Master thesis Public Administration – Management of Governance Networks

Erasmus University Rotterdam

23-03-2020

Curriculum.nu

A CASE STUDY ON GOVERNANCE NETWORK STRUCTURES AND ITS EFFECT ON OUTCOMES OF CURRICULUM DESIGN.

Eva Blom (499114) 499114eb@student.eur.nl

Supervisor: Prof. dr. J. F. M. Koppenjan

Preface

Here in front of you lies the product of months of chaos and order, getting lost and finding my path again, in short: my Master's thesis in Public Administration – Management of Governance Networks from Erasmus University in Rotterdam. Writing this thesis was a period of finding extremes and combining these into a learning curve in both an academic and a personal sense. My inspiration and motivation to write this thesis derives from a combination of various interests; how do people with different backgrounds work together? How can complex issues be addressed without imposing top-down regulations? How can educational pressures be resolved, or at least softened? Personally, I find it important that everyone affected by a certain measure or problem is heard. This not solely ensures a level of legitimacy and a sense of ownership, it can bring about new insights and create novel solutions. Especially education I deem an important aspect of society as this is a great factor in the development of children into adulthood and as such shapes the society of tomorrow. Combining these aspects I came to the topic of analysing a network that tries to better education and the position of educators while listening to all stakeholders involved. As it happened to be, at the time of writing this thesis such a network was up and running, allowing me to combine these interests into one research.

Writing a thesis is an individual task, yet it is a process you cannot always get through all alone. Therefore, I would like to thank a couple of people who helped me through this process:

- All participants have contributed greatly to this research through their stories and experiences of the network. Thank you for sharing in such an open manner.
- Prof. dr. J. F. M. Koppenjan, who always provided a critical and valuable perspective to the content of my thesis.
- My family and friends, who believed in me and supported me at all times.

Please enjoy!

Eva Blom

March 2020

Table of contents

Preface	1
List of figures and tables	3
Summary	4
Chapter 1. Problem statement	5
Chapter 2. Theoretical framework	9
2.1 Background information on governance	9
2.1.1 Governance	9
2.1.2 Governance networks	11
2.1.3 Why governance networks?	12
2.2 Governance network structure	14
2.3 Outcomes	19
2.3.1 Three levels of outcomes	19
2.3.2 Three types of outcomes	20
2.4 Network structure – outcome relationship	22
2.5 Conceptual model	27
Chapter 3. Methodology	29
3.1 Operationalization	29
3.2 Method	32
3.3 Participants	34
Chapter 4. Curriculum.nu	35
4.1 Context behind Curriculum.nu	35
4.2 Structure of Curriculum.nu	39
4.3 Outcomes in Curriculum.nu	54
4.4 Network structure-outcome relationship in Curriculum.nu	59
4.5 Taken together	63
Chapter 5. Conclusion	66
References	69
Appendix A: Topic list interviews	74
Appendix B: Informed consent	75
Appendix C: List of participants	77
Appendix D: Coding scheme	78

List of figures and tables

Figure 1: Four perspectives on government-governance relation Based on Levi-Faur (2012)	10
Figure 2: Representation of low brokerage and high brokerage in networks	15
Figure 3: Conceptual model	28
Figure 4: Levels of curricula	35
Figure 5: ADDIE model for curriculum design, adapted from Nieveen & Berendsen (2019)	39
Figure 6: Map of design schools in the Netherlands, Source: Curriculum.nu, 2019	40
Table 1: Mode of governance	15
Table 2: Integration mechanisms and tools	16
Table 3: Size and Heterogeneity	17
Table 4: Network inner stability	17
Table 5: Rules	18
Table 6: Trust	19
Table 7: Level of outcomes - constituents relationship	20
Table 8: Summary of different types of outcomes as used in this thesis	22
Table 9: Key predictors of Provan and Kenis	23
Table 10: Operationalization	29
Table 11: Summary of the network structure of Curriculum.nu	53
Table 12: Summary of the outcomes of Curriculum.nu	59

Summary

Since 2015, the Dutch government is working on a new national curriculum. This new curriculum should account for problems as unclarity of common goals, experienced high pressure, and the schism between current curriculum and current society. Rather than using traditional top-down methods to establish this renewal, the government set in motion a more bottom-up governance approach which came to be known as Curriculum.nu. In this project a network was created in which about 300 stakeholders worked together to create a basis for a new curriculum. Governance networks can be analysed from various perspectives. This research analyses the network structure of this governance network and how this structure is related to network-level content and process outcomes using a case study of Curriculum.nu. The research question is 'Which factors of governance network structure explain outcomes of a new curriculum design in the case of Curriculum.nu?'. To answer this question first theories on governance networks and network structures were investigated, followed by an account of the theory on outcomes and how these structures are related to outcomes. The network structure is thought to consist of mode of governance, integration mechanisms and tools, size and heterogeneity, network inner stability, rules, and trust. It is suggested that the structural aspects are interdependent and that the specific combination determines the relationship with process and content outcomes. In the next chapter, these theoretical findings were applied to the case. The case was analysed through desk research and interviews. In Curriculum.nu all network structures could be found. Regarding outcomes, it was found that the network structure of Curriculum.nu contained aspects that were positively related to outcomes but that this relation could be greater. Most importantly, a balance needs to be found; centralisation but also density, not too many participants but not too little either, stability but also changeability, and rules but also freedom. The level and the type of trust that needs to be present also depends on the network structure. In conclusion, all identified aspects of governance network structures impact outcomes of a new curriculum design. The type of outcomes is determined by the combination of how these structural aspects are shaped. This thesis is limited in its scope by solely addressing the network structure, other factors as processes, management, and more personal aspects also play a major role in the outcomes of the network. Furthermore, this research is based on a limited number of self-reported data which could make the findings less objective and generalisable. Despite these limitations, this thesis contributes scientifically by adding a piece of the puzzle to the understanding of governance networks and how this is applied. On a social level this research is relevant as the educational field has been experiencing many problems, and this project might contribute to solving these problems.

Chapter 1. Problem statement

In 1848 Johan Rudolph Thorbecke established a law in the Dutch constitution of freedom of education (Slaman, 2018). This was not applied without problems, until 1917 there was a period known as *Schoolstrijd* (battle of schools) and even after that period, dissatisfaction continued in the educational field with how education and government involvement were regulated. Following this constitution, everyone is allowed to provide education, but the government supervises the quality of educators and education given. The government makes sure that (public) education is available to anyone and they fund this education. With everyone being able to provide education, the questions arise what education should look like and who has a say in what education should pertain. Should this be done top-down or bottom-up?

In the Netherlands, there is a clear separation between policymakers and educational providers (Maassen, Moen & Stensaker, 2011). Even though schools have always held great autonomy, the exact influence of governments in education has changed over time. The law of 1848 almost inherently pertains this tension between centralised governmental steering – keeping the educational quality in check – and decentralised school autonomy, and raises questions regarding the design of education. From the 1970s to the 1990s there was internationally a tendency to develop core curricula. The Netherlands went along with this movement and determined in 1993 over 100 core goals of primary education and about 300 for lower secondary education, thereby greatly shaping the input of educational practices (Nieveen & Kuiper, 2012). Since then, the government provided a common base from which schools had to depart. Up to today the question of how to fill in this common base remains a point of discussion.

In 2006 the last revision took place, decreasing the goals to 58 and making them less detailed and untied from specific teaching methodologies (Nieveen & Kuiper, 2012). Even though the general quality of Dutch education is good (Inspectie van het Onderwijs, 2018), the government's aim of providing guidance and inspiration showed to be failing. Through the implementation of more outcome focussed regulations of inspections and quality measurements, certain issues were experienced. Problems found are no consensus on what 'good education' entails, questions of who bears responsibility, sense of no autonomy, and too little time and space for reflection on used methods (Veugelers, 2004; Inspectie van het Onderwijs, 2018). Downsides of the core goals are that they were experienced as too broad, unclear, and detached from the 21st century (Curriculum.nu, 2019).

Because of these problems there was a call in 2014 to reformulate the national curriculum for primary and lower secondary education, and to do this in dialogue with affected parties. The government started gathering various stakeholders to discuss the matter of what the curriculum should look like (Rijksoverheid, 2019). Since 2015, actors – students, teachers, parents, school board members, school directors, scientists, social and cultural organisation representatives, private sector representatives, and political parties – have been coming together, discussing the issue at hand in *Platform Education2032*

(Platform Onderwijs2032). After having created a vision of education, named *Our Education2032* (Ons Onderwijs2032), a coordination group (CG) consisting of educational bonds and foundations formed which established an action plan to reach a renewed curriculum (Platform Onderwijs2032, 2016b). After adjustments by the house of representatives a new initiative started in 2018. Whereas the house of representative called for change, the manner of establishing this change was left mainly to the CG. As such, *Curriculum.nu* came to existence. Curriculum.nu handed in their advice 10th of October 2019. The produced documents are then presented to the house of representatives who will decide how to proceed and shape the findings into an actual, legally binding new curriculum, expected to be implemented in 2022. This befalls besides growing protests by educators and students, showing their dissatisfaction with how education is regulated; too much is asked while getting too little time, resources, and reimbursements (POinActie, n.d.; VOinActie, 2019). High pressure is experienced in the educational field, showing the need for changes to occur.

Curriculum.nu is a network of numerous stakeholders, all with their own expertise and role. This form of including various stakeholders in addressing complex societal issues is in line with the growing focus on governance (Klijn, 2008; Levi-Faur, 2012) and governance networks (Klijn & Koppenjan, 2016; Torfing, 2012) in public administration. These networks can have positive effects as well-informed decision making, information sharing, greater problem-solving capacity, and greater support for decisions. Moreover, according to Goodlad, Klein, and Tye (as cited in Nieveen & Kuiper, 2012), a discrepancy can exist between envisioned/planned (by the designers), executed/delivered (by the schools and teachers), and experienced (by the students) curriculum. Through the inclusion of these stakeholders, this discrepancy can be accounted for. However, challenges arise as well by using networks as divergent opinions and strategies are confronted.

