisink & Knies, 2019), until now little is known on the link between PLCs and SHRM in schools.

Participative decision-making³. Participation in school decision making is a complex task which refers to the extent of involvement in different decision-making areas, approached with different levels of desire and sources of power (Ho, 2010). Decision making refers to various aspects of school life, from curriculum and instructional co-ordination to students' attendance and discipline and from staff development and personnel issues to the allocation of resources and general administration (Pashiardis, 1994; Smylie, 1992).

Although the importance of participative decision-making in SHRM has been stressed by different researchers (Leisink & Boselie, 2014), until now scant research has explored to what extent it is an important condition for strategic HRM in schools. Nevertheless, earlier studies on single HR practices has indicated the need of a participative decision-making culture in relation to HR practices such as 'professional development' (e.g. Geijsel et al., 2009; Pedder, 2006) and 'rewards' (e.g. task differentiation) (e.g. Cheng & Szeto, 2016).

Teacher autonomy. Different definitions of (teacher) autonomy are proposed in the literature. Husband and Short (1994), for example, defined teacher autonomy as "the ability to control daily schedules, to teach as one chooses, to have freedom to make decisions on instruction, and to generate ideas about curriculum" (p. 60). Yet, over the years, there has been a shift in the conceptualisation of teacher autonomy (Zeng, 2013). Looking at definitions put forward through time, the focus has changed from independence and non-reliance to personal choice and collaborative decision making. In this regard, Wilches (2007) defined teacher autonomy as "a personal sense of freedom from interference or in terms of teachers' exercise of control over school matters" (p. 245).

Based on earlier educational studies we know 'teacher autonomy' is an important condition for the professional development of teachers (e.g. De Neve, Devos & Tuytens, 2015) as well as reward systems such as task differentiation or financial support (e.g. Ingersoll & May, 2012; You & Conley, 2015). Nevertheless, it is unclear whether teacher autonomy is also important in the context of SHRM.

³ Participative decision making (of 'leerkrachtparticipatie') has been discussed also in an earlier research report as a form of distributed leadership: Vekeman, E., Tuytens M. & Devos, G. (2020). *Gedeeld leiderschap en strategisch personeelsbeleid in scholen*. Steunpunt Onderwijsonderzoek, Gent.

School leadership

Leadership refers to people's ability, using minimum coercion, to influence and motivate others to perform at a high level of commitment (Bass, 1985, 1999). In educational research two leadership models which are very influential and enduring: instructional and transformational leadership (Bush, 2014; Hallinger, 2003). Both have gained support in the literature, and both have been recommended as models of leadership for school principals (Leithwood & Jantzi, 2006; Robinson et al., 2008). Instructional leadership focuses on the core business of education: teaching, learning, and classroom pedagogy (Hallinger, 2003). Hallinger (2003) developed a specific conceptualisation of instructional leadership consisting of three dimensions: (1) defining the school's mission, (2) managing the instructional program, and (3) promoting a positive school learning climate. Transformational leaders, on the other hand, seek to build their school's capacity, to select its goals and to support the improvement of the quality of teaching and learning (Hallinger, 2003). A transformational leader invests enough time in communicating a clear and shared vision, places motivation and commitment of teachers central, emphasises the understanding of teachers' needs in order to increase their capacity and creates an supportive culture for learning in the school (Hallinger, 2003; Leithwood, 1992).

Also within the context of SHRM the importance of school leadership has been stressed (Leisink & Boselie, 2014; Vanblaere et al., 2017; Vekeman, Devos & Valcke, 2016a). In the context of professional development of teachers, for example, different studies point to the importance of transformational and shared leadership (Vanblaere & Devos, 2016; Kurland, Peretz & Hertz-Lazarowitz, 2010) or, in the context of teacher evaluation, to the importance of an integrated leadership style (i.e. approach that combines both transformational and instructional leadership) (Tuytens & Devos, 2011; 2014). Yet, except for Robinson and colleagues' (2008) plea for leadership skills in securing resources that are aligned with school goals and instructional purposes, only a handful empirical studies focus on the link between school leadership and (S)HRM (e.g. Janssens, 2016; Vekeman, Devos & Valcke, 2016b). These studies indicate that both instructional and transformational leadership is associated with the fact that HR practices are aligned with the strategic planning (Vekeman, Devos & Valcke, 2016b) or that distributed leadership is associated with the extent to which motivation and ability-enhancing HR practices are used in schools (Janssens, 2016). Based on the literature we described above and the fact an integrated approach of leadership is advised in several studies (Day, Gu & Sammons, 2016; Marks & Printy, 2003), our research wants to focus on an integrated leadership approach or 'leadership for learning' (Hallinger, 2011) approach that focuses both on transformational and instructional leadership characteristics in the context of SHRM and the school's organization.

Purpose of the study

Although different studies on single HR practices focused on important school characteristics and school leadership, they have not been applied to the realization of SHRM, which is the focus of this study. Therefore, we set up comprehensive case study research and used the advanced method of qualitative comparative analysis (QCA) to systematically analyse how school characteristics and school leadership jointly contribute to SHRM in schools. More specifically, the following research question is addressed in this study: *Which school and leadership characteristics, or combinations of characteristics, are associated with the extent to which HR practices are strategic in schools?*

Methods

In order to answer this research question, a twofold research design was established. First, a comprehensive case study research was conducted, followed by Qualitative comparative analysis (QCA) to analyse the data systematically. In what follows, these two steps will be explained.

Multiple case study

Case selection. A multiple case study design was chosen in order to deepen the understanding about SHRM in primary and secondary schools. More specifically, a sample of schools was used that was purposefully chosen. In this regard, we aimed to select schools that were particularly interesting based on one of their human resource practices and hence, had a high potential of being meaningful and enriching for this study. This means that we were not pursuing a representative, random sample, but we used a *stratified purposeful sample* (Miles & Huberman, 1994). When selecting schools, we looked for an equal representation of schools based on demographic characteristics (e.g. school size; educational umbrella organisation; pupil population (OKI), school location and type of education (ASO/TSO/BSO). We selected a sample of 24 schools in total, in essence 12 elementary schools and 12 secondary schools (see Table 1).

In order to identify particularly interesting schools in light of their human resource practices, our case selection was twofold: 1) we launched a call to all Flemish schools to participate in the study through a newsletter that was sent out to all Flemish schools by the Ministry of Education. In this call, we asked to identify schools that had a specific approach of one or more HR practices that are under investigation through an online form. In this form, we requested information about the specific approach of one or more HR practices and several characteristics of the school (elementary or secondary, school size, student population, etc.). 2) we selected schools based on our prior knowledge of the school. In essence this involved schools that already participated in previous studies that

were performed in our research group. The focus of these previous studies was specifically on one of the HR practices that are put forward in this study (e.g. teacher assignment, teacher evaluation, teacher recruitment). For the selection of our cases, first we looked at the schools that were identified through the call. In total, 14 schools were selected based on the call. This involved 8 elementary and 6 secondary schools. After this selection, we added 10 schools (4 elementary and 6 secondary schools) to our sample based on our experiences with these schools through prior research on one of the HR practices.

In order to get a good insight in schools' human resource management and related factors (such as leadership, school context, etc.), we investigated the 24 cases throughout one entire school year using interviews, observations and documents. First, a pilot study in 4 cases (2 elementary schools and 2 secondary schools) was carried out during school year 2017-2018. Second, based on the same format of the pilot study, 20 cases (10 elementary schools and 10 secondary schools) were investigated during the following school year (from August 2017 until August/September 2018). The interviews were used as the main source of data collection. The observations and documents were gathered as a complementary data collection procedure in support of data triangulation. In total, we conducted 194 interviews with on average 8 interviews per school. In each school, three semi-structured interviews were conducted with the school leader (at the beginning, in the middle and at the end of the school year). This approach gave us the chance to get insight in important moments related to HRM during the school year and time to gain deep insight in the different HR practices, strategic planning and schools' characteristics and context. The first interview with the school leader (at the beginning of the school year (August/September) can be seen as an explorative interview in which we focused on: 1) strategic planning, 2) HR practices (i.e. recruitment and selection, assignment, teacher evaluation, professional development and rewards) and 3) distributed leadership. Based on this interview we could also identify which are important moments during that school year related to strategic planning and/or HRM. Based on this interview also other relevant actors in strategic planning and HRM were identified. In this way, the researcher was given an initial overview of the school's policy and important actors within the school. Based on this initial overview, the researcher discovered with whom the interviews were best conducted and could make (in consultation with the school) a schedule of interesting observations. The theme setting of this initial meeting with the school leader is included in Appendix I.

The second interview with the school leader took place in the middle of the school year (December / January) and was focused on detailed aspects of strategic planning (i.e. vision development) and HRM, the school's internal (e.g. structural characteristics, cultural heritage) and external context (e.g. market context, institutional context), school characteristics (i.e. collaboration with teachers, shared vision, ...) and school leadership (see Appendix II).

Table 1: Demographic characteristics of cases

CASE	SCHOOL LEVEL	SCHOOL SECTOR	NUMBER OF STUDENTS	SES	LOCATION	EDUCATIONAL TRACK
1	SE	KOV	950	1.06	urban	TSO/BSO/KSO
2	SE	GO	250	1.04	urban	ASO/TSO/BSO
3	SE	POV	380	2.23	urban	TSO/BSO
4	SE	KOV	1700	0.90	urban	TSO/BSO/DBSO
5	SE	KOV	280	0.48	rural	ASO
6	SE	KOV	840	0.59	urban	ASO/TSO/BSO
7	SE	KOV	670	1.11	urban	ASO
8	SE	GO	540	1.83	urban	TSO/BSO/DBSO
9	SE	KOV	780	0.64	urban	TSO/BSO
10	SE	KOV	1100	0.29	semi-urban	ASO
11	SE	GO	360	0.60	semi-urban	TSO/BSO
12	SE	POV	320	0.37	rural	ASO/TSO
A	PE	KOV	300	0.30	rural	/
B	PE	OVSG	160	0.26	rural	/
C	PE	KOV	440	0.38	semi-urban	/
D	PE	GO	280	0.54	rural	/
E	PE	KOV	240	0.11	semi-urban	/
F	PE	OVSG	320	0.83	semi-urban	/
G	PE	GO	580	3.32	urban	/
H	PE	KOV	190	0.21	urban	/
I	PE	OVSG	290	0.88	rural	/
J	PE	OKO - FOPEM	200	0.32	urban	/
K	PE	KOV	250	1	urban	/
L	PE	KOV	370	0.27	rural	/

Note. Number of students are rounded. Bold numbers indicate large number of pupils (for elementary more than 270 pupils; for secondary more than 600 pupils) or high SES level (for elementary larger than 0.83; for secondary larger than 0.94) – School level: secondary education (SE), primary education (PE). School sector: KOV (Katholiek Onderwijs Vlaanderen), GO (Gemeenschapsonderwijs), POV (Provinciaal Onderwijs), OVSG (Onderwijsvereniging van Steden en Gemeenten), OKO-FOPEM (Overleg Kleine Onderwijsverstrekkers – Federatie van Onafhankelijke Pluralistische Emancipatorische Methodescholen) Educational tracks: general (ASO), vocational (BSO), technical (TSO) and part-time vocational (DBSO) secondary education , Leadership team: Yes (leadership team available), No (no leadership team available)

Finally, in each school a final interview with the school leader was carried out in which the researcher could elaborate on topics that had not yet been addressed or could double check things which have been told by teachers or other school members. Moreover, this final interview gave the researcher the chance to discuss aspects that have changed throughout the school year on school level or policy level (e.g. experiences with the replacement pool). Moreover, during the school year, we conducted interviews with minimum four teachers per school. In order to gain insight on how these HR practices are perceived by teachers, we interviewed one beginning teacher, one less experienced teachers and two experienced teachers in each school. Also, if relevant for HR practices, we conducted interviews with other (teacher) leaders, members of the school board, etc. During the interviews, the perspectives of the respondents on the HR practices and strategic planning in the school were gathered (see Appendix II).

In addition to the interviews, we carried out observations within the school spread over the school year depending on school's planning. In each school 3 observations were planned: 1) a school staff meeting (i.e. 'personeelsvergadering'), 2) a meeting between leading actors with the school (e.g. meeting between coordinators and principal; principal meeting within the school or school network) and 3) a meeting between teachers (e.g. meeting between subject colleagues; meeting between parallel-colleagues). Due to practical issues or the fact some activities were less relevant, in some schools 2 observations took place. However, in total 66 relevant activities were observed in schools (varying in length from 30 minutes to approximately 4 hours per observation) using the observation scheme in Appendix III. The observations were mainly in order to check whether elements mentioned during the interviews were also effectively addressed (e.g. communication on school's vision, participative decision making in HRM). The observations provided also a concrete picture of how school leaders behaved during meetings and interactions with their staff, how staff members reacted and how they behaved towards each other.

Finally, we asked all schools to deliver relevant documents (on paper or digital) such as school regulations, texts on school vision or mission, school plan (i.e. 'schoolwerkplan'), professional development plan (i.e. 'nascholingsplan') and information for beginning and/or new teachers within the school. These documents were supplemented with other relevant documents related to HRM when available (e.g. checklist for teacher evaluation, format for teacher selection interview, reports on teacher meetings, etc.). When a school inspection report was available online, the report was also included for document analysis.

Data analysis. In order to analyse the data we followed a clear step-by-step plan. First, all interviews were systematically transcribed and coded using Nvivo (i.e. a qualitative research software tool). Second, based on the interview protocol, sets of categories (or nodes) were created in Nvivo. The interviews were coded based on these categories in order to structure the text and to reduce the data. Third, after coding each interview or set

of interviews an 'interim case summary' (Miles & Huberman, 1994) was adjusted or refined. An interim case summary is a provisional product of varying length that provides a synthesis of what the researcher knows about the case and also indicates what may remain to be found out. In our study the case summary presents (a) a review of findings, (b) a careful look at the quality of data supporting them, (c) the agenda for the next interview(s). The review of findings in the summary was ordered based on the different codes in Nvivo (cf. Appendix IV for case summary format). Fourth, based on the final case summaries (approximately 35 pages per case) and the coded interviews in Nvivo a detailed case report (on average 25 pages) was written for each school in which we reported on the within-case analysis for the different central variables (i.e. school's internal and external context, school characteristics, HR practices, school leadership, teacher characteristics and teacher outcomes). When relevant, we added extracted information from the observations and documents to the interim case summary and case reports. As both the analysis of the observations and documents were mainly supplementary to the interviews, the predefined categories were also used to analyse the documents and observations (Bowen, 1997).

Data validity. In this study, we took different steps to establish the validity of the interview data. First, we used multiple data sources to strengthen the validity of the interview data (Stake, 1995). In particular, we drew on interview data, observations as well as documents provided by the school. When differences were encountered between the information based on the interviews and the information we extracted based on the observations and/or document analysis, we asked school principals during the 2nd or 3rd interviews for possible explanations. This approach helped us to confirm or adjust our earlier interpretations. Second, the triangulation of perceptual viewpoints of both principals, teachers and other relevant actors within the HR process helped to validate the responses from the different subgroups (Patton, 1990). In most of the cases the perceptual viewpoints of principals, teachers and other relevant actors were in general like-minded. When we encountered a different perceptual viewpoint, we asked the principal or other respondents for possible explanations in the following interviews. Based on these explanations we could confirm or adjust our interpretations. Moreover, when we encountered one perceptual viewpoint which deviated extremely from other viewpoints in the school, we did not include this perspective in our further analysis. Yet, when we encountered a difference in perceptual viewpoints it was mostly related to a certain aspect we talked about in the interviews (e.g. personal experience with the principal, a certain situation which occurred in the past). We never experienced that the inclusion of a deviating perceptual viewpoint would change the score of the cases as we used multiple data sources (i.e. interviews, observations and documents) to finally score the data. In other words, by making use of data triangulation a deviating viewpoint could be always placed in perspective. Third, in order to draw valid conclusions from the data, considerable time was spent to reading, re-reading and discussing the interviews within the research

team which -according to Patton (1990)- also increases validity. By cross-checking decisions and interpretations within the research team including researchers with a large experience and expertise in studying leadership and school policy in Flemish education, we ensured that the conclusions accurately reflected the data. Cross-checking decisions and interpretations within the research team took place in different stages of the analytical process. In the first place, the coding scheme was developed within the research team. Based on the pilot study we discussed the coding within the research team which led to small changes. Some overlapping codes, for example, were deleted and more detailed (sub)codes were added (e.g. a distinction was made between ‘content of strategic planning’ and ‘process of strategic planning’). Moreover, substantive differences between codes that closely match were discussed substantially and a common approach was decided. In the second place, considerable time was spent to reading, re-reading and discussing the interviews when a detailed case report was written for each school based on the interim case summary. As such also the within-case analysis (which includes also an interpretation of codes) was discussed within the research team. Finally, in terms of member checks (Creswell, 2012), we sent each case report to the school principal. We asked all principals to read the case report and asked them explicitly to inform us when they encountered possible misinterpretations. Although not all principals responded to this request, we received 16 replies from principals which all were positive.

Qualitative comparative analysis

In order to investigate which school characteristics are associated with the extent to which HR practices are strategic in schools, we opted for qualitative comparative analysis (QCA) (Rihoux & Ragin, 2009). QCA is a case-based, qualitative, comparative analysis method that combines the in-depth insight of case studies with the inferential power of ‘large-N’ studies. Consequently, QCA allows the generalization of findings from a relatively small number of cases and offers the ability to identify conditions, or combinations thereof, that are associated with a similar outcome (Ragin, 1987). The number of conditions that can be included within QCA analysis depends on the number of cases that are being studied (Marx, Cambré and Rihoux, 2013). Additionally, an outcome variable needs to be defined. Defining conditions and outcomes is an iterative process that is influenced by literature and the cases involved in the study (Thomann & Maggetti, 2017). Further, QCA aims to address necessary (has to be present for the outcome to occur) and sufficient conditions (can produce the outcome by itself), or combinations thereof, which are referred to as pathways and are associated with the outcome of interest. Moreover, QCA includes all theoretically possible combinations of conditions, called logical remainders, which could produce an outcome in order to obtain the most parsimonious minimal formula that is associated with the outcome of interest (Rihoux & Ragin, 2009). Consequently, QCA requires the researcher to identify conditions (step 1) within each case that can be associated with a certain outcome of interest (step 2) (Rihoux & Ragin, 2009).

More specifically, in this study a crisp-set QCA (csQCA) analysis is used which implies that each condition and the outcome will get a score of 0 (fully out) or 1 (fully in) for each school case.

Step 1: Defining and calibrating conditions. In this study we treated three cultural school characteristics (i.e. 'PLC', 'participation' and 'autonomy') and two school leadership characteristics (i.e. 'instructional leadership' and 'transformational leadership') as five separate conditions. When analyzing five conditions, at least 17 cases need to be included in the study (Marx et al., 2013). In line with csQCA literature, a rubric was developed (Table 2) based on the literature to assign codes (0 or 1) to the conditions at each school (Rihoux & Ragin, 2009; Thomann & Maggetti, 2017). For all dimensions analysed, the information gathered based on the interviews (with the leadership team (e.g. principal, adjunct-principal, coordinators) and teachers), observations and documents was taken into account which helped us to score the conditions in a valid way (cf. section on 'data validity'). In a first phase, each researcher scored half of the schools for the different conditions. In a second phase, both researchers checked all scores and in case of doubt, the scoring was discussed and decided on collaboratively. Both the interviews in primary and secondary schools were scored based on the coding rubric in Table 2. Yet, for the cultural characteristic 'PLC' it is important to state that while in primary schools we looked at school-based PLC's by focusing on the involvement of all staff members in the community (Bolam, Stoll & Greenwood, 2007), in secondary school we also focused on department-based PLCs. Actually, departments are seen as the most important organizational units in secondary schools that regulate teachers' behaviour in several ways and affect teachers' work, whom they work with, and how their work is perceived by others (Vanblaere & Devos, 2016). Although the data collection in this study did not allow to rate every department-based PLC in the secondary schools investigated in our study, based on the interviews with principals (and teachers) we had a general view on the absence or presence of the three important PLC characteristics (i.e. reflective dialogue, deprivatized practice and collective responsibility) in the majority of the existing departments within the school. More details and examples of the scoring assigned to the school, in line with Table 2, are provided further in this paper (see section: 'school's scores on school characteristics'). In Table 3 the total amount and percentage of total cases can be found for the different conditions.