The network of Curriculum.nu is part of a process that aims to improve the current curriculum and address the problems experienced with it from a more bottom-up approach. With the current unclarity of common goals, the experienced high pressure, and the dispatching from current society in the curriculum, it is imperative to analyse how the curriculum change is dealt with and if this manner of governance aids in the successfully addressing of problems faced with now. The issue of curriculum change is still worked on and there are not yet clear to be measured outcomes. We can, however, examine the perceived and expected outcomes in the sense of how the process is experienced, the quality of the content is perceived, and if actors think that aims have been or will be achieved. The focus group is network members, meaning people formally chosen to actively work and participate in the network. Furthermore, in order for networks to function well and establish successful outcomes, various aspects are of relevance. One such aspect that could influence the outcomes of the network is its structure. Network structures have been shown to, for example, play a role in stimulating innovation and effectiveness (Klijn & Koppenjan, 2016; Provan & Kenis, 2008; Turrini, Cristofoli, Frosini & Nasi, 2010). Acknowledging the multiplicity of factors influencing networks as environmental factors,

personal factors, and exact strategies and processes, the focus of this thesis is on a more overarching, relatively constant aspect being the structure. The research question formulated is:

Which factors of governance network structure explain outcomes of a new curriculum design in the case of Curriculum.nu?

To answer this question, Curriculum.nu is used as a case study. Note that design in this case does not solely refer to the process of designing, it also refers to the product developed. This product is not yet final, it is part of the whole process of the creation of a new curriculum and is an in-between product, a sketch of the final curriculum. Curriculum.nu is a process within a bigger process with own outcomes. The case is analysed at one point in time rather than at multiple times in the process. The research aims to take a practical take and add to the body of literature on governance networks by applying the theory of the influence of network structures on outcomes in a practical example of Dutch curriculum design. Another aim of this research is to evaluate the network by analysing the network structures and which factors of the structure can explain outcomes. Research on governance networks has not yet been applied to this field while it could provide insights on how to deal with the curriculum change. By doing a case study the applicability of governance network theories is tested. Using O'Toole's (1997) terms "if we are to "treat networks seriously," we must understand whether they work" (Provan and Milward, 2001, p. 415). As such, this research is scientifically valuable by adding to the practical understanding of literature on governance networks and its effect on outcomes. Furthermore, as education relates to all and with the current protests and critics to educational regulations (POinActie, n.d.; VOinActie, 2019), this research is socially relevant in assessing whether the manner of governance chosen functions well to achieve a core curriculum which addresses the problems faced nowadays and can elicit support from affected parties.

In order to answer the research question, several sub-questions have been created:

- 1. Which theoretical insights does the body of knowledge on network structures offer?
- 2. Which theoretical insights does the body of knowledge on governance networks offer on outcomes?
- 3. Which factors of network structures influence outcomes?
- 4. Which network structures can be found in the case of Curriculum.nu?
- 5. What are the outcomes in the case of Curriculum.nu?
- 6. Which factors of the network structure influence the outcomes in the case of Curriculum.nu?

These questions form the guideline of this paper. First, in chapter 2, a theoretical framework is presented in which questions 1 to 4 are answered. Starting with a review of governance and governance networks in section 2.1, the paper moves to a synthesis of governance network structures in section 2.2. Following,

section 2.3 addresses outcomes. The theoretical framework closes in section 2.4 with an analysis of the relationship between network structures and outcomes. Chapter 3 provides the methodology in which is explained how concepts are operationalized, how the research is conducted, and which methods are used. The results of the research are presented in chapter 4 and an analysis of the results is provided in chapter 5. These chapters provide the answers to sub-questions 5 to 8. The thesis ends with a conclusion and discussion in which limitations and points for further research are given.

Chapter 2. Theoretical framework

In order to analyse and understand governance network structures we should take a step back and first gain an understanding of the theory in which network structures are embedded: governance and governance networks. This chapter is structured as follows. Firstly, some background information is given by defining the concepts of governance and governance networks and providing an account of why governance networks are deemed important. Secondly, governance network structures are examined. Thirdly, the chapter moves to an account of outcomes when using governance networks. Lastly, the relationship between network structures and outcomes is researched.

2.1 Background information on governance

Governance can be many things and is used in numerous combinations, for example collaborative governance, e-governance, democratic governance, interactive governance, economic governance, corporate governance, global governance and there are many more. Because of the usage of the term in various fields, little consensus on a single definition in the literature is found. The concept of governance networks does not know more clarity than governance. Therefore, this section first explains what these terms entail and how they are used throughout the paper. This section closes with a synthesis of why governance networks are thought to be useful.

2.1.1 Governance

The term 'governance' can be traced back to the Greek word *kubernan*, which means 'steer' (Hoad, 2003). In ancient times it overlapped with the meaning of government (Jessop, 1998), nowadays this is one point of discussion in what governance is: what is the role of government and the state in governance? Another question is how we should interpret governance. According to Torfing (2012) governance still is, in its most generic form, the steering of society and the economy, similar to the original Greek translation. For this second question Klijn (2008) provides an overview of various interpretations. These two questions, of government involvement and interpretations of governance, are addressed subsequently based on which is clarified how governance is used throughout this paper.

With regards to the first discussion of government involvement, two broad distinctions can be made: governance without government and governance with government (Lynn, 2012) or in other words, hollowing out the state versus filling the state in (Matthews, 2012). Another distinction to be made is whether the focus lays on the state or whether it goes beyond the state. These views can then be divided into four perspectives: hollowing out the state, degovernancing, state-centred governance, and big governance (Levi-Faur, 2012). The first two perspectives, hollowing out the state (Peters, 1994; Rhodes, 1994) and degovernancing, leave out government from governance. Authors who take a perspective of hollowing out the state argue that the government loses its power and authority and instead networks of various actors steer society. Degovernancing moves beyond the state as it addresses

governance as hollowing out politics or authority entirely. The market is the controlling factor in degovernancing. The other two perspectives, state-centred governance and big governance leave room for the government to play a role. In state-centred governance, as the name implies, the state has a great deal of autonomy, yet its limitations and the need for other actors are recognised. Big governance believes that government and governance co-exist and both expand, leading to regulatory mechanisms coming not solely form the state but also from civil and private actors.

Despite the differences, one thing is clear, governance is not the same as government and it includes multiple actors involved in steering. In the case of Curriculum.nu the network is held accountable by the government and the government has a say in the end, meaning that government is included in the governance. Moreover, the network governance is not solely regulated by the hard laws of the state, regulatory mechanisms come from within the network including civil and business actors. Therefore, a big governance perspective is best to take and governmental actors should not be left out of the equation when analysing the network. The four perspectives can be found in figure 1, highlighting the position taken in this paper.

With government	State-centered	Big governance
Without government	Hollowing out Within the State	Degovernancing Reyord the State
	Within the State	Beyond the State

Figure 1: Four perspectives on government-governance relation Based on Levi-Faur (2012)

This account of state involvement or not does not yet provide a clear definition of what governance is. According to Gerry Stoker (1998), governance has several meanings but a baseline can be found, agreeing that "...governance refers to the development of governing styles in which boundaries between and within public and private sectors have become blurred." (p. 17). Rhodes (1996) distinguished these different meanings and found at least six usages of the concept. Klijn (2008) also recognised these various usages and brought these six usages down to four major interpretations: governance as good governance, governance as new public management, governance as multilevel governance, and governance as network governance. As this paper does not focus on networks as means of governing – as in good governance, new public management, and multi-level governance – but mainly focusses on

the network and the governance of the network, the network governance interpretation is best suited. Network governance can be defined as "the set of conscious steering attempts or strategies of actors within governance networks aimed at influencing interaction processes and/or the characteristics of these networks" (Klijn & Koppenjan, 2016, p. 11). In this stream of thought, Klijn and Koppenjan state that they approach governance as the process in which governance networks exist.

Besides a process, governance can have other approaches, making four in total: a structure, a mechanism, a strategy, and a process. "As a structure, governance signifies the architecture of formal and informal institutions; as a process it signifies the dynamics and steering functions involved in lengthy never-ending processes of policy-making; as a mechanism it signifies institutional procedures of decision-making, of compliance and of control (or instruments); finally, as a strategy it signifies the actors' efforts to govern and manipulate the design of institutions and mechanisms in order to shape choice and preferences." (Levi-Faur, 2012, p. 8). Despite the fact that each meaning points at something different, they can be approached as two sides from the same coin which influence each other and are not mutually exclusive. As stated, Klijn and Koppenjan (2016) approach governance as a process in which governance networks exist. However, this process rests upon a structure of institutions, with mechanisms of decision-making and control, and strategies to manipulate the design. Recognising the relevance of each approach, one is chosen to gather a more in-depth understanding. Based on the distinction given above, this thesis takes a slightly different approach from Klijn and Koppenjan. Instead of examining the exact strategies at various points in time to influence the process, this thesis examines the base upon which the network is built – the structure. This structure can emerge gradually over time as the network evolves, but also conscious decisions are made on how to arrange the network. The strategies and organisations that remain stable over time can be deemed part of the institutional architecture as these are formalized or have become 'the way we do things'. As such, the network structure are then also sets of conscious steering attempts or strategies. However, rather than focussing on the exact processes the network engages in, the focus lays in this case on the strategies and organisation which remain relatively stable over time.

All in all, this paper uses a quite broad conception of governance as network governance – being steering in networks. This steering can include both governmental and non-governmental actors. The focal point of this thesis is on the structural aspects of governance. As such the definition provided by Klijn and Koppenjan is approached somewhat differently by examining the governance structure of governance networks rather than the process in which governance networks exist. With this definition a new question comes to the surface: what are governance networks?

2.1.2 Governance networks

As Manuel Castells (2000) states, we are in a new society and "the new society is made up of networks" (p.695). Also in the study of governance, networks appear to play a great role. Whereas there used to be a distinction between policy networks and network management, these have converged to the study of

governance networks (Klijn & Koppenjan, 2012). However, similarly to governance, the concept of governance networks knows various definitions and interpretations.

In the literature, governance networks have been used to describe a form of governance with a focus on interaction processes— see discussion above on network governance — or refer to a more analytical form of social structures with a focus on institutions (Ball, 2008; Klijn & Koppenjan, 2016; Provan & Kenis, 2008; Raab & Milward, 2003). Examining definitions of governance networks (Hajer & Versteeg, 2005; Klijn & Koppenjan, 2016; Torfing, 2005) certain core terms seem to reappear: the relative stability in networks, the interdependency of actors, the autonomy of actors, the interactions or negotiations, and a public purpose. Some definitions suggest that networks are self-organising or self-governing (Rhodes, 1996). This might suggest no interference of any sort of control or intervention by public actors which is not necessarily true (Ball, 2008; Klijn & Koppenjan, 2016; O'Toole, 2014). Even where networks function without public officials, some sort of guiding factors are in place, for example, managers, rules or legislation. We can speak of self-regulation within limits (Sørensen & Torfing, 2005). In this respect, Klijn and Koppenjan (2016) created a quite encompassing definition of governance networks as "more or less stable patterns of social relations between mutually dependent actors, which cluster around a policy problem, a policy programme, and/or a set of resources and which emerge, are sustained, and are changed through a series of interaction" (p. 11).

A simplified illustration of networks is spiderwebs. A spiderweb consists of different strings connected by nodes. All of these strings and nodes are connected, and they need to be, in order to be a strong, functioning web. The web could function on itself (it catches resources), however, it is fragile and needs to be built; the spider plays a role in this. The spider provides the silk and can create more nodes or to strengthen certain strings, it provides the basis for the web and makes sure that the network does not fall apart. Bringing the illustration to governance networks, the nodes are the actors and the strings are the social relations. In reality, these nodes and strings are not as organised and aligned as in a spiderweb, they form an entangled knot. The spider stands for the guiding factors, of which the base can be found in the network structure as discussed in section 2.2.

2.1.3 Why governance networks?

After the periods of bureaucracy in Traditional Public Administration from 1945-1970 and market regulation in New Public Management from 1970-1990, the idea existed that society had grown more complex and fragmented and that bureaucratic hierarchies and markets had failed. Hence, there was a need for a new manner of steering. Educational systems have also grown more complex and are looking for manners to govern this complex system (Burns, Köster & Fuster, 2016; Waslander, Hooge & Drewes, 2016). Governance appeared as the new approach to steering this 'new society' (Provan & Kenis, 2008; Torfing, 2005), being more flexible and proactive in contrast to bureaucracies and markets (Sørensen & Torfing, 2005). Networks seem to form a great part of the governance approach. These governance networks do not inherently elicit positive or negative consequences, it depends on how the

network functions and is build up. Simply having a network does not lead to more effectivity or a greater democratic legitimacy, the network needs to function well in order to create positive outcomes. Moreover, networks are not only to be seen in a positive light as solving all problems. Well-functioning networks can also create problems; think of dark networks as described by Raab and Milward (2003). The question is thus not whether networks are a good or bad development, but what they are believed to be useful for. What are the advantages of using networks? What can go wrong in the functioning of networks? And what is needed for networks to function well?

As stated before, New Public Governance arose as a solution to the growing complexity of society and the failure of Traditional Public Administration and New Public Management to deal with these complex issues. The complex problems faced require a diverse set of resources and affect a wide range of stakeholders. This inclusion of various actors and their collaboration is believed to have multiple advantages over traditional government regulations. This idea is rooted in game theory, that cooperation will lead to more favourable outcomes for all parties than competition (Axelrod & Hamilton, 1981). A first assumption of advantages is substance oriented. Through the inclusion of more stakeholders, more and better information becomes available (Torfing, 2005). Moreover, creative solutions might spur because of the diverse perspectives on an issue or simple new resources become available (Klijn & Koppenjan, 2016). In short, the problem-solving capacity grows when more people are included in the process because of system diversity. A second assumption can be found in seeing governance as a strategy; the inclusion and collaboration of more stakeholders are likely to elicit more support and to facilitate conflict resolution (Torfing, 2005). Once one contributes to a process, he or she is more likely to stand behind what is happening. Furthermore, trust could grow in the existing governmental institutions. Thirdly, in a democratic sense, greater stakeholder participation could mean better representation of the various groups involved and greater democratic legitimacy; the gap between politics and citizens is reduced.

As can be seen from the paragraph above, many advantages can be found in using governance networks. However, challenges arise as well due to the great number of people involved. These challenges present themselves in the fields of substance, strategy, and institutions (Klijn & Koppenjan, 2016). Actors might have different ideas on what the problem is and what the solution should be, what success is and what failure is, what rules apply etc. If no consensus is reached, stagnation and deadlock might occur, resulting in the disaggregation of the network and failure to reach solutions to problems. Moreover, due to the inclusion of many and various people the process might take longer than when few people make decisions. This system diversity is, therefore, both a virtue and a vice of networks. A critique given to governance including laymen in policy issues is that they are not proficient in policy work thus should they be involved in the process of creating new policies? For these failures to be prevented, networks can be guided. Aspects as integration mechanisms, management, and external controls can be put in place. The network structure can form the basis for these guiding principles, the basis for what the network can achieve.

2.2 Governance network structure

As in virtually the whole field of governance, governance structures can also be approached in various manners. No clear definition of governance network structures was found, as such this section dives into the question of what can be understood as governance network structures. Governance networks can be approached as social relationships as well as a form of governance. As social relations, the network structure is approached as dyadic, node to node relationships. It is said to be a rather descriptive approach of illustrating what the network looks like: who is linked to whom and how wide does the network spread. As a form of governance "Network structures have been likened to an orchestra where the musicians must be permitted individual creativity while still assuring quality music." (Mandell, 1999, p. 59). In order for actions to occur in this interdependent setting, there is a need to organise; through sole individual actions the musical piece will not form a whole, some sort of frame needs to be offered as the key to play in, specific instruments chosen or the conductor leading the musicians. In other words, the network structure is approached as the actively coming together of people to reach a particular goal, with the autonomy yet interdependency of actors. As a form of governance, network structures can be characterised by a common mission, interdependent members, and unique structural arrangements (Keast et. al, 2004) These structures can be formal, in the sense of regulations and contracts, and informal, as trust and norms (Agranoff & McGuire, 1999). This inclusion of informal rules and trust also implies that network structures are not set in stone, they are stable to a great extent but can change over time. Some authors argue for the usage of both approaches in the analysis of a network to create a more complete picture (Blom-Hansen, 1997; Klijn & Koppenjan, 2016; Provan & Kenis, 2008) which is related to the use of institutions as a point of analysis. Based on these descriptions of what governance network structures entail, an own definition is created of network structures as "the more or less stable manners in which a network and the relations within this network are organised to reach a particular goal". Often it is not clearly stated what factors authors deem part of network structure and what not. Examining the manner network structures have been conceptualised and used for research we can identify a couple of authors and theories which do clearly state what is meant with network structures. The meta-analysis by Turrini, Cristofoli, Frosini, and Nasi (2010) provides a good basis as it clearly distinguishes factors of governance network structures. Building on this literature and combining it with other literature an understanding is created of which factors comprise the network structure, as is discussed next.

Mode of governance

This first factor is derived from what Turrini et al. (2010) describe as external control. External control is a part of what Provan and Kenis termed mode of governance (2008). The mode of governance is based on 2 dimensions (Provan & Kenis, 2008): brokerage and participant governed/externally governed. Brokerage refers to the centralisation and density of the network. Lowly brokered networks are dense and decentralised with governance by the organisations comprising the network and interaction between

all organisations meaning actors are tightly connected with each other. Highly brokered networks are centralised and less dense with governance by a single organisation and little direct interaction between organisations meaning ties between actors are less existent.

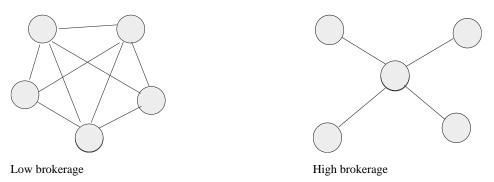


Figure 2: Representation of low brokerage and high brokerage in networks.

In brokered networks the distinction can be made whether the broker is a participant of the network or an external party. As such, three modes of governance have been suggested by Provan and Kenis (2008): (1) participant-governed networks (activities are jointly organised by all members resulting in symmetrical power – low brokerage and internally governed), (2) lead organisation-governed networks (asymmetrical power through a single governor from within the network who organises the network – high brokerage and internally governed), and (3) network administrative organisation (external governance is in place to coordinate and facilitate the network activities – high brokerage and externally governed). In the literature of Turrini et al. (2010) external control refers to the dependency upon external supporters such as fiscal control by the state in public health and human service systems (Provan & Milward, 1995). These external stakeholders play an important role in the governance of the network and can be compared to the external party Provan and Kenis (2008) discuss.

Table 1: Mode of governance

Core concept	Sub-concepts	
Mode of governance	Brokerage (centralisation & density)	
	Internal/external governed	

Integration mechanisms and tools

In the work of Turrini et al. (2010) integration mechanisms and tools are linked to the cohesiveness of the network and the presence of one coordinating agency. Whereas this has already been touched upon in mode of governance, this factor focusses more on the strategic aspect of integration. Working in cliques – small groups within the network – can be handy for the specific focus and expertise and clique members often speak the same language. Yet, these specializations are a double-edged sword, the information processes more efficiently in the clique, but simultaneously obstacles for information and resource sharing are created for inter-clique relations (Tushman & Scanlan, 1981). For this purpose

integration mechanisms and tools become an important aspect of network structure. Various forms of integration can be found in networks and their coexistence has a positive effect on network effectiveness. Examples of such mechanisms and tools are common information and communication systems and joint staff activities. Moreover, a broker or network manager could fulfil this role of coordinating agents in integrating networks. This aspect of Turrini et al.(2010) focusses mainly on externally placed interaction systems and activities. This focus is expanded to include internal systems of patterns of perception as discussed by Klijn and Koppenjan (2016) Patterns of perception refer to the difference actors might experience in their understanding of the content and other actors. Initially, each actor has different ideas about the problem, goals, and solutions. Moreover, they might speak a different language due to their background. Rephrasing Ostrom (2011), any language-based phenomenon is typified by the problems of lack of clarity, misunderstanding, and change. To work in a network, there is a need for some degree of alignment or consensus as collaboration becomes impossible due to misunderstandings and conflicts if not working for something similar. Perception alignment has been termed differently as for example shared meaning (Ansell & Gash, 2008), goal consensus (Provan & Kenis, 2008) and common ground (Klijn&Koppenjan, 2016). Yet each author stresses the importance of this alignment in perceptions or common understandings. This could be seen as a form of integration. Therefore, shared language and common problem and goal understanding are added to this concept.