Table 2. Coding rubric developed to score school factors as conditions in each case

Conditions		A score of 1 versus 0
Cultural school characteristics	<i>Professional learning community</i>	<p>The data indicates that teachers within the school: 1) engage in reflective and in-depth conversations about educational matters (e.g. instruction, curriculum, and student achievement); 2) share their teaching and allowing their colleagues to enter their classrooms and 3) they accept their share of responsibility for general operations, improvement, and student learning, rather than considering this the sole responsibility of the leadership team.</p> <p>Based on: Stoll et al. (2006); Wahlstrom & Louis (2008); Printy (2008); Vanblaere & Devos (2016); De Neve, Devos & Tuytens (2015)</p>
	<i>Participation</i>	<p>The data indicates that teachers within the school are involved in different decision-making areas ranging from curriculum and instructional co-ordination to students' attendance and discipline and from staff development and personnel issues to the allocation of resources and general administration.</p> <p>Based on: Pashiardis (1994); Smylie (1992)</p>
	<i>Autonomy</i>	<p>The data indicates that teachers have a personal sense of freedom from interference or control over school matters.</p> <p>Based on: Wilches (2007)</p>
School leadership	<i>Instructional leadership</i>	<p>The data indicates that the school leader focuses on learning and instruction by setting and communicating clear school goals, managing the instructional programme and creating a positive learning climate.</p> <p>Based on: Day, Gu & Sammons (2016); Hallinger (2003; 2011), Marks & Printy (2003); Leithwood (1992)</p>
	<i>Transformational leadership</i>	<p>The data indicates that the school leader invests enough time in communicating a clear and shared vision, motivating and supporting teachers individually and creating an supportive culture for learning in the school.</p> <p>Based on: Day, Gu & Sammons (2016); Hallinger (2003; 2011), Marks & Printy (2003); Leithwood (1992)</p>

Step 2: Defining and calibrating the outcome of interest. The outcome of interest for this study is the extent to which HR practices are strategic within each school. To investigate this, we rely on the results of a previous study. In this qualitative study (Tuytens, Vekeman & Devos, 2020), for 24 cases (which are the same in this study) a score was given

to each HR practice under investigation. This scoring contained three categories per HR practice based on the literature (Boselie, 2014): 0, 0.5 or 1. A score ‘0’ indicates that a HR practice is not aligned with strategic planning nor with individual needs. A score ‘0.5’ shows that a HR practice is aligned with strategic planning OR with individual needs. A score ‘1’ demonstrates that a HR practice is aligned with strategic planning AND teachers’ individual needs. Details about this scoring per HR practice can be found in the earlier research report.

When we look at this earlier scoring of these cases, we notice that 10 out of the 24 schools align 3 or more HR practices (or in other words: 3, 4 or 5 HR practices) with the strategic planning of schools and the individual needs of teachers. As only a minority of schools could be classified in this group we labelled this group as ‘excellent strategic schools’ (see Table 3). On the other hand, we notice that 14 out of the 24 schools align 2 or less HR practices (or in other words: 0, 1 or 2 HR practices) with the school’s strategic planning and individual needs of teachers. For this group of schools we use the term ‘moderate strategic’. Only in one out of the 14 schools none of the HR practices were aligned with strategic planning and individual needs. Yet, in this school and in all other schools of this ‘moderate group’ we see that they try to align HR practices with the strategic planning OR the individual needs. Therefore, we purposefully choose the term ‘moderate’ (compared to excellent) as these schools show clear efforts to install HRM strategically but do not (yet) succeed in a balanced approach.

Table 3. Conditions and outcomes of cases

	Total primary schools	Total secondary schools	Total schools	Percentage of total schools
Conditions				
PLC				
Absent (0)	7	9	16	66.7%
Present (1)	5	3	8	33.3%
Participation				
Absent (0)	5	5	10	41.7%
Present (1)	7	7	14	58.3%
Autonomy				
Absent (0)	0	1	1	4.2%
Present (1)	12	11	23	95.8%
Instructional leadership				
Absent (0)	5	7	12	50%
Present (1)	7	5	12	50%
Transformational leadership				
Absent (0)	4	4	7	29.2%
Present (1)	8	8	17	70.8%

**Outcome:
excellent strategic
school**

Absent (0)	7	7	14	58.3%
Present (1)	5	5	10	41.7%

Results

In order to answer the research question, three additional steps were taken. First, we analysed how schools scored on the school characteristics. Second, we investigated how schools scored on the outcome variable. Third, we examined how school characteristics were related to the outcome of interest.

Schools' scores on school characteristics

Professional learning community. A strong PLC was rated as present in 8 schools (i.e. 5 primary schools and 3 secondary schools). Within these schools both school leaders and teachers indicated that the teacher team engages in reflective and in-depth conversations about educational matters (e.g. instruction, curriculum, and student achievement) both in formal and informal ways which indicates the presence of a reflective dialogue within the school. Moreover, in these schools the respondents indicate that they share their teaching and allowing their colleagues to enter their classrooms. This points thus at the presence of a deprivatized practice within the school.

“I ask a lot advice from my grade colleagues and the teacher who supports our grade. Sometimes I ask her: ‘Can you observe this specific lesson?’. I learn a lot from these observations. [...] She [the teacher who supports the grade] has a lot of experience in this school and I ask often her feedback. I reflect on her feedback and adjust my practice when necessary.” (Teacher, School G)

Finally in these schools the respondents indicate they accept their share of responsibility for general operations, improvement, and student learning. In other words, there is a sense of collective responsibility present in these schools.

“The good cooperation between teachers here can be mainly explained by the engagement of teachers. Everyone is responsible for this school. There are coordinators but everyone is responsible. I give a lot of autonomy which stimulates responsibility.” (Principal, school 9)

Within the other 16 schools (i.e. 7 primary schools and 9 secondary schools) not all PLC characteristics could be identified. Therefore, in these schools, PLC was rated as weak. Yet, only in 5 schools we noticed that all three PLC characteristics (i.e. reflective dialogue, collective responsibility and deprivatized practice) seemed to be absent. This means that

in most cases in which the PLC was rated as weak, we noticed that one or two PLC characteristics remained absent. More specifically, we found that in some schools the characteristic ‘deprivatized practice’ remained absent (in 5 cases as the only absent characteristic; in 8 cases as an absent characteristic in combination with the absence of reflective dialogue and/or collective responsibility). This means that in these schools most teachers do not fully share their teaching and allowing their colleagues to enter their classrooms.

“The principal has stimulated that [deprivatized practice]. Last year we had a session about creating powerful learning environments. There was even a call for teachers to open their classroom doors for colleagues ... I also approached some teachers and asked to observe my teaching but they do not come.” (Teacher, school 6)

Furthermore we found that in some schools reflective dialogue was rated as weak (in 2 cases as the only absent characteristic and in 7 cases as an absent characteristic in combination with the absence of deprivatized practice and/or collective responsibility). Yet, in these cases we often noticed that some teachers (e.g. grade teachers) in primary schools) or some departments in secondary engage in reflective and in-depth conversations about educational matters but this is not the case for the whole teacher team or the majority of departments. Moreover, we notice these conversations are mainly practical in function of organizing activities rather than in function of reflection.

“The kindergarten team works often together. For example, when there is a Christmas party they organise that together. We don’t have time for that in team meetings. Often they come together at lunch time spontaneously.” (Principal, school H)

Finally, we also identified schools in which collective responsibility was rated as weak (i.e. in 8 cases as an absent characteristic in combination with the absence of reflective dialogue and/or collective responsibility). In those cases we noticed school leaders and teachers do not really have a sense of shared responsibility for general operations, improvement, and student learning.

“The schools wants to include everyone but according to me it isn’t feasible. We are a strong school. I believe 80 percent of our students succeeds at university, which is high. I don’t want that the level would decrease because of including everyone. You need to pay attention to everyone but at the end the strongest students will be the head of our society. I can’t lower your standards. I have the feeling that it often happens in our school because the leadership team pays attention to the number of students rather than quality.” (Teacher, school 10)

Participative decision making. Participative decision making in school was rated as high in 14 schools (i.e. 7 primary schools and 7 secondary schools). Within these schools

both school leaders and teachers indicated that teachers are involved in different decision-making areas. On the one hand we notice that in these schools teachers are involved in decisions about curriculum, instruction, and school culture (e.g. playground rules, innovation).

“Actually everything that has to do with the school is discussed in a team meeting. For example, this year the decision was made to divide the playground in two parts. One part for primary and one part for kindergarten. That has been discussed and everybody could give his opinion. ... so the team has decided and I do think this was a big decision.” (Teacher, school J)

On the other hand, the interviews in these cases point to the fact teachers are also involved in staff development, personnel issues, the allocation of resources and/or general administration.

“In our school you have a selection interview with a part of the school board and a selection interview with a part of the teachers and the principal. The school board are actually parents. So, actually you have two selection interviews. I think this was good. During these different interviews different questions are asked. In the meantime I have been also involved in the selection interviews for new teachers.” (Teacher, school J)

Within the other 10 schools (i.e. 5 primary schools and 5 secondary schools) the interviews suggested teachers are in an only limited manner involved in decision making. Therefore, these schools were rated as weak for participative decision making. In most of these cases, teachers are involved in decision making about curriculum, instruction and/or aspects related to school culture (e.g. student’s discipline) but the involvement of teachers in decisions about school policy (e.g. setting school priorities, personnel management) is rather limited.

“According to me we are weakly involved in decision making. Actually, we are not informed about what happens at the school’s policy level. An open communication towards the teacher team remains absent.” (Teacher, school K)

“I don’t have the feeling we can participate in decision making about personnel policy. Sometimes they [the leadership team] ask for our opinion but most of the time we have the feeling it is already decide before we give our ideas. They do that, I believe, to keep us sweet. [...] There is also a pedagogical council in which we can add discussion points. But actually in this council only minor matters are discussed. We can’t participate in decision making about important things.” (Teacher, school 7)

Autonomy. In almost all schools (i.e. 23 schools) autonomy was rated as high based on the interviews with school leaders and teachers. Within these schools teachers

indicated they have a personal sense of freedom from interference or control over school matters.

“I believe that the Autonomy-Competence-Relatedness framework is very important. I think it is important that people get a certain degree of autonomy, that they can relate with each other and that they can develop their competences. This works. [...] Where situates this autonomy? Within their profession. They are the experts. Let people do their job. I’ll never tell a physics teacher: ‘Wouldn’t you use that?’. Yet, I’ll ask: ‘What do you need?’ ”. (Principal, school 12)

“Yes, I believe I have enough autonomy. Sometimes I am uncertain but then I ask for help. We certainly get enough chances to experiment and to organise your teaching practices as you want.” (Teacher, school E)

Yet, only in one school (school 10) we notice teachers indicate that they seem to lack a sense of freedom or control over school matters. More specifically, in this school teachers indicate they feel limited in certain aspects of school life (e.g. giving punishments to students, communicating with parents).

“Yes, we have autonomy in teaching but in other aspects of school life it is different. I don’t have a sense of freedom in communicating with parents, for example. We need to involve the leadership team. Sometimes they say: ‘Come to my office, tell me what the problem is and why are we not informed?’. Then you know where the shoe pinches.” (Teacher, school 10)

Instructional leadership. An instructional leadership style was noticed in half of the schools in this study (i.e. 7 primary schools and 5 secondary schools). Within these schools we notice that the respondents indicate that the school leader focuses on learning and instruction by setting and communicating clear school goals, managing the instructional programme and creating a positive learning climate.

“She is very strong in learning and instruction. We can always learn from her. She always has that little bit more. She gives didactical and pedagogical tips or advices you to read a certain article. She has good ideas. She thinks along with you about your teaching practice and is always open to chat about it. She is very strong in that.” (Teacher, school D)

“Based on the classroom observation I got feedback from him [the principal] about class management. He also looks at your annual planning and schedules. When he observes your teaching practice he also take a look at your tasks and tests, your lesson structure, your language, your instruction, ...” (Teacher, school 9)

Within the other 12 schools (i.e. 5 primary schools and 7 secondary schools) we notice that the respondents point to the absence of a focus on learning and instruction by the school leader. The interviews suggest there are different reasons for that. While some school leaders plan to invest in instructional leadership activities in the future we also notice that for some school leaders a focus on learning and instruction is impossible because of time constraints or because it does not fit their personal style.

“I don't easily walk into a lesson. I feel like an intruder then. In my previous school I didn't have that feeling. It is one of my goals for this year to do more classroom observations.” (Principal, school 5)

“I personally think that I do too little related to learning and instruction. Actually I don't get it done.” (Principal, school C)

“When I arrive at school I don't start checking instruction. I'm not like that at all. That might be my fault. If we agreed on something, I assume that they will do that in their classes. [...] I believe you should first listen to the people. I think it is very important that people feel good.” (Principal, school I)

Transformational leadership. In the majority of schools in this study (i.e. 9 primary schools and 8 secondary schools) the interviews pointed to a transformational leadership style of the school leader. Within these schools the respondents stated that the school leader invests time in: communicating a clear and shared vision; motivating and supporting teachers individually and creating an supportive culture for learning in the school.

“He has a very clear vision. He knows perfectly how he wants it and how the school should evolve in the future. This makes it also very clear for you as a teacher. [...] When this vision does not fit you, he will be open for your opinion. I'm convinced that in such a situation you can go to him and that he will explain why he wants it that way.” (Teacher, school 8)

Within the other 7 schools (i.e. 3 primary schools and 4 secondary schools) the interviews pointed to an absence of these transformational leadership characteristics. In some schools, for example, the interviews pointed to the fact that ‘communicating a clear and shared vision’ or ‘motivating and supporting teachers’ individually is a weakness of the school leader.

“A good leader is someone who can listen to people and who has human knowledge ... That's something I have less. I often think: ‘You must do your job as it should be and that must be good’. My weakness is that I don't go often to people to listen to them. [...] A good leader is also someone who can make decisions. That is also something I miss. I want to do good for everyone but that is impossible.” (Principal, school K)

“During meetings I miss her as a leader of the meeting who holds everyone together. Sometimes I believe she should make clear decisions. Often there is a lot of discussion without a decision really being made. [...] That has to do with leadership, I think, and knowing: ‘Where do I want to go with this school?’” (Teacher, school C)

Schools’ scores on the outcome variable

As stated earlier, to investigate outcome of interest for this study, we rely on the results of a previous study (Tuytens, Vekeman & Devos, 2020). In this study 24 cases (which are the same in this study) were scored for each HR practice under investigation. This scoring contained three categories per HR practice based on the literature (Boselie, 2014): 0, 0.5 or 1. First, a score ‘0’ indicates that a HR practice is not aligned with strategic planning nor with individual needs, as the following quote illustrates for the HR practice ‘teacher evaluation’

“No, up to now I never had a performance appraisal conversation. I asked for it myself: ‘[name principal], can I have a performance appraisal conversation? I’m here already for 2 years ...’. It is not too soon, no? [...] Sometimes I think: ‘Come on, just take a look in my classroom?’.” (Teacher, school J)

“Out of thirty teachers, three asked for a performance appraisal [...] I know there are three teachers willing to do that so I will take up this because they asked for it. There will be something they want to talk to me about. With the other teachers I plan to do performance appraisal conversations but not annually. Formal evaluations ... in my previous school I was tapped on my fingers. I didn’t do one ... Honestly ... It is not correct. I’m wrong. I admit that immediately.” (Principal, school 6)

Second, a score ‘0.5’ shows that a HR practice is aligned with strategic planning OR with individual needs, as the following quote illustrates this for the HR practice ‘assignment’:

“In performance appraisal conversations she [the principal] asks questions about assignment. In such a conversation you can express your wishes. [...] In the past there has been some shifts and more specifically in the kindergarten classes but also in the higher classes when someone retired. In such cases the principal asks how you want to change. I don’t think the principal chooses that for us. I never encountered that the principal said: ‘Now this teacher is assigned to this class’. It is always discussed with teachers.” (Teacher, school H)

Finally, a score ‘1’ demonstrates that a HR practice is aligned with strategic planning AND teachers’ individual needs, as the following quote illustrates for the HR practice ‘recruitment and selection’:

“In the past my experience was: ‘There is a vacancy and teachers apply’. You have the right diploma and you start. With [name principal] it is like this: ‘You enter. There is a conversation which focuses –amongst other things- on: ‘What do you know about the school?’, ‘What do you think about the vision?’, ‘Do you know our population?’. Always a goal-oriented selection. It is striking that in the last years more teachers enter which are prepared to handle our pupils. In the past we had brilliant teachers but not for our audience. Now the right people enter because of the interview which takes place.” (Sector coordinator, school 8)

“I give a lot information. I always refer to our name which also represents our vision and I always describe what happens within our school, what our pupil population looks like, which differences there are between our schools and I tell them that we are a great team, which is true. [...] Also, I always say that they should choose for our school ... If they don’t feel connected with our school, it does not work. You should believe in it and go for it. In this school you need to give a lot of energy. You get a lot in return if you feel connected and then you don’t want to leave. If there is a match it is a win for everyone.” (School principal, school 8)

Of the 24 schools, ten schools (i.e. 5 primary and 5 secondary schools) were found to align 3 or more HR practices with the strategic planning of the school and the individual needs of teachers and were consequently coded with one (i.e. ‘excellent strategic’). More specifically, we see that only three schools align all five HR practices with strategic planning and the individual needs of teachers within the school (i.e. 1 primary school and 2 secondary schools). In another 3 schools (i.e. 2 primary schools, 1 secondary school) we notice four HR practices are installed strategically. In these schools one HR practice (i.e. ‘professional development’ or ‘rewards’) is found to be only aligned with the needs of teachers (cf. score 0.5). Finally, four schools (i.e. 2 primary schools, 2 secondary schools) can be identified which install only three HR practices. In all of these four cases the HR practice ‘professional development’ and ‘assignment’ is installed strategically in combination with ‘teacher evaluation’ or ‘recruitment and selection’.

The other 14 schools (i.e. 7 primary schools and 7 secondary schools) were found to align no, one or only 2 HR practices with the strategic planning of the school and the individual needs of teachers. More specifically, we see that 6 schools (i.e. 2 primary schools and 4 secondary schools) install two HR practices strategically (e.g. ‘professional development’ and ‘teacher evaluation’; ‘professional development’ and ‘assignment’). In seven schools (i.e. 4 primary schools, 3 secondary schools), we notice only one HR practice (which is often ‘professional development’) is aligned with both strategic planning and the needs of teachers within the school. Finally, in only one primary school we found none of the five HR practices were aligned with both strategic planning and the individual needs of teachers. Yet, in this school 3 HR practices were aligned with the needs of teachers only (cf. score 0.5).

All codes given for each condition and the outcome variable for every school - called configurations in QCA terminology (Rihoux and Ragin, 2009) - are included in Table 4 (which is also called a Truth table by QCA researchers). If more than one school had the same configuration, then these schools were put together (e.g. H, I, J, 5). In addition, the configurations were ranked according to their outcome: first, all configurations with a [0] outcome; second, all configurations with a [1] outcome. The configurations in each subdivision were ranked according to the number of one numerals in it.