Table 2: Integration mechanisms and tools

Core concept	Sub-concepts
Integration mechanisms and tools	Common information and communication systems
	Joint activities
	Coordinating agency
	Common problem & goal understanding
	Shared language

Size & Heterogeneity

Size relates to the number of members. Turrini et al. (2010) also include composition in this term being the homogeneity or heterogeneity of the network members. This heterogeneity refers to the variety of stakeholders present in the network. Aspects related to composition are the openness and inclusiveness of the network. Besides the present composition, is there room for all stakeholders to be involved? And are all stakeholders involved who should be involved? As such the view of composition is broadened and includes next to the actual heterogeneity the possibility of heterogeneity through openness and inclusiveness. To determine who should be part of the network one can do a stakeholder analysis. In this analysis, stakeholders are placed in a power-interest matrix to determine who should be actively involved (Ackerman & Eden, 2001). Stakeholders with high power and interest should be most actively involved, stakeholders with high power but low interest should be kept satisfied, stakeholders with low

power but high interest should be kept informed, and stakeholders with both low power and low interest should receive minimal effort.

Table 3: Size and Heterogeneity

Sub-concepts
Number of members
Heterogeneity
Openness
Inclusiveness

Network inner stability

This characteristic of Turrini et al. (2010), network inner stability, describes the stability of the members working in the network, including level of competitiveness versus cooperation within the network, lifetime spent in the network, tie strength, and the existence of inter-organisational links. Interorganisational links extend to links with organisations outside the network, as such differing from density which focusses on those links inside the network. Interorganisational links are of importance to increase ease of resource access and learning abilities of other organisations. Tie strength might also be deemed similar to density. However, whereas density focusses more on the variety and amount of links, tie strength focusses on the intensity of those links. A great amount of stability in the network facilitates trust building, relationship continuity, and knowledge diffusion. Despite being stable, the network should not become rigid, rather some degree of change should be possible when the system appears to be malfunctioning. As the definition of governance networks also states, we speak of "more or less stable patterns of social relations", not entirely stable patterns. Change will inevitably happen due to interactions. Adaptive learning or learning from experience also needs to happen if you want to grow or even survive as organisation (Senge, 1997). In this regards we need to add adaptability to the equation. Whereas the aspects of Turrini et al. (2010) focus more on the actor level, the network level is added to this construct by including adaptability.

Table 4: Network inner stability

Core concept	Sub-concepts	
Network inner stability	Collaboration/competitiveness	
	Interorganisational links	
	Lifetime in network	
	Tie strength	
	Adaptability	

Rules

Rules are thought to regulate behaviour in a network (Klijn & Koppenjan, 2016). Turrini et al. (2010) use the terms formalization and accountability. However, I do not deem these sufficient to cover the structure of the network. The network structure is not solely determined by its formal aspects, informal rules also give shape to the network (Klijn & Koppenjan, 2016). Therefore, the term 'rules' appears more encompassing than formalization solely. Using this terminology it can be useful to examine the work of Elinor Ostrom (2011) who distinguished 7 types of rules: (1) boundary rules – rules on entering and exiting the network, (2) position rules – rules on the available positions or roles, (3) choice rules – rules on authority, (4) scope rules – rules on the domain, (5) aggregation rules – rules on control, (6) information rules – rules on information sharing, and (7) pay off rules – rules on benefits/rewards and costs. These rules are stated to be formal, however they can also be informally established. Accountability can also be regarded as either formally or informally established through mandates as the evaluation of the progress and who is responsible. The mandate receiver becomes accountable and needs to explain what they are doing to the mandate giver. Next to the presence of rules, the rigidity of rules can be analysed. Rules are fixed and static, as otherwise they lose the meaning of being a rule. However, when dealing with complex problems, the environment is not entirely stable and predictable (Klijn & Koppenjan, 2016). As the environment changes, rules might need adaptations to move in accordance to the environment. Thus, rules can be rigid and non-changing, but in dealing with complex problems rules also need to be dynamic.

Table 5: Rules

Core concept	Sub-concepts	
Rules	(In)formal rules	
	Accountability	
	Rigidity	

Trust

Lastly, trust is added as a separate structural characteristic due to the often mentioning of the term and explicit relevance placed on it in governance network literature (Klijn, Edelenbos & Steijn, 2010; Klijn & Koppenjan, 2016; Provan & Kenis, 2008; Turrini et al. 2010). Trust has various meanings and can be defined as a social aspect being "a more-or-less stable perception of actors about the intentions of other actors, that is, that they refrain from opportunistic behavior" (Edelenbos & Klijn, 2007, p. 30) but also as trust in the capacities and professionalism of actors. Thus, trust can be social and professional, but the one type can exist without the other; you can trust someone is able to do a job well without trusting that person to be honest or vice versa. Trust is regarded as an important coordination mechanism in networks but is not inherent to networks; trust needs to be build and is vulnerable (Klijn & Koppenjan, 2012).

Table 6: Trust

Core concept	Sub-concepts
Trust	Social trust
	Professional trust

Processes and strategies

The network functioning characteristics as described by Turrini et al. (2010) dive more into the specific strategies, methods, and processes used in the network. As stated, these are not discussed in this thesis. However, this does not mean that no processes or strategies are included. On the contrary, they are included but on a more general, overall level. Aspects as integration, collaboration, and openness touch upon processes and strategies. Assessing how in general these aspects return in the network in contrast to on a specific moment in the process it can be regarded as part of the network structure.

2.3 Outcomes

As could be seen in the discussion on 'why governance networks' it is expected that governance networks have a positive effect on outcomes whilst also recognising the complexities which might elicit challenges. In this regard, we need to examine what is understood as outcomes. To start with, outcomes are found on different levels; the network level, participant level, and the community level (Provan & Milward, 2001), which is further elaborated on in the first part of this section. Moreover, outcomes can be understood in the sense of content/substance, process, and institutions (Klijn & Koppenjan, 2016). The second part of this section addresses these different types of outcomes.

2.3.1 Three levels of outcomes

To start with, outcomes can be measured on various levels as Turrini et al. (2010) pointed out. Provan and Milward (2001) distinguished three levels on which outcomes (measured as effectiveness) could be analysed: community level, network level, and participant level. At the community level the contribution to the communities attempted to serve is evaluated, at the network level one would judge the network as a whole, and at the participant level contributions to the individual organisations or members are judged. These levels appertain to three network constituents or key stakeholders: principals, agents, and clients. Each level of outcomes focusses on a different relationship between constituents. The principals are those "who monitor and fund the network and its activities" (p. 416), the agents are those "who work in the network both as administrators and service-level professionals" (p. 416), and the clients are those "who actually receive the services provided by the network" (p. 416). Table 7 provides a summary of the level of outcome – constituents relationship.

Table 7: Level of outcomes - constituents relationship

Level of outcomes	Constituents
Community level	Principals and clients
Network level	Principals and agents
Participant level	Agents and clients

Based on Provan & Milward, 2001

The lines between these constituents are not always clear cut, in the case of Curriculum.nu for example, some working in the network as administrators and professionals (agents) are also the ones who receive the service (client). These key stakeholders and levels of analysis influence each other. Whereas the outcomes on one level affect the outcomes on the other levels, high effectiveness on one level does not imply or guarantee effectiveness at the other levels. As this research does not focus on individuals and cannot yet measure what contribution the network has made to the community, the network level is chosen as a point of focus, meaning the principals and agents are the constituents focussed on. Community level outcomes are touched upon with reference to the general reception of Curriculum.nu and its work. This, however, brings us to the next point to be questioned: what do outcomes actually entail?

2.3.2 Three types of outcomes

Within the governance network literature, we can find a variety of understandings of what outcomes entail. Examining the literature more thoroughly, three types of outcomes can be distinguished, being content outcomes, process outcomes, and institutional outcomes (Klijn & Koppenjan, 2016).

Content outcomes

Content outcomes or substance outcomes deal with what has been achieved. Many authors refer to this as effectiveness. According to a literature review by Klijn, Steijn and Edelenbos (2010) six characteristics can be discerned. These characteristics are somewhat in line with the aspects Turrini et al. (2010) discerned in their literature review on network effectiveness. Their analysis of effectiveness focusses on client level effectiveness and capacity of achieving stated goals (problem-solving capacity), network sustainability and viability (results' robustness), community effectiveness, and innovation and change (innovative character). However, as the characterization of Klijn, Steijn and Eelenbos (2010) is somewhat more specific, this is used for the research at hand. One change is made in the factor of the cost-benefit relationship. In the analysis of Klijn, Steijn and Edelenbos (2010) this is characterized as a content outcome. However, in the book of Klijn and Koppenjan (2016) this is included in the process outcomes. As it deals more with 'how' outcomes are achieved rather than 'what' outcomes are achieved, I also deem this aspect as a process outcome. Hence, the following five characteristics are distinguished:

- 1. Innovative character; are innovative results established?
- 2. Integral nature of solutions; are multiple functions addressed with the solution?
- 3. Content contribution; was there involvement of actors or recognizable contribution, what impact did the stakeholder involvement make in the decision-making process?
- 4. Problem-solving capacity or solution effectiveness; does the solutions truly address the problem and goal?
- 5. Results' robustness over future or future effectiveness; does the solution remain effective over time?

Process outcomes

This second type of outcomes focusses on the process itself. Also for these outcomes, Klijn, Steijn and Edelenbos (2010) created a list of six characteristics. What has to be noted, however, is that these descriptions of the process outcomes are mainly related to network perceptions; how do members of the network perceive the content and processes? As stated, another level would be examining the perceptions and expectations of the clients or the whole community. Are the needs of the community met and how do they perceive the outcomes of the network? What needs more focus is whether the community felt involved in the process and felt represented, which is something becoming more clear in the description of Klijn and Koppenjan (2016) of process outcomes as (1) duration of the process, (2) transaction costs involved and (3) quality of the process – collaborative strategies, openness, democratic legitimacy, and accountability. Based on the review of these authors, a combination is made of characteristics. The most substantial changes are that, first of all, conflict resolution, deadlock occurrence and contact frequency are combined into one aspect as they all touch upon one thing: collaborative strategies rather than a go-alone stance, and secondly, that efficiency is added. Efficiency covers the cost-benefit relationship as mentioned in content outcomes, the duration, and the transaction costs. Furthermore, legitimacy is equated to support, and level of management can be include in openness. This analysis would lead to a total of 5 characteristics – openness, collaborative strategies, productive use of differences, legitimacy, and efficiency. What is noted however, is that an overlap can be seen between some process outcomes and certain structural aspects as defined in section 2.2. First of all, openness is addressed in the size and heterogeneity of the network. Secondly, collaborative strategies can be found in the structural aspect of collaboration/competition of the network inner stability. As the models used as basis for this thesis included these aspects in the structure, the theory is better applied if also in this thesis used as structure rather than outcome. As such, the following characteristics of process outcomes are determined to be used in this thesis:

- 1. Productive use of differences; have the differences in stakeholders been used productively in the project, are the different groups of actors represented in the project?
- 2. Legitimacy; do the decisions taken receive support of the stakeholders?

3. Efficiency; how long did the project take and how does this stand in ratio to the benefits of the project, could the same have been achieved in less time?

Institutional outcomes

Institutional outcomes are the last type of outcomes to be discussed. These are less elaborated on in the literature as most seem to focus on content and process outcomes. Yet we can find some explanation of institutional outcomes in the work of Klijn and Koppenjan (2016). "Institutional outcomes refer to the effects of the process on the network as a whole, more specifically its impact on relationships (strengthened or weakened; changed) and the level of trust realized" (Klijn & Koppenjan, 2016, p.277). Outcomes to be found in the network are mutual orientations, joint perceptions, trust, and a shared language (Klijn & Koppenjan, 2016). As seen in section 2.2 on the network structure, these aspects of aligned or shared perceptions and trust are used as independent variables, being characteristics of network structure. Institutional outcomes can be found over time (Klijn & Koppenjan, 2016). As this thesis measures the structure and outcomes at one point in time rather than change over time, institutional outcomes are not measured but solely used as part of the network structure. A summary of the outcomes as used in this thesis is provided in table 8.

Table 8: Summary of different types of outcomes as used in this thesis

Content outcomes		Process outcomes	
Innovation	Solution effectiveness	Productive use of differences	
Content contribution Future robust		Legitimacy	
Integrative nature		Efficiency	

Based on Provan & Milward (2001) and Klijn, Steijn & Edelenbos (2008)

2.4 Network structure – outcome relationship

Having established what governance network structures are and what is understood as outcomes, a look can be taken at the relationship between the two. As Provan and Kenis (2008) note, the effect structures have on outcomes is dependent upon the interplay of factors. In the case of Provan and Kenis their (2008) analysis, the effectiveness of the network is dependent upon five factors: the mode of governance, trust, number of participants, goal consensus, and need for network-level competencies. Table 9 indicates the key predictors and their combinations needed for effective functioning of governance forms.

Table 9: Key predictors of Provan and Kenis

Governance forms	Trust	Number of Participants	Goal Consensus	Need for network- level competencies
Shared governance	High density	Few	High	Low
Lead organisation	Low density,	Moderate number	Moderately	Moderate
	highly centralised		low	
Network administrative	Moderate density,	Moderate to many	Moderately	High
organisation	NAO monitored		high	
	by members			

Source: Provan & Kenis, 2008

No one structure is superior over other forms, rather, they are different and functional in particular situations (Kenis & Provan, 2009), with every situation needing a different structure. The table as provided by Provan and Kenis (2008) is used as a basis for the analysis of the relationships between network structure and outcomes.

Mode of governance

As can be seen in the table of Provan and Kenis (2008), the effectiveness of the mode of governance is dependent upon other factors. When the network is smaller, participants are likely to prefer a form of shared participant governance. In shared governance, power is symmetrical and community capacity is built (Chaskin et al. 2001). When there is community capacity all participants feel responsible and committed (Provan & Kenis, 2008) which has a positive effect on both the process and content outcomes. Centralisation might create a feeling of unfairness as power imbalances emerge, negatively influencing process outcomes. As the network becomes bigger and more varied, complexity grows and brokerage becomes needed to efficiently coordinate the network and keep everyone on the same page. As such, Provan and Milward (1995) find that centralisation and external control lead to more network effectiveness, being content outcomes. This finding is supported by later research of Raab, Mannak, and Cambré (2013). The greater the diversity, the greater the need for not merely centralisation but also the governance by an external party who rather than favouring one side over another copes with these varying sides (Saz-Carranza & Ospina, 2011). With little diversity there might be more a sense of a shared identity, therefore preferring an internal governor. Following social identity theory, people favour a leader who champions the ingroup and is an exemplar of the group (Forsyth, 2014). The process outcomes would be positively related to this internal governance. Integration mechanisms also play a role in this as Provan and Kenis (2008) indicate with goal consensus. When there is low integration there is more need for an internal governor as they are closer to the network and can manage the network more directly. High integrated networks do not need a close standing governor but might benefit from an external party who interferes solely when needed. Further, centralisation seems to trade-off with density; the more centralised a network becomes, the less dense it becomes. Examining density, Retrum et al. (2013) find that density is important for positive outcomes in the network which could be explained by fewer transaction costs, greater resource sharing, and more trust. Thus, where the network is small, centralisation is not needed but actors need to interact with each other creating a denser network and as such positively affect outcomes. The findings of Provan and Sebastian(1998) indicate the benefits of combined density and centralisation in bigger networks. They find that density is positive for outcomes, but only at the clique level, not at the overall network level, with cliques being coupled with each other providing a more centralised network as a whole. The following assumption is derived from the above theory:

1) Mode of governance is positively related to process and content outcomes if networks are big, heterogeneous, and have many integration mechanisms.

Integration mechanisms and tools

Throughout the literature, integration has shown to be of major importance in what outcomes are reached with the network. However, integration can be both a virtue and a vice. As a virtue, integration facilitates communication, information flow, and collaboration. Perspectives, knowledge, and skills are combined leading to more possibilities for solution finding and innovation. Moreover, shared understandings lead to ownership and more realistic implementation strategies (Elizondo-Montemayor et al., 2008). Huizinga et al. (2014) applied this to curriculum design and found the importance of a facilitator and a shared vision in the ability of teachers to design a curriculum. More support for a positive relation between integration mechanisms and content outcomes is given by Conrad et al. (2003), who find that integrated information and care systems improve the quality of service delivery. However, this integration can turn into a vice when the network becomes too cohesive and uniform. Due to the unification, groupthink can occur (Janis, 1982) leading to closed-mindedness, the disregarding of new or different ideas, and pressures to uniformity (Forsyth, 2014; Janis, 1982; Klijn & Koppenjan, 2016). As such, inclusion and innovation are impeded. Thus, integration mechanisms and tools could be positive for outcomes, but solely if there also is sufficient diversity and non-uniformity. The findings of Provan and Sebastian (1998) support this idea with dense cliques - thus closely related actors - in combination with loose coupling between cliques is positive for outcomes. The cliques benefit from the positive aspects of integration while at the same time still receiving input from 'outsiders' and as such avoid groupthink and create possibilities for learning and innovation. For this coupling between diverse groups coordinating actors are important. The importance of coordinating actors in achieving successful outcomes is stressed by research of Klijn, Steijn, and Edelenbos (2010), who found that network management, especially in respect of exploring content and connecting, is relevant for both process and content outcomes on the network level. Jennings and Ewalt (1998) also find that central coordination mechanisms positively affect client level effectiveness, measured in the sense of content outcomes, as accessibility to clients is improved. Visualizing the aspect of integration one could imagine a bell shape: integration mechanisms and tools positively affect process and content outcomes up until a certain point. Beyond that point, more integration negatively affects content outcomes. In short, the following assumptions can be formed:

Integration mechanisms and tools are positively related to process outcomes. Integration
mechanisms and tools are positively related to content outcomes if there remains some degree
of heterogeneity.

Size and heterogeneity

When the network is small and homogeneous, it is easier to get on the same page which goes at the cost of the number and diversity of solutions generated. Following this logic, size and heterogeneity might have a negative influence on process outcomes – communication and collaboration require more costs – but a positive influence on content outcomes – solutions are more diverse and integrative. On this note, Retrum et al. (2013) found that diversity or breadth creates difficulties in reaching consensus and creating ties, illustrating the difficulties of the process. Similarly, research of Hasnain-Wynia et al. (2003) indicated that the larger a network, the less effective the network is perceived by its members due to challenges in coordination, communication, and conflicts, meaning both low process and content outcomes. However, there needs to be some diversity as to have all resources and expertise needed for the problem at hand. A lack of resources affects both the process and the quality of the content (Hardré et al., 2006). In this regard, Provan and Kenis (2008) indicate that the larger the network, the more need for central coordination in order to remain effective. The following can be assumed:

3) Size and heterogeneity are negatively related to process and content outcomes if networks have low integration mechanisms and tools and low network inner stability.

Network inner stability

To start with, Provan and Milward (1995) find that substantial changes in the network or its environment negatively affects network effectiveness. Meaning that networks need to be stable for positive effects to occur. A first aspect of network inner stability is the level of competitiveness versus collaboration. Competitiveness is an aspect that can be a risk for good outcomes as well as an opportunity. According to research by Conrad et al. (2003), a high level of competitiveness has a negative effect on outcomes on both a network and community level. When there is a high level of competitiveness, the network is unstable; commitment is low, conflicts might occur, and actors might take on a go-alone or conflictual strategy with the aim of realizing the own strategies and hampering the ones of other actors (Ansel & Gash, 2007). When there is a bit of competitiveness however, it might bring opportunities for innovation and creative thinking. This can be seen in the notion of 'creative competition'; an intentionally created competitiveness to generate innovative solutions (Klijn & Koppenjan, 2016) A stable network can also be characterised by the strength of the ties existing; when ties are weak they are likely to dissolve, strong

ties remain longer. This tie strength has various effects on outcomes. Initially it was thought that only strong ties would have positive effects on outcomes. Strong ties reflect commitment and information sharing (Provan & Milward, 2001). The longer in a network, the more experience with one another and the greater the trust in one another grows. However, as the analysis of Granovetter (1973) on "the strength of weak ties" shows, also weak ties hold importance in networks as they connect groups with one another, bring in new resources, and bring opportunities for learning. Weak ties should therefore not be disregarded. Similarly to the integration mechanisms and tools, the stability of the network on outcomes can be visualised by a bell curve. Initially, stability is positively related to outcomes. Trust is built so information is shared, communication is facilitated, members collaborate etc. However, at a certain point when diversity lacks, nothing changes and no one is challenged anymore, the relationship with content outcomes becomes negative as innovation decreases and resources might not be allocated. Thus, the assumption is:

4) Network inner stability is positively related to process outcomes. Network inner stability is positively related to content outcomes if networks pertain some level of heterogeneity.