Table 4. Scores of conditions and outcome

school	SCHOOL CHARACTERISTICS					OUTCOME
	PLC	participation	autonomy	instructional leadership	transformational leadership	ES (1) / MS (0)
10	0	0	0	0	0	0
C, K	0	0	1	0	0	0
6, 12	0	0	1	0	1	0
B, 7	0	0	1	1	0	0
1	0	1	1	0	0	0
H, I, J, 5	0	1	1	0	1	0
2	1	1	1	0	0	0
L	1	0	1	1	1	0
F, 4	0	0	1	1	1	1
3, 8	0	1	1	1	1	1
11	1	1	1	0	1	1
A, D, E, G, 9	1	1	1	1	1	1

Note. ES: excellent strategic schools; MS: moderate strategic schools

Relating school characteristics to the outcome

After compiling Table 4, a csQCA analysis was performed using the TOSMANA software (Cronqvist, 2018) resulting in a Venn diagram (see Figure 1 in Appendix V). This csQCA analysis revealed that there are two combinations of conditions associated with excellent strategic schools. These findings demonstrate the principle of equifinality. This means that there are multiple, distinct paths to the same outcome (Ragin, 1987). Table 5 illustrates the findings in a simple way, presented using the notation method developed by Ragin and Fiss (2008). The presence of a condition in all cases in this solution is marked by a filled circle [i.e. ●] and the absence of a condition in all cases in this solution is noted by a circle with “x” [i.e. ⊗]. If a condition is not important in a solution, there is no notation. Interpreting these results requires a dialogue between the QCA results, researchers’ theoretical and empirical background knowledge, and concrete examples of the solutions at work (Legewie, 2013). We explore each of these solutions in turn.

Table 5. Solutions for outcome [1]: excellent strategic school

	PLC	participation	autonomy	instructional leadership	transformational leadership	unique consistency	coverage
Solution 1	•	•			•	1.00	0.60
Solution 2	⊗			•	•	1.00	0.40

Note. • = presence of a significant condition, ⊗ = absence of a significant condition, no notation = a condition is not important in a solution. Consistency expresses the proportion of the cases with the condition X where we also find the outcome, relative to all cases with X. Coverage applies to the proportion of the sum of the membership scores in an outcome that a particular configuration explains. In other words, it explains how many cases are covered with the sufficiency configuration for outcome Y.

Solution 1: the presence of PLC, participation and transformational leadership. The first solution involves the presence of PLC, participation and transformational leadership (see Table 5). This pathway is also visualized in Figure 1 with dashed lines, whereby two configurations were actually observed within the schools (school 9, A, D, E and G: [11111], school 11: [11101]) plus two logical remainders (i.e. all theoretically possible (yet not observed) combinations of conditions which could produce an outcome in order to obtain the most parsimonious minimal formula that is associated with the outcome of interest). The coverage for this solution is 0.60, suggesting that 60% of the excellent strategic schools can be represented by this pathway. In other words, this solution helps us understand 6 cases in our dataset. The pathway has a high consistency level of 1.00, suggesting that this subset of cases approximates the outcome, excellent strategic school, to the highest degree. In other words, if there was a new case that would fall into this set of cases, there is a 100% chance the new case would have this outcome (Cooper & Glaesser, 2012). This consistency value is thus fully acceptable (≤ 0.75 ; Ragin, 2008).

What may account for this solution where the presence of a PLC, participation and transformational leadership is associated with being an excellent strategic school (regardless of autonomy and instructional leadership)? As QCA theorists recommend, we turn to our in-depth knowledge of cases, along with theory and empirical literature, to theorize about this relationship. Based on our knowledge of the schools, we recognize the presence of a PLC, a participative decision-making culture and transformational leadership in the excellent strategic schools when we look at the interviews and observational notes we made during attended school staff meetings or meetings between teachers. The following observation note for school A, for example, illustrates how a participative decision-making culture is combined with the strategic installation of the HR practice ‘professional development’.

Observation notes - staff meeting (CASE A)

Date: 25/08/2017

Attendees: +/- 23 teachers, principal

The school principal discusses professional development initiatives and states that: the professional initiatives are chosen based in consultation with teachers (cf. participative decision-making); he

searched some specific professional development courses at the request of some teachers; it is important to search professional development initiatives which meet the needs of teachers (cf. strategic HRM) and teachers always can ask questions related to professional development.

[...]

The school principal listens to what teachers say and he responds to the suggestions of team members (e.g. related to the teacher replacements). Teachers seem to be able to openly discuss things with the principal and get the chance to be critical on decisions made by the principal (cf. participative decision-making).

Moreover, it is important to stress that except for one school (i.e. school 11) all schools in this solution (i.e. school A, D, E, G and 9) were rated high [1] for all five conditions. This actually means that the majority of these schools can also be seen as ‘excellent schools’ regarding the three cultural school characteristics and the two leadership styles, next to their excellent strategic HRM. As stated, only in school 11 we notice that not all five conditions are rated as high. Actually, we see that while the cultural school characteristics and the principal’s transformational leadership style were rated as high [1], principal’s instructional leadership style was rated as low [0]. A detailed inspection of this school shows us that the absence of an instructional leadership style of the school principal can be mainly explained by time constraints. Until school year 2017-2018 the current principal was appointed as the assistant principal of the school. Since the school year in which this school was investigated [2018-2019] the current principal became the head of the school as the previous principal retired at the end of school year 2017-2018. Although it was difficult to find a new assistant principal, the current principal finally could appoint a new assistant principal in the middle of the school year 2018-2019. At the time of the interviews and observations, the assistant-principal has not yet (or only just) been appointed which made that at the time of the study the principal could not share yet a lot of leadership tasks with the assistant principal. As a result, the principal stated several times during the interviews that she has little time to supervise and support teachers on the classroom floor. Yet, the interviews and observations indicated clearly that this instructional role is adopted by different department leaders who function as teacher leaders within the school. In this regard, the principal states the following:

“Besides the TA⁴ and TAC⁵ there are also department leaders. Every week I have a meeting with the department leaders. The meeting is focused on the planning of activities within their department but we also discuss teachers’ classroom practice. I always discuss the performance of teachers with the department leaders since they see teachers a lot more than I do. Actually, they visit classes on a weekly basis. [...] And, yes, they also coach teachers. Department leaders teach own courses but next

⁴ TA: Technisch Adviseur

⁵ TAC: Technisch Adviseur Coördinator

to that they actually run the whole department. They also support teachers, they sometimes give an example lesson when they have specific expertise or knowledge about a certain topic, they replace sick teachers, ... [...]. Actually, I also ask advice from department leaders when I need to evaluate beginning teachers. They do not observe the classroom practice in a formal way but they are in teachers classes on a weekly basis. They also coach beginning teachers. Department leaders are the first persons teachers can rely on.” (Principal, school 11)

Hence, this solution shows us that instructional leadership is not per sé a necessary condition for excellent strategic schools as long as there is a PLC, participative decision making and transformational leadership in the school. We believe that this result hints towards the possibility that instructional leadership might also be given by others in the school than merely the formal leader (e.g. by other (teacher) leaders or among teachers as colleagues within a PLC). Based on our knowledge of the literature, we acknowledge that a PLC is an important catalyst for the effectiveness of certain HR practices (such as ‘professional development’ (Geijsel et al., 2009) or ‘teacher evaluation’ (Zhang & Ng, 2011)). Yet, this study shows that a PLC at school might be related to the strategic installation of also other HR practices. This result confirms the findings of a previous qualitative study in Dutch schools indicating that in some schools SHRM is related to the professionalism of teachers and a professional learning culture (Knies & Leisink, 2017). However, this solution not only includes the presence of a PLC; equally important to understand this pathway is its combination with the presence of a participative decision-making and transformational leadership. The presence of participative decision-making in excellent strategic schools is in line with previous research showing that it is an important condition in the light of some HR practices (e.g. ‘professional development’ (Geijsel et al., 2009; Pedder, 2006) or ‘rewards’ (Cheng & Szeto, 2016)). Yet, in addition to these previous studies, the result of this study points to the importance of participative decision-making for the alignment of a set of HR practices with strategic planning and individual needs of teachers. This result is in line with the findings of a previous qualitative study in which we focused on the link between distributed leadership and SHRM (Vekeman, Tuytens & Devos, 2020). Actually, this study suggests that in excellent strategic schools teachers get more decision-making responsibilities in HRM and teachers more often participate spontaneously and collaboratively, with no necessary identification of leaders or followers. In these excellent strategic schools we notice a form of ‘cultural leadership distribution’ in which the emphasis from leaders and leadership switches to a community of people working together to a common end with all the tensions and challenges that real vibrant communities display. Hence, here, distributed leadership has become part of the team culture. Moreover, we believe that the presence of participative decision-making in excellent strategic schools links back to the difference made in management literature between ‘control’ and ‘commitment’ HR systems (Arthur, 1994). Control HRM systems are characterized by a division of work into small, fixed tasks for which individuals can be held

accountable and direct supervision (Walton, 1985). Control systems aim at reducing labor costs and improve efficiency, enforcing employee compliance through rules and procedures (Walton, 1985; Eisenhardt, 1985; Arthur, 1994). Commitment HRM systems are characterized by managers who facilitate rather than supervise. This type of system emphasizes employee development and trust and the establishment of (psychological) links between organizational and personal goals. In this regard, it seems also logical that transformational leadership is also present in this solution as a focus on employee development and trust are characteristics of transformational leadership. While outside education, some researchers point to the link between transformational leadership and SHRM (e.g. Vermeeren, 2014; Vermeeren, Kuipers & Steijn, 2014; Zhu, Chew & Sprangler, 2005), to our knowledge, it is one of the first studies showing transformational leadership is related to SHRM (or the alignment of HRM with both strategic planning and individual needs of teachers). A possible explanation for this result lies in the fact that a transformational leader succeeds in aligning HRM with strategic planning because he/she is able to select goals based on a clear and shared school vision. Moreover, transformational leadership can also be linked to SHRM as this leadership style is characterised by individualised consideration of the needs of their employees. Actually, transformational leaders pay attention to individual and personal differences in needs development and growth and provide necessary resources to help followers to realize their dreams (Avolio, 1999; Bass & Avolio, 1994).