Rules

Rules can exist in a formal and informal manner and regulate behaviour (Klijn & Koppenjan, 2016). They provide legitimacy, security, and predictability. Ground rules as who participates and how the process will move reassure stakeholders "that the process is fair, equitable and open" (Murdock, Wiessener, & Sexton, 2005, as cited in Ansell & Gash, 2008, p. 557). Formal agreements have shown to positively affect perceived benefits in productivity and performance and improved decision making (Brown, 1998). Moreover, formalization established accountability. When held accountable and when having someone to hold accountable, commitment is enhanced (Klijn & Koppenjan, 2016). Following these aspects as offered through rules, especially process outcomes are affected. These rules are aiding networks to a certain degree. Too rigid rules might impede the innovative character of the network (Ansell & Gash, 2008) and negatively affect content outcomes. For example, deadlines are needed as collaborative processes can be time-consuming. At the same time, deadlines might limit the scope of discussions (Freeman, 1997). Complex problems have an uncertain character and humans are beings with bounded rationality so there needs to be some room for movement and change to adapt to the environment. Therefore, the following assumption is formed:

5) Rules are positively related to process outcomes. Rules are positively related to content outcomes if the rules are somewhat dynamic and leave room for adaptations.

Trust

Trust is a valuable asset in a network. It needs to be built and could therefore be seen as an outcome on its own. When trust exists however, it also has an influence on other outcomes. Trust becomes important

as it is believed to decrease transaction costs, increase actors' probability to invest in the project, stimulate learning and information exchange, and stimulate innovation (Klijn, Edelenbos & Steijn, 2010). When there is trust it is expected to positively influence perceptions of outcomes as the process is deemed fair and good and the network (members) are deemed qualified to make decisions. It is indeed found by Klijn, Edelenbos and Steijn (2010) that trust positively affects both process and content outcomes. Thus, the last assumption used in this thesis is:

6) Trust is positively related to process and content outcomes.

2.5 Conceptual model

Based on the theoretical framework given in chapter 2 a conceptual model can be build which is given below in figure 3. Note that the factors are not mutually exclusive in their relationship to outcomes. Each factor is found to be relevant, but it is the combination of factors that shapes the value of the relationship. Therefore the model does not include value indicators. The account above led to certain theoretical assumptions which are listed below.

- 1) Mode of governance is positively related to process and content outcomes if networks are big, heterogeneous, and have many integration mechanisms.
- 2) Integration mechanisms and tools are positively related to process outcomes. Integration mechanisms and tools are positively related to content outcomes if there remains some degree of heterogeneity.
- 3) Size and heterogeneity are negatively related to process and content outcomes if networks have low integration mechanisms and tools and low network inner stability.
- 4) Network inner stability is positively related to process outcomes. Network inner stability is positively related to content outcomes if networks pertain some level of heterogeneity.
- 5) Rules are positively related to process outcomes. Rules are positively related to content outcomes if the rules are somewhat dynamic and leave room for adaptations.
- 6) Trust is positively related to process and content outcomes.

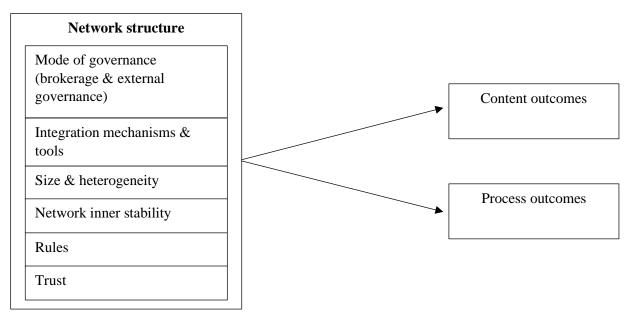


Figure 3: Conceptual model

Chapter 3. Methodology

This chapter explains how this research is conducted. First, an overview is given of what each concept entails and how each concept is measured. This is done by breaking down each concept into smidgen. Secondly, the methods used are explained, providing an understanding of how this research was conducted and could be done again.

3.1 Operationalization

Based on the theoretical framework given above we can operationalize the concepts. These operationalizations can be used to analyse the data found in the research. A summary of the operationalizations can be found in table 10. The first column presents the core variables: network structure and outcomes. The second column gives the core-concepts that are part of the core variable. The sub-concepts are the characteristics or indicators of the core-concepts established in chapter 2. One step further, the description column presents which questions led to answers to code a fragment according to a concept. Lastly, the value column presents more specifically how the concepts coded fragments were valued.

Table 10: Operationalization

Variable	Core-concept	Sub-concept	Description	Value
Network	Mode of	External governed	Who governs the network?	- Internal party
structure (Independ ent)	governance			- External party
		Brokerage	Is the network clustered	- No brokerage
			around a central point?	- Some brokerage
			Is there interaction with	- High brokerage
			various actors in the	
			network?	
	Integration	Joint activities	Do actors take part in joint	- No joint activities
	mechanisms and tools		activities in the network.	- Some joint activities
	4114 1 0 0 15			- Many joint activities
		Common information	Are common information	- No use
		and communication	and communication systems	- Some use
		systems	used in the network?	- High use
		Common goal &	Do actors have a common	- Not common
		problem understanding	understanding of the	- Somewhat common
			problems to be addressed by	- Highly common
			the network?	

		Do actors have a common	
		understanding of the goals to	
	G 11 1	be achieved by the network?	
	Coordinated agency	Is a coordination agent in	- No presence
		place in the network?	- Some presence
			- High presence
	Shared language	Do actors speak the same	- No shared language
		language?	- Some shared language
			- High shared language
Size and	Number of members	How many members does the	- Small number
heterogeneity		network have?	- Moderate number
			- High number
	Heterogeneity	What roles do actors have in	- No heterogeneity
		the network?	- Some heterogeneity
		What resources have actors	- High heterogeneity
		available for the network?	
	Openness	Is the network is open for	- No openness
		recognizable stakeholder	- Some openness
		involvement in the	- High openness
		management of the project?	
	Inclusiveness	Is the network inclusive of	- No inclusiveness
		stakeholders in the	- Some inclusiveness
		management of the project?	- High inclusiveness
Network inner	Competitiveness	Is there a great level of	- No competitiveness
stability		competitiveness in the	- Some competitiveness
		network?	- High competitiveness
		Is there is a go-alone sphere	
		in the network?	
		Have conflicts occurred in	
		the network?	
		Have conflicts been resolved	
		well in the network?	
	Interorganisational	Are there inter-organisational	- No inter-organizational
	links	links in the network?	links
			- Some inter-organizational
			links

				- Many inter-organizational
				links
		Lifetime in network	How long do actors remain	- Short time in the network
			in the network?	- Moderate time in the
				network
				- Long time in the network
		Tie strength	How often do actors interact?	- No interaction
				- Some interaction
				- High interaction
	Rules	(In)formal rules	Are boundary rules in place?	- Boundary rules
			Are position rules in place?	- Position rules
			Are choice rules in place?	- Choice rules
			Are scope rules in place?	- Scope rules
			Are aggregation rules in	- Aggregation rules
			place?	- Information rules
			Are information rules in	- Pay-off rules
			place?	
			Are pay-off rules in place?	
		Accountability	Is accountability clearly	- No accountability clarity
			established in the network?	- Some accountability clarity
				- High accountability clarity
		Rigidity	Are rules rigid and non-	- No rigidity
			dynamic?	- Some rigidity
				- High rigidity
	Trust	Social trust	Does trust exist that actors	- No social trust
			refrain from opportunistic	- Some social trust
			behaviour?	- High social trust
		Professional trust	Does trust exist in the	- No professional trust
			capacities and	- Some professional trust
			professionalism of actors?	- High professional trust
Outcomes	Process	Productive use of	Have differences in network	- No use of differences
(Depende	outcomes	differences	members been used in the	- Some use of differences
nt)			project?	- High use of differences
		Legitimacy	Are actors and stakeholders	- No legitimacy
		Legimine	supportive of the decisions	- Some legitimacy
			taken in the network?	- High legitimacy
			taken in the network?	- mgn regiumacy

	Efficiency	Are the costs and benefits of	- No efficiency
		collaboration well balanced?	- Some efficiency
		Did the network work	- High efficiency
		efficiently?	
Content	Innovation	Are the ideas developed	- Not innovative
outcomes		during the project	- Somewhat innovative
		innovative?	- Highly innovative
	Content contribution	Did actors and stakeholders	- No contribution
		make a recognisable	- Some contribution
		contribution to the project?	- High contribution
	Integrative nature	Are various problems	- No integrative nature
		addressed with the solution	- Some integrative nature
		offered by the network?	- High integrative nature
	Solution effectiveness	Do the results of the project	- No effectiveness
		address the problems to be	- Some effectiveness
		solved well?	- High effectiveness
		Do the results of the project	
		address the goals set well?	
	Future robust	Will the result of the project	- No future robustness
		remain effective over time?	- Some future robustness
			- High future robustness

3.2 Method

The research question of this thesis is "Which factors of governance network structure explain outcomes of a new curriculum design in the case of Curriculum.nu?" In order to answer this question a single-case study is done, analysing the network 'Curriculum.nu'. This case was chosen due to its high current societal relevance. The reason for being a single case study rather than comparative is that the case is that this method of curriculum design is rather new and unknown. This is the first time in the Netherlands this approach was taken. In one other country some similar approach was found (British Columbia, which was said to be the inspiration for the approach of the Netherlands), however, not much information could be found on this approach. Thus, due to accessibility reasons the decision was made to go more in depth in one case. The research is descriptive in nature; it is not attempted to create or expand the theoretical framework as in exploratory research, neither is the aim to find causal relationships as in causal research, the objective is rather to understand the case and structure-outcome relationship by application of theory to a practical case (Sekaran & Bougie, 2013). Furthermore, the research is done at one moment in time, analysing the case as a snapshot in 2019 rather than as a process

over time. This snapshot is taken right before the project handed in a document to the Minister of Education. This is done due to time and accessibility restrictions.

Descriptive research can be both quantitative and qualitative (Sekaran & Bougie, 2013). Because of the network size, a fully reliable quantitative study is not possible. Therefore, a qualitative method is chosen of combing desk research with interviews to create a more complete picture of the network and its outcomes. While recognising its limits in establishing conclusive, causal information, these methods are most accessible for the scope of the research and can provide a great amount of insightful information.

First desk research is done, analysing all formal, openly accessible documents on the case and how the network is regulated and structured on paper. By doing so aspects of the formal structure of the network can be found. Next to the formal structure, we might also find how the structure is perceived from the outside. Indicators that can be found are external/internal governance, integration mechanisms and tools in place, size and composition, formal rules and formal accountability. Information is gathered through the websites of the Dutch government and Curriculum.nu itself. However, what is formally written down might vary from what occurs in reality. Therefore, interviews were conducted. Because people in differing parts of the network might have constructed a different social reality (Bless, Fiedler & Strack, 2004) of the network and as such experience the network in a different manner, participants with varying roles in the network are approached.

The interviews were held in Dutch as this was the mother tongue of all participants. The questions were semi-structured and based on the operationalization given above, a topic list was used which can be found in appendix A. The interviews were held in a place of choice of the participant to establish a more comfortable setting for him/her. At the start of each interview, an explanation was given of the anonymity and that personal details, the recorded interviews or the transcriptions will not be shared with third parties without first getting full consent of the participants. Each participant gave consent to use what has been said for this thesis and was assigned a number as to remain anonymous. A list of discussed topics can be found in appendix B together with the form used to give consent. Further, a list of participant numbers with their corresponding function in the network can be found in appendix C. The interviews lasted about an hour each. After the interviews, the recordings were transcribed and answers were coded according to the descriptions column of the operationalizations table (table 10). If deemed needed, a new code was added. First, an analysis was made whether the interviewee mentioned a sub-concept. These fragments were then labelled accordingly. Following, the fragments of each interview were compared to find similarities and differences. Based on the similarities and differences it was determined what level of measurement was to be given. The program Atlas.ti was used for this analysis. Appendix D shows a coding scheme as resulted from the research. After the full research, the results were given to the participants to check whether interpretations were proper in order to ensure the results were interpreted well. One small adjustment was requested regarding the naming of the participant title given.

3.3 Participants

The participants of this research all had a formal role in Curriculum.nu. Participants had various roles in the network. In total 14 interviews were conducted. The roles included in the interviews were 2 content supervisors, 1 advisory group member, 1 project group member/account holder, 4 CG members, 1 *Stichting Leerplan Ontwikkeling* (SLO– national curriculum design organisation) employee, and 5 design school members. Participants were personally approached and through snowballing more participants were approached.

Chapter 4. Curriculum.nu

This chapter addresses the results of the analyses done. First some general context is provided of curricula and the background of Curriculum.nu as to understand where Curriculum.nu is based on. Following, it is explained how Curriculum.nu functions. Subsequently the structure of Curriculum.nu is analysed, followed by the outcomes. Lastly the relationship between structure and outcomes is examined.

4.1 Context behind Curriculum.nu

The educational curriculum can be approached in various manners and on various levels (Nieveen & Berendsen, 2019) each influenced by the higher levels. From big to small one can see a supra level – the international agreements on education, a macro level – the national educational plans and frameworks, the meso level – the implementation and adaptation of the frameworks to the specific schools, the micro level – the implementation of the plans by the teacher in the specific class, and the nano level – the individual, personal plan of each student. Curriculum.nu works on three levels: the macro level, the meso level, and the micro level. These levels are illustrated in figure 4.

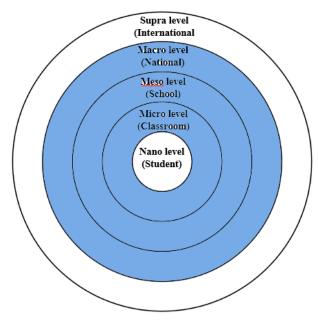


Figure 4: Levels of curricula

The inclusion of three different levels to be addressed by the network has raised doubts and worries from various stakeholders. As the *Onderwijsraad* (the Dutch advisory board regarding education) warns the government; because of processes being intertwined, the current review of the curriculum has too little focus and direction (Onderwijsraad, 2018). Following suggestions by SLO, this manner of bridging and including different levels could mind for the possible gap between theory and practice. What designers envision for the curriculum might not be executed as such by schools and teachers or experienced as planned by the students (Nieveen & Kuiper, 2012). Curriculum design does not solely

shape the practice, according to the ministry, nowadays more than in the past, it is the belief that the practice should feed the design to ensure greater quality and to increase ownership (Slob, 2018).

Inspirational source: British-Columbia

The idea of Curriculum.nu did not come out of thin air. Educational reforms have occurred over the world. One reform in particular is said to be a source of inspiration to Curriculum.nu which is a reform in British-Columbia which started in 2010. The Province began a process of broad consultations with various stakeholders to create an educational plan. In 2011 an advisory group was formed to provide advice on the curriculum. In 2012 various working sessions were held in which feedback was gathered on the ideas from the advisory group. All recommendations and feedback were collected and summarized in the document: 'Enabling innovation: Transforming Curriculum and Assessment' (Ministry of Education, 2012) based on which a set of guiding principles were created (Ministry of Education, 2013). These principles then were used to form a curriculum prototype consisting of five design principles (1) curriculum organisers (2) big ideas (3) learning standards (4) competency links and (5) implementation links. After this was received positively another consultation phase started in which specific subject areas were addressed and in which more educators took part. Subject area experts formed development teams and decided on the big ideas, the curricular competencies, and content for each grade. The ministry then gathered further feedback and created a final curriculum.

As can be seen from the short description of the reform in British Columbia certain parallels can be drawn between the reform in British Columbia and the Dutch reforms. At the start of the reform the ministry created a document of guiding principles after extensive consultations with stakeholders. In the Netherlands this is known as *Platform Onderwijs2032* which created a piece of advice for the ministry on how to proceed with the curriculum change. Currently we are in the comparable phase of the development teams creating documents on big ideas, competencies and content. What is different however is that in the Netherlands a greater role seems to be given to the field with their leading principle of 'Teacher-in-the-Lead'.

The predecessor of Curriculum.nu: Onderwijs2032

Curriculum.nu also knows some closer history as it is an extension of an earlier process. This preceding process is discussed in this section. In 2014 the *onderwijsraad* published an advisory document in which they stated that curriculum renewal is needed and that more direct, specific attention has to be paid to curriculum renewal (Onderwijsraad, 2014). In the same year, the ministry of education decided to act on a renewal of the curriculum (Platform Onderwijs2032, 2016b). The first step in this renewal was to go into a phase of dialogue. This first phase of the process consisted of a brainstorm with anyone who had some opinion on education and the curriculum. A group was created to collect all input and produce overarching advice, this group came to be named *Platform Onderwijs2032* (Platform Education2032).

Members of the platform established brainstorm sessions and dialogues and listened to what happened in the field of education. After gathering information from various stakeholders the platform created the advice, *Ons Onderwijs2032 – Eindadvies* (Platform Onderwijs2032, 2016a), for the ministry of education on how to proceed with curriculum change.

The vision focusses on what students ought to know and be able to do for their development in contemporary society until they start their adult life in 2032. *Onderwijs2032* was received both positively and negatively (Platform Onderwijs2032, 2016b). Whereas some recognised the issues posed in the advice, others missed aspects or did not agree with the path taken. Especially the involvement of the educational field, specifically the teachers, was deemed worrisome. These doubts led to the decision to prolong the period of research and go into a second phase of generating more in-depth knowledge. This phase consisted of two parts. The first was generating more support and legitimacy through conversing with teachers about the role of teachers in curriculum renewal and whether the advice is going in the right direction. The second part examined whether the advice is applicable or is already applied in practice. The conclusions of this further research were given to the government. About half a year later, in April 2017, the house of representatives accepted to renew the curriculum (Rijksoverheid, 2019). In September 2017 the process was set in motion by the search for the participants. March 2018 Currirulum.nu was ready and set to start.

The design process of Curriculum.nu

As stated on their website (Curriculum.nu, 2019), the main goal of Curriculum.nu is an actualisation of core goals and end terms of primary and lower secondary education. Besides this main goal, members of Curriculum.nu see opportunities to address multiple other issues. These issues are the cohesion in education, overloaded educational programs, clarity on room for own input and what every child should learn, the balance in the main goals of education (knowledge transfer, personal development, preparation for societal participation), and the connection between the different levels of education. The reason for these opportunities is that they are tightly connected with the content of the curriculum. As the case with many complex problems, changing one system affects subsystems (Gerrits, 2012). Changing the content does not solely affect the system of what is taught. Subsystems of how much will be obligatory to teach, how much autonomy teachers will have to fill in their own program, how the subjects are connected can all be changed. This main goal, however, is to be achieved after the work of Curriculum.nu. The documents Curriculum.nu create form a basis for the actual actualisation to take place.

The design process is led by the CG and a project bureau, these two groups do not work on the content but make sure the process proceeds well. The CG does this from a higher level, making the final calls. The project bureau takes care of the more daily management of the process. At the core of the design, numerous design teams and design schools can be found, which are elaborated on in section 4.2. For these teams and schools, 9 subject areas are distinguished: (1) Movement & Sports, (2) Citizenship, (3) Digital literacy, (4) English/Modern Foreign Languages, (5) Art & Culture, (6) People & Society,

(7) People & Nature, (8) Dutch, and (9) Mathematics. At the start of Curriculum.nu, thorough selection rounds were held to elect the members of the design teams and design schools. The CG, *Dienst Uitvoering Subsidies aan Instellingen* (DUS-I; governmental bureau for institutional subsidies), a professional selection bureau, and a selection committee as established by the CG selected the members based on various criteria (Dekker, 2017). Following, the selected design teams members and design schools were presented to the ministry of education, culture, and science which decided on possible subsidies. The selection of the design teams are made based on variation in actors. Factors of variation are denomination, location of work, experience and educational level, subject taught, type of school, and focus on collaboration/results/environment. Further, motivation was also taken into account. The design schools are also selected based on variation in schools. The factors taken into account for the schools were type of school, environment of the school (city/rural), denomination, size of schools, degree of already changed curriculum, and schools receiving 'gewichtengeld' (a budget received for students with a high chance of educational backlog) or not. Furthermore, stance on collaboration, and experience of and room for curriculum design are also take into account in the selection of schools (Dekker, 2017).

Together all of the parties as described in more detail in section 4.2 work in the process of the curriculum design. SLO (Nieveen & Berendsen, 2019) proposes five steps of curriculum design following the ADDIE model, and Curriculum.nu follows these steps. The ADDIE model is a circular model of Analysis, Design, Development, and Implementation with constant feedback moments of Evaluation as can be seen in figure 5. In Curriculum.nu, there are in total 6 official, formally established design moments in which the design teams create plans and distribute those to the design schools for them to put into practice. These teams work in their own discipline on three given tasks: (1) formulate visions (2) formulate 'big assignments' and (3) formulate building blocks.