Finally, related to solution 1, we notice that 4 schools out of 6 in this solution are primary schools. In line with earlier research (e.g. Louis et al., 2010; Heck, 1992), our study shows that the presence of a PLC, on the one hand, and instructional leadership, on the other hand, occurs more often in the primary schools we investigated compared to the secondary schools included our study. As the teacher population is often smaller in primary schools than in secondary schools, this might make it easier for teachers to cooperate with each other and more feasible for school leaders to supervise teachers in the classroom and to manage the instructional program.

Solution 2: the presence of instructional and transformational leadership without a PLC. The second pathway (see Table 5) associated with the outcome ‘excellent strategic’ is the presence of both instructional and transformational leadership and the absence of a PLC. This pathway is visualized in Figure 1 with dotted lines, whereby two configurations were actually observed within the schools (school 4 and F: [00111]; school 3 and 8: [01111]), plus two logical remainders (i.e. all theoretically possible (yet not observed) combinations of conditions which could produce an outcome in order to obtain the most parsimonious minimal formula that is associated with the outcome of interest). For this solution the consistency value is also 1.00, showing that when this configuration was present, it led to the outcome of excellent strategic school. The coverage for this solution is lower than the previous pathway (0.40). This means that while this solution is still relevant, it represents only 40% of the excellent strategic schools (n= 4).

This 2nd solution points to the importance of both transformational and instructional leadership. If we turn to literature to theorize about the relationship between this pathway and outcome of interest, we acknowledge previous research pointed at an ‘integrated school leadership’ (Marks & Printy, 2003) or ‘leadership for learning’ (Hallinger, 2011) approach that focuses both on transformational and instructional leadership characteristics. Actually, different studies point to the fact that instructional and transformational leadership can function best as a tandem (Day, Gu & Sammons, 2016).

However, this solution not only includes the presence of instructional and transformational leadership; equally important to understand this pathway is its combination with the absence of a ‘professional learning community’ at the school. We believe this result suggest that when a PLC is absent in a school, this might be compensated by the school leaders’ integrated leadership style. This means that the school leader focuses on learning and instruction by setting and communicating clear school goals, managing the instructional program and creating a positive learning climate (i.e. instructional leadership) but at the same time invests enough time in communicating a clear and shared vision, motivating and supporting teachers individually and creating a supportive culture for learning in the school (i.e. transformational leadership).

Based on our in-depth knowledge of cases we might conclude that school leaders in these schools (i.e. school 3, 4, 8 and F) adopt instructional leadership as a mean to build a (stronger) professional learning community in the future, as suggested by McLaughlin and Talbert (2007). The principal in school F, for example, states that his instructional leadership role should be distributed to the teacher team in the future.

“I believe that as a principal you should have actual knowledge. For example, you should know how co-teaching works. I’m focused on those things. When I join a working group, I want to know what they are talking about and do I have a clear voice in the discussion. Yet, I’m aware of the fact that I do not control too much. [...] I know I should distribute some specific tasks more to people within the school but this is something that should grow in the future.” (Principal, school F)

Moreover, we notice that in this solution term more secondary schools (n=3) are included than primary schools (n=1). Although some authors (e.g. Bolam, Stoll & Greenwood, 2007) emphasise the importance of the involvement of all staff members in the community and the need for collaboration between teachers across the school (and thus not just in groupings of particular subjects, roles or phases), we agree with Huberman (1993) it is harder for secondary schools that teachers of all grades and different subjects collaborate with each other. In this regard, we notice that in the three secondary schools included in this solution term (i.e. school 3, 4 and 8) some departments can be seen as a professional community while this is not yet the case for all departments within the school.

“[name teacher department X] is very open to me and helps me a lot. She offered me also material to use in my classroom such as exams, tests, ... I developed my own lessons but I had a very good starting point. [...] It was different within the ICT department including one teacher who teaches next to me. I needed to ask for an example of the course. She sent the course via e-mail and this course included only 20 pages. She told me that the other pages were not up to date with the new curriculum. [...] I often asked for new material but actually I figured it out on my own. This was not pleasant at all.” (Teacher, school 3)

“In the most departments teachers collaborate but we notice differences between departments. In some departments teachers do not collaborate because of conflicts. [...] Yet, we evolved in collaboration. A couple of years ago every teacher worked on his island. Some departments took big steps in collaboration. As a result, teachers work together for different projects. This is something that is excepted from now on for almost all departments.”(Sector coordinator, school 8)

Discussion

The aim of the study was to gain deeper insight into how school characteristics and school leadership characteristics, or combinations of these conditions, are associated with the extent to which HR practices are strategic in schools. More specifically, we focused in this study on three cultural school characteristics (i.e. PLC, participation and autonomy) and two school leadership characteristics (i.e. instructional leadership and transformational leadership). It was found that two combinations of conditions were associated with being an ‘excellent strategic school’: 1) the presence of a PLC; a participative decision-making culture and transformational leadership and 2) the presence of instructional and transformational leadership, with an absence of a PLC. These results imply that in schools where no PLC is present (i.e. teachers collaborate limited and do not support each other sufficiently through meaningful interactions), the absence might be compensated by the school leaders’ instructional leadership style. On the contrary, in schools in which a PLC is present and teachers get to chance to participate, a transformational leadership style seem to be a sufficient condition for excellent strategic HRM. Moreover, this study shows that in none of the two solution terms ‘autonomy’ was included. This means that autonomy was not found to be a necessary condition to explain the outcome (i.e. excellent strategic HRM). Although we agree with other authors (e.g. Knies & Leisink, 2017) that teacher autonomy is important for the enactment of SHRM in schools, this study suggests that this cultural characteristic is not a sufficient condition on its own. Looking at our cases, this result might be explained by the fact that in almost all schools - except one - the autonomy of teachers was rated as high. The fact that in the majority of schools respondents indicate teachers have a personal sense of freedom from interference or control over school matters is in line with previous research pointing to

high mean scores for teacher autonomy in the Flemish context (De Neve, Devos & Tuytens, 2015).

Together, the findings of this study paint a complex portrait of the necessary conditions of excellent strategic HRM. Practitioners and policymakers should consider multiple conditions, in different combinations, that may shape SHRM in schools. When considering the cultural school characteristics, for instance, there is no guarantee that one cultural characteristic or school leadership characteristic leads to SHRM. Interestingly, the absence or presence of a PLC can lead to a similar outcome. Moreover, prior research often points to a list of conditions that matter for school policy in general. The literature until now indicates, for example, that school leaders adopt best both an instructional and transformational leadership style as these leadership styles function best in a tandem. Although we acknowledge the need of integrated leadership based on this study and previous studies, we believe our analysis offers a unique contribution in that it explores not only which school characteristics shape excellent strategic HRM but how the presence or absence of these factors -alone or in concert- may support excellent strategic HRM. Albeit in a limited number of cases, this study shows that instructional leadership is not a necessary condition for the presence of excellent strategic HRM in schools when the school is characterised by a strong professional learning community and a participative decision-making culture. This offers maybe a more nuanced perspective on the link between school leadership and SHRM. Moreover, it might help to reassure school leaders who seem to struggle more with adopting instructional leadership compared with adopting transformational leadership (De Neve & Devos, 2016; Tuytens & Devos, 2011; Vekeman et al., 2016b; Vanblaere & Devos, 2016). In line with Shatzer and colleagues (2014), we fully understand it can be challenging for one school leader to combine both leadership styles as they have a different conceptual focus. In this regard, this study suggests that when the pedagogical or instructional leadership role becomes a responsibility of teachers and/or teacher leaders a transformational leadership style might be sufficient in order to install SHRM. In other words, we believe this study confirms the possibility of distributed leadership. As it can be difficult for a school leader to be equipped with sufficient pedagogical content knowledge to provide high quality instructional leadership for all areas and grades, leadership around instructional matters can become a shared endeavor with teacher leaders or other members of the leadership team in larger schools (Marks & Printy, 2003). Although the same might be true for transformational leadership, the nature of transformational leadership implies that this type of leadership should certainly be taken up by the main school leader or head of the school. As transformational leadership involves the creation of a kind of norm for the entire school that requires all stakeholders to be on the same page (Bass & Avolio, 1994), in line with Vanblaere & Devos (2016) we believe it is important that transformational leadership originates from the school leader and consequently permeates all levels of the school.

Furthermore, this study leads to several methodological and theoretical implications. As current research lacks evidence on the link between SHRM in schools and schools' cultural characteristics and school leadership, our findings, guided by qualitative comparative analysis, advance this understanding. More specifically, this study shows no one factor accounts for being an excellent strategic school. Instead, we found that schools could arrive at that outcome via multiple pathways. Each solution represents a different pathway to an outcome, and each pathway is important for understanding the phenomenon at hand. Education researchers should consider how different combinations of conditions – including those not included in this analysis, like structural school characteristics (e.g. school sector, school level) – may contribute to different outcomes. Finally, we cannot assume that a condition (e.g. transformational leadership) that may facilitate the outcome (here: excellent strategic HRM) automatically constrains that outcome in its absence. The presence or absence of PLC, for instance, may have different underlying mechanisms that contribute to strategic HRM or the absence of strategic HRM. Our analysis suggests the need for more complex methods for understanding the conditions that enable or constrain how schools install HR practices strategically.

Limitations and suggestions for further research

This study is an exploratory analysis, and given its limitations, future studies are needed to understand how different conditions shape excellent strategic HRM in schools. Furthermore, our data may not be representative for all schools, given the sample of 24 schools and a relatively small number of teachers in each school. Hence, the number of cases per solution are also rather limited. Future studies could expand this type of analysis in more schools. Moreover, we believe in future research it could be interesting to use other case selection procedures than the one we used in this study. For instance, we found that transformational leadership was rated as high in 17 schools out of the 24 schools. The fact that a relative large amount of school leaders were rated as high for this leadership style might be explained by the stratified purposeful sample we used in this study. As we aimed to select schools that were particularly interesting based on one of their human resource practices (and hence had a high potential of being meaningful and enriching for this study), it might be that we oversampled schools with strong school leadership. An additional methodological limitation that should be taken into account is that this study does not allow to confirm the suggested causality between the conditions and the extent to which HRM is strategic in schools. Although we use the term 'outcomes' -as recommended by QCA researchers (e.g. Schneider & Wagemann, 2010)- QCA tells us actually that something is 'sufficient' for something else which has, per se, nothing to do with causality. Thus, when you say that "A in combination with B is sufficient for the presence of E", this is just what the data, on the basis of the laws of Boolean algebra, tell you functionally. It neither implies that A and B are conjunctive causes of E, nor that nothing else apart from A and B is needed to effect E. In this regard, we believe that more complex

research models and longitudinal designs are necessary in the future to facilitate the estimation of the causal impact of school characteristics and school leadership on SHRM. A final limitation of this study is that we used a crisp-set QCA (of cs/QCA). This implies that a school characteristic is considered either fully in or fully out within each school (Rihoux & Ragin, 2009). This might contrast the reality of social phenomena in which dimensions are not always clearly present or absent. Although we believe future studies could also use fuzzy-set QCA (using ordinal, interval or ratio scores) which implies the use of mixed method research, we argue that csQCA is a valid method because of several reasons. Actually, csQCA allows: 1) to study configurations that are common to a number of cases; 2) that there may be several combinations of conditions that generate the same outcome; 3) to reduce complexity and generate parsimonious explanations, through the elimination of irrelevant causes (Marx, Cambré & Rihoux, 2013).

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Appendices

Appendix I: Theme setting initial meeting with school leader

- Jaarplanning
 - o Strategisch schoolbeleid
 - o Rekrutering en selectie
 - o Opdrachttoewijzing
 - o Professionele ontwikkeling
 - o Leerkrachtevaluatie
 - o Beloningsmogelijkheden

- Belangrijke actoren
 - o Schoolteamleden (leidinggevend, leidinggevende leerkrachten, andere)
 - o Schoolbestuur
 - o Scholengemeenschap

- Beschikbare documenten
 - o Schoolvisie/pedagogisch project
 - o Schoolwerkplan
 - o Onthaalbrochure nieuwe leerkrachten
 - o Nascholingsplan
 - o Evaluatiereglement
 - o Functiebeschrijving
 - o Schoolreglement
 - o Voorbeeld van vacature
 - o Verslagen (bv. van selectie/rekrutering, evaluatieverslag)
 - o Andere?

Appendix II: Interview protocol – school leaders and teachers

LEIDRAAD DIRECTIES:

- Schoolstructuur:
 - o Samenstelling schoolbestuur (hoeveel scholen, welke scholen (niveau en locatie))
 - o Relatie met schoolbestuur
 - o Samenstelling scholengemeenschap
 - o Samenwerking scholengemeenschap
- Culturele erfgoed:
 - o Hoelang bestaat de school al?
 - o Zijn er de voorbije tien jaren grote veranderingen in de school geweest?
 - o Zijn er belangrijke zaken in de geschiedenis van de school die nog steeds een invloed hebben op de werking vandaag?
- Arbeidsmarkt
 - o Tekort aan leerkrachten?
 - o Scholen in de buurt die concurrentieel zijn bij het aantrekken van leerkrachten?
- Institutionele context:
 - o Beleid:
 - Welke aspecten in uit het onderwijsbeleid zijn cruciaal (stimulerend of beperkend) voor de strategische planning en personeelsbeleid dat u kan voeren in de school?
 - o Vakbond
 - Hoe is de verhouding met de vakbondsafgevaardigden binnen de school?
- Schoolleiding:
 - o Ervaring
 - o Hoe zou u goed leiderschap omschrijven?
 - o Welke eigenschappen moet een leider in uw functie idealiter bezitten?
 - o Welke zijn uw sterke punten als u deze eigenschappen bij uzelf bekijkt?
 - o Welke zijn uw werkpunten als u deze eigenschappen bij uzelf bekijkt?
 - o Wat zijn uw belangrijkste taken als schoolleider binnen de school?
 - o Zijn er andere leidinggevenden binnen de school?
 - o Hoe worden de taken verdeeld onder de leidinggevenden? Weten leerkrachten bij wie zij waarvoor terecht kunnen?
 - o Hoe verloopt de samenwerking tussen de leidinggevenden?
- Schoolkenmerken:
 - o Formeel overleg:
 - Welke formele overlegmomenten zijn er binnen de school?

- Leerkrachtparticipatie:
 - Hoe worden leerkrachten betrokken bij de strategische planning en het personeelsbeleid?
- Professionele leergemeenschap:
 - Hoe zou u de relatie of de sfeer tussen de leerkrachten omschrijven?
 - Wat is uw visie op samenwerking?
 - Wat vindt u belangrijke voorwaarden voor samenwerking?
 - Hoe wordt samenwerking gestimuleerd op school (formeel en informeel)?
 - Gezamenlijke verantwoordelijkheid
 - Gedeprivatiseerde praktijk
 - Reflectieve dialoog
- Leerkrachtautonomie:
 - Hoe belangrijk vindt u de autonomie van leerkrachten en op welke vlakken?
 - Hoe tracht u die autonomie te stimuleren?
- Gedeelde visie:
 - Kunt u de visie van de school omschrijven?
 - Hoe is deze tot stand gekomen?
 - Hoe draagt u deze uit als schoolleider?
- Schoolbeleid:
 - Strategische planning:
 - Wat zijn op dit moment de cruciale schooldoelen waar u aan werkt?
 - Hoe zijn deze doelen tot stand gekomen?
 - Hoe evalueert u of u de doelen bereikt?
 - Worden deze doelen aangepast? Wat is dan de aanleiding?
 - Hoe probeert u de concrete doelen te bereiken?
 - Personeelsbeleid:
 - Hoe pakt u selectie aan?
 - Hoe pakt u de opdrachttoewijzing aan?
 - Hoe pakt u leerkrachtevaluatie aan?
 - Hoe pakt u professionele ontwikkeling aan?
 - Hoe pakt u de waardering/beloning van leerkrachten aan?

LEIDRAAD LEERKRACHTEN:

- Leerkrachtkenmerken: (alle leerkrachten)
 - Welk vak heeft u binnen de school?
 - Welke andere taken neemt u op zich binnen de school?
 - Hoelang heeft u al les binnen de school? (vastbenoemd?)
 - Hoelang bent u al leerkracht?
 - Hoe zou u uw rol als leerkracht in de dagdagelijkse lespraktijk omschrijven?
 - Wat zijn uw sterke kanten als leerkracht?
 - Wat zijn uw werkpunten als leerkracht?
 - Kunt u leerlingen goed motiveren in uw lessen?
 - Heeft u het gevoel dat u uw klassen goed in de hand kan houden? Een goed klasmanagement kan hanteren?
 - Kunt u gemakkelijk werk- en evaluatievormen toepassen in uw klassen die tegemoet komen aan de noden van de leerlingen?
- Schoolbeleid: (alle leerkrachten)
 - Strategische planning:
 - Wat zijn op dit moment de cruciale doelen waar de school aan werkt?
 - Hoe gebeurt dit?
 - Personeelsbeleid:
 - Selectie: (beginners en TADD)
 - Hoe vond uw aanwerving in de school plaats?
 - Welke vragen werden gesteld tijdens het sollicitatiegesprek?
 - Was u zelf tevreden over de manier van aanwerving?
 - Hoe bent u opgevangen tijdens uw beginperiode hier als leerkracht?
 - Opdrachttoewijzing: (TADD en ervaren)
 - Hoe gebeurt de opdrachttoewijzing aan leerkrachten in de school?
 - Wanneer wordt deze gecommuniceerd?
 - Leerkrachtevaluatie: (TADD en ervaren)
 - Heeft u een functiebeschrijving gekregen?
 - Zijn er op regelmatige basis functioneringsgesprekken?
 - Worden er ook evaluatiegesprekken gehouden?
 - Hoe verzamelt de directie informatie over uw praktijk/uw functioneren?
 - Is er een specifieke evaluatie geweest naar aanleiding van uw TADD-aanstelling?
 - Vindt u zelf dat u voldoende feedback krijgt omtrent uw functioneren? (formeel/informeel)

- Professionele ontwikkeling: (alle leerkrachten)
 - Hoe belangrijk vindt u professionele ontwikkeling zelf als leerkracht?
 - Hoe wordt deze gestimuleerd in de school?
 - Waardering – beloning (alle leerkrachten)
 - Hoe weet u of men uw werk in de school waardeert?
 - Heeft u zelf het gevoel gewaardeerd te worden?
 - Krijgt u ook beloningen? Welke?
 - Afstemming personeelsbeleid (TADD en ervaren)
 - Heeft u zelf het gevoel dat de verschillende aspecten van personeelsbeleid afgestemd zijn op elkaar? Voorbeeld?
- Schoolleiding: (alle leerkrachten)
 - Wat zijn de sterke punten van de schoolleider?
 - Wat zijn werkpunten van de schoolleider?
 - Ondersteunt uw schoolleider uw dagelijkse (les)praktijk? Hoe doet hij/zij dit?
 - Vertrouwt u de schoolleider?
 - Weet u waarvoor u bij de schoolleider terecht kan?
- Schoolkenmerken: (alle leerkrachten)
 - Formeel overleg:
 - Welke formele overlegmomenten zijn er binnen de school?
 - Leerkrachtparticipatie:
 - Hoe worden leerkrachten betrokken bij de strategische planning en het personeelsbeleid?
 - Professionele leergemeenschap:
 - Hoe zou u de relatie of de sfeer tussen de leerkrachten omschrijven?
 - Hoe wordt samenwerking gestimuleerd op school (formeel en informeel)?
 - Komen leerkrachten bij elkaar in de klas?
 - Overlegt u vaak met collega's? Waarover? Wanneer?
 - Vindt u zelf samenwerking belangrijk?
 - Leerkrachtautonomie:
 - Kan u voldoende zelf beslissen over uw klaspraktijk?
 - Gedeelde visie:
 - Kunt u de visie van de school omschrijven?
 - Hoe wordt deze gecommuniceerd naar leerkrachten en leerlingen, ouders?
 - Is het personeelsbeleid van de school ook afgestemd op de visie van de school? Hoe merkt u dit?
- Uitkomsten leraarniveau: (alle leerkrachten – behalve laatste twee vragen enkel TADD/ervaren)