Besides these 6 formally arranged design moments, the own discipline comes together as deemed fit to discuss their findings and make sure there is no overlap among the disciplines. In between the design sessions, there are moments of reflection and feedback. As stated, this feedback is provided by any interested stakeholder. There is also a specific advisory board set up to provide more professional, scientifically-based feedback. To remain up to date with what the network does, stakeholders can find information on the website of Curriculum.nu and they can subscribe for a newsletter. Examining the feedback rounds, each round included feedback of hundreds of people with various backgrounds. After the feedback rounds, the feedback is discussed and processed, the red thread is found and the design plans are adapted accordingly. Throughout the process design teams and schools have access to an online platform where they can share information and questions.

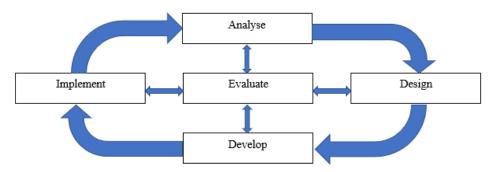


Figure 5: ADDIE model for curriculum design, adapted from Nieveen & Berendsen (2019)

At the end of the journey, the results are presented to the ministry of education. The house of representatives then decides on how to proceed and whether these results are used to come to final and formalized updated core goals and end terms of primary and lower secondary education. A concise illustration of the process Curriculum.nu went through can be found on the website of Curriculum.nu (2019).

4.2 Structure of Curriculum.nu

Before going into the analysis of the structure of Curriculum.nu first is analysed whether Curriculum.nu can actually be deemed a governance network. The definition used in this paper describes governance networks as "more or less stable patterns of social relations between mutually dependent actors, which cluster around a policy problem, a policy programme, and/or a set of resources and which emerge, are sustained, and are changed through a series of interaction" (Klijn & Koppenjan, 2016, p. 11). To start with, various actors are involved in the process all with their own knowledge and experiences. Moreover, participants mentioned the need of these actors to reach good outcomes highlighting the mutual dependency. Secondly, the actors cluster around the creation of a national curriculum which in its current state is deemed problematic thus addressing a policy problem. Moreover, the members interact regularly with each other, creating patterns of social relations. As the members are relatively stable also the aspects of 'more or less stable patterns of social relations' and 'series of interactions' are present. As such we can indeed identify Curriculum.nu as a governance network and move on to an examination of the network structure of Curriculum.nu

Size and heterogeneity

The first factor to be analysed is the size and heterogeneity as this will give a clearer picture of who is actually part of the network. Curriculum.nu is set up of various formally chosen stakeholders with different roles. To start with, each of the 9 disciplines has its own design team and design schools. The *design teams* consist in total of 125 teachers and 18 school directors. Beside these teams, 84 schools were selected as *design schools* (Curriculum.nu, 2019). These schools put the ideas of the design teams in practice and give feedback on the applicability and feasibility of the ideas. These schools are also divided per discipline and can be found all over the Netherlands as can be seen in figure 6, representing a map of all the design schools.



Figure 6: Map of design schools in the Netherlands, Source: Curriculum.nu, 2019

The teams and schools are supported by a support team. None of the participants mentioned all roles. Based on an aggregation of the interviews and the website of Curicriculum.nu it was found that for the design teams this support team consists of a *content supervisor* from SLO, a *process supervisor* and an *account holder*. The latter is also part of the project bureau. For the design schools a *content advisor* is available who is a substantively qualified expert and contributes to the findings and ideas of the teams with their knowledge of recent developments in the discipline. The support team also checks the cohesion within the discipline and the connection with the next step of learning further. In total a team of 40 experts is present (Curriculum.nu, 2019). The teams and schools actively gather feedback from various stakeholders.

The overall process is coordinated by the *CG*. This group constitutes of 8 people, all coming from a different educational organisation (participants 1, 2, 3, 4, 7, 8, 11, 12, 13; Curriculum.nu, 2019). The organisations represented in the CG are *VO-raad* (association for schools providing secondary education), *PO-raad* (association for schools providing primary education), *CNV Onderwijs & Aob* (profession association), *FvOv* (association for educational personnel), *AVS* (association for school directors), *LAKS* (organisation for students in secondary school), and *Ouders & Onderwijs* (organisation for parents and education). An auditor from SLO is also present (participants 7, 8) to follow the progress and decisions made. The CG is supported by a separate *project organisation* composed of about 20 people from the involved organisations (participants 1, 2, 3, 4, 5, 7, 8, 11, 12, 13; Curriculum.nu, 2019). This project organisation is occupied with the daily management of Curriculum.nu. Besides the project organisation an *advisory group* is in place (participants 1, 2, 4, 7, 12; Curriculum.nu, 2019). The advisory group supports the CG through advice and reflections on the quality of outcomes, with a focus on cohesion, program overload, and continuous line in learning. Five experts in the field of curriculum design and educational sciences take part in this advisory group (Curriculum.nu, 2019).

The last relevant actors to be mentioned are the house of representatives and SLO. Even though not actively involved in the design process, they do heavily influence the network. Before the start of the curriculum design the house of representatives had a say in how to approach the project, during the project they decide on the subsidies available, and after the project they are the ones deciding on how to proceed, as such indirectly influencing Curriculum.nu (participants 2, 3, 4, 7, 8, 10; Curriculum.nu, 2019). As an organisation, SLO does not officially have a role as a network member. However, SLO is more involved in the design process, and parties are often connected through someone from SLO. All participants mentioned some role of SLO, leading to the conclusion that SLO supports the network in the execution throughout various roles in Curriculum.nu; roles mentioned were members of the project organisation, members of the support team, advise giver where necessary, and auditors. In these two cases the line between being part of the network or not are not entirely clear. However, as these parties do not actively participate in the process and are more guideline givers, the house of representatives and SLO are solely deemed important external parties to take into account rather than part of the network itself.

In total, more than 300 people are actively involved in the process and design of Curriculum.nu, with clear and distinct roles. Beside these core members, all participants stated the openness of the network to other possible stakeholders through feedback. Everyone is allowed and encouraged to provide feedback and parties are actively involved in phases of consultation. Approximately 2700 pieces of feedback were gathered online, in which each round approximately 6000 people were involved (Curriculum.nu, 2019). Parties included in this process are students, other teachers, professional associations, higher education, teacher education, parents, private sector organisations, public sector organisations, and scientists. Next to the described, theoretical openness and inclusiveness, the network is by virtually all participants also deemed inclusive and open for recognisable stakeholder involvement in practice. These stakeholders giving feedback are not necessarily part of the network but this does indicate openness as structure.

"The online consultation is open for truly everybody. You can also react there. Everyone who wants can participate and you don't have to do anything for it. You don't have to log in. you don't have to give personal details, you can just go there and fill it in. In that sense, it is really open." (participant 2)¹

¹ "die online consultatie is open voor echt iedereen. Daar kan jij ook op reageren. Er zijn/ echt iedereen die dat wil die kan eraan meedenken dus dat is / je hoeft er ook niks voor te doen. Je hoeft niet in te loggen, je kan gewoon in een je hoeft geen gegevens af te staan, je kan er gewoon naartoe en je kan het invullen. Dus in die zin is het echt heel open."

"next to the online consultation, in this period of time, there are many consultation meetings with various stakeholders who would like to talk with the teams about what they have delivered." (participant 2)²

However, information to contribute might not be readily accessible. As discussed in the section of integration mechanisms and tools, language usage and information overflow might be impairing the accessibility of the network. Furthermore, not many people seem to know of the project (participants 6, 7, 9, 10). People who have heard about it might merely see it as '1 of the 100 other projects in education' (participant 14) or have created an own story of what Curriculum.nu does (participants 1, 10, 13) indicating that Curriculum.nu might not be readily accessible for every stakeholder. The people that do know of the project and act on it are thought to be similar types of people (participants 9, 12). These points indicate a possible lack of inclusiveness. Even though everyone in principle is able to access the network, apparently many people cannot or do not want to. The cause of this, however, is unclear. The only explanation given is that it is the personal responsibility of people in the educational field to know about the curriculum change and the project (participants 5, 7, 10). Further research could indicate if it is people of the same group who cannot access the network, meaning that the network was not inclusive of all stakeholders.

"(Do you think that people do not know what is going on..?) That I know for sure! Sometimes I say 'yeah we are working with Curriculum.nu'...what is that...? so Yeah in that regards many people are not occupied with it and I think that if you are not in the middle of it, it isn't easy to follow what is happening... That is why I said that the translation stage, that is still a thing." (participant 6)³

The above relates to the heterogeneity and inclusiveness within a specific stakeholder group. Another aspect to examine is whether the network was inclusive to all relevant stakeholders. SLO has created an extensive list of relevant stakeholders for curriculum design (Nieveen & Berendsen, 2019). Throughout the interviews it became clear that a conscious decision has been made of whom to actively include and which relevant stakeholders are 'kept on hold' for the following parts of the process. Most listed stakeholders have been included in Curriculum.nu. Stakeholders of policy design, test/exam design, and method design have explicitly been left out as to give the floor to the teachers (participants 5, 12, 14) – as all participants state, the teacher is in the lead. The stakeholders that are currently not

² "die online bevraging en daarnaast heb je in deze periode ook ontzettend veel consultatie bijeenkomsten van allerlei stakeholders die graag met die teams willen praten over wat ze opgeleverd hebben."

³ "Denkt u dus dat meer mensen uit de buitenwereld eigenlijk helemaal niet weten wat er aan de gang is of..? Dat weet ik wel zeker! Want soms dan kom ik er wel eens en dan zeg je Ja wij zijn met Curriculu.nu bezig.. wat is dat..? Dus wat dat betreft zijn er heel veel partijen niet mee bezig maar ik denk dat als je er niet in zit dat je ehm dat het niet meevalt wat er gebeurd ... Daarom zei ik, die vertaalslag dat is nog wel een eh dingetje."

included might have an active role later on in the process. For the point in time where Curriculum.nu is, the stakeholders involved are the ones needed to truly get a teacher perspective.

All in all, the network is big in size with a wide array of stakeholders involved. Participants indicate to be satisfied with the number of members involved and the degree of hetero and homogeneity (participants 3, 4, 5, 6, 12, 14). Yet the heterogeneity can be questioned in the sense that it is only a specific type of person who decides to apply and participate (participants 2, 3, 10). Moreover, participants question the possibility of truly representing all voices (participants 6, 8, 10, 11, 12). It is stated that a great amount of the affected stakeholders wait for more tangible results and are reserved so these are not optimally represented (participants 1, 11, 12, 14). Yet