- Voelt u zich goed op school?
- Zou u liever lesgeven op een andere school?
- Bent u tevreden in uw job als leraar?
- Zou u liever een andere job uitoefenen?
- Voelt u zich thuis in het lerarenteam?
- Wat zorgt er vooral voor dat u dagelijks met plezier komt werken?
- Hoe probeert u als leraar bij te blijven met de nieuwe ontwikkelingen?
(formeel en informeel leren)
 - Vakontwikkelingen
 - Meer algemene ontwikkelingen in onderwijs
- Welke veranderingen in de klas hebt u recent doorgevoerd? Wat was de aanleiding hiervoor?

Appendix III: Observation scheme

Datum, tijdstip, plaats van observatie, activiteit, aanwezigen:

Beschrijvende gegevens (acties, gedrag, gesprek)	Reflectieve informatie (eigen bedenkingen, ideeën, vragen, bezorgdheden)

Appendix IV: Case summary format

Variabele	Deelvariabele	Wat we al weten...
INTERNE CONTEXT	Onderwijsnet	Vooraf gekend
	Onderwijsniveau	Vooraf gekend
	Schoolstructuur	Grootte en complexiteit schoolbestuur en scholengemeenschap: Info uit interviews, observaties en documenten
	Schoolgrootte	Vooraf gekend zie: http://onderwijs.vlaanderen.be/nl/nl/onderwijsstatistieken/themes- onderwijsstatistieken/leerlingenaantallen-basis-en- secundair-onderwijs-en-hbo5
	Leerlingpopulatie	Vooraf gekend zie: http://www.agodi.be/sites/default/files/atoms/files/ Publicaties_Leerlingenkenmerken_Overzicht_2016- 2017_bao.pdf http://www.agodi.be/sites/default/files/atoms/files/ Publicaties_Leerlingenkenmerken_Overzicht_2016- 2017_sec.pdf

	Culturele erfgoed	Normen en waarden, historiek, identiteit, leeftijd: Info uit interviews, observaties en documenten
	Schoolligging	Vooraf gekend
	Schooltype	Vooraf gekend
	Middelen	Vooraf gekend zie: http://www.agodi.be/nieuwe-omkadering-basisonderwijs Niet voor secundair onderwijs?
	Schoolprestatie	Doorlichtingsverslag indien aanwezig, databundel leerlingen (gegevens over prestaties van leerlingen in vervolgonderwijs, gegevens over instroom/uitstroom)
EXTERNE CONTEXT	Arbeidsmarkt	Info uit interviews, observaties en documenten
	Institutioneel – beleid	Info uit interviews, observaties en documenten

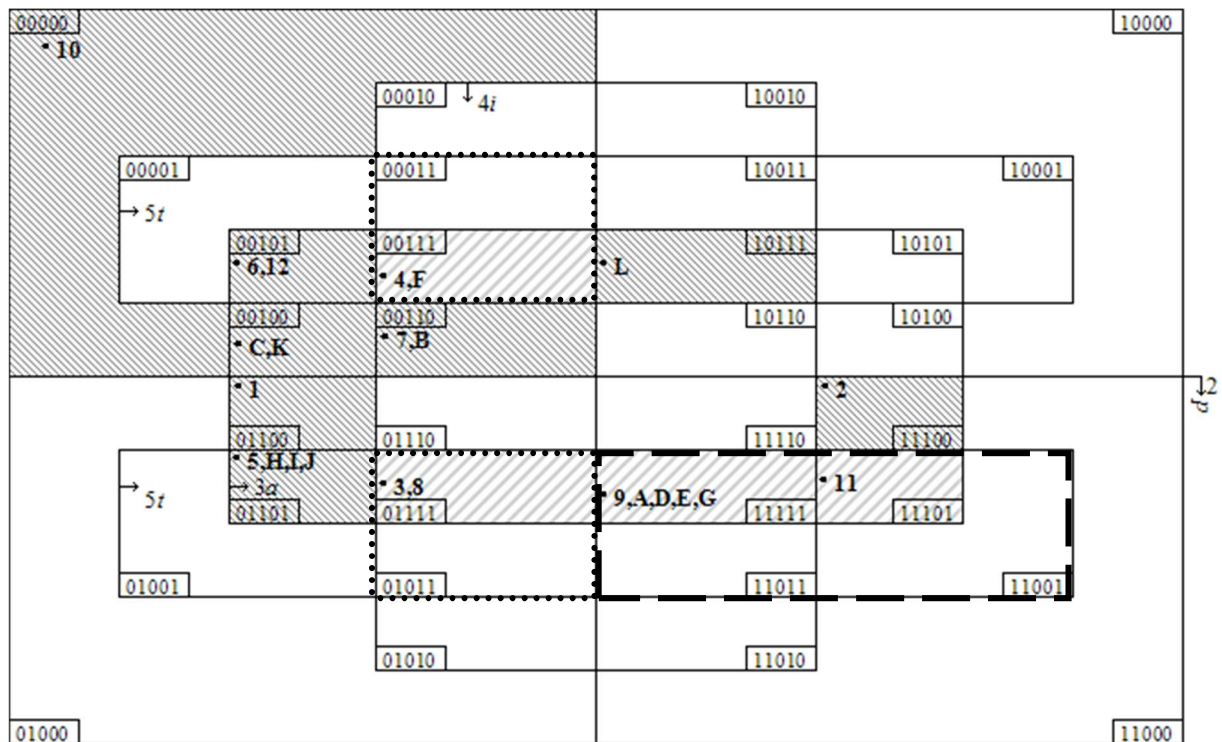
	Institutioneel – vakbond	Info uit interviews, observaties en documenten
SCHOOL-LEIDING	Ervaring	Info uit interviews, observaties en documenten
	Transformationeel	Info uit interviews, observaties en documenten
	Instructioneel	Info uit interviews, observaties en documenten
	Administratief	Info uit interviews, observaties en documenten
	Ondersteuning	Info uit interviews, observaties en documenten
	Gedeeld	Info uit interviews, observaties en documenten
SCHOOLKEN MERKEN	Formeel overleg	Info uit interviews, observaties en documenten
	Leerkrachtparticipatie	Info uit interviews, observaties en documenten

	Professionele leergemeenschap	Info uit interviews, observaties en documenten
	Leerkrachtautonomie	Info uit interviews, observaties en documenten
	Vertrouwen	Info uit interviews, observaties en documenten
	Gedeelde visie	Info uit interviews, observaties en documenten
SCHOOL- BELEID	Strategisch	Info uit interviews, observaties en documenten
	Personeelsbeleid	REKRUTERING EN SELECTIE Info uit interviews, observaties en documenten OPDRACHTTOEWIJZING Info uit interviews, observaties en documenten LEERKRACHTEVALUATIE Info uit interviews, observaties en documenten

		<p>PROFESSIONELE ONTWIKKELING</p> <p>Info uit interviews, observaties en documenten</p> <p>WAARDERING EN BELONING</p> <p>Info uit interviews, observaties en documenten</p>
LEERKRACHT - KENMERKEN	Demografisch	Info uit interviews, observaties en documenten
	Functie	Info uit interviews, observaties en documenten
	Carrièrefase	Info uit interviews, observaties en documenten
	Vak	Info uit interviews, observaties en documenten
	Statuut	Info uit interviews, observaties en documenten
	Onderwijsopvattingen	Info uit interviews, observaties en documenten
	Doelmatigheidsbeleving	Info uit interviews, observaties en documenten

UITKOMSTEN LERAAR-NIVEAU	Welbevinden	Info uit interviews, observaties en documenten
	Professioneel leren	Info uit interviews, observaties en documenten
	Lerarenverloop	Info uit interviews, observaties en documenten (o.a. databundel personeel)
	Interactie tussen leraren	Info uit interviews, observaties en documenten
	Veranderingen in de klas	Info uit interviews, observaties en documenten

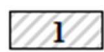
Appendix V: Venn-diagram (with logical remainders)



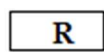
Note. This Venn-diagram offers an overview of the relationship of the school characteristics with regard to the outcome of interest within this study. It comprises 32 fields each with a unique code or combination of five binary numerals (e.g. 00010). These codes, or configurations, correspond to all possible combinations of scores that could be given to the school and leadership characteristics. 10000 = only the first condition, PLC, is present; 01000 = only the second condition, participative decision-making, is present; 00100 = only the third condition, autonomy, is present; 00010 = only the fourth condition, instructional leadership, is present; 00001 = only the fifth condition, transformational leadership, is present.



All right-shaded fields indicate that an outcome of [0] was observed for this configuration for at least one school. For example, school 1 scored [0] of the first characteristic, two times [1] for the 2nd and 3rd characteristic and [0] for the last two characteristics and the outcome variable.



All the left-shaded fields indicate the outcome of interest [1; excellent strategic] was observed for this combination for at least one school.



All the white fields indicate that no school with this specific configuration was observed. These fields represent the logical remainders or theoretically possible configurations that could produce an outcomes but were not observed with our data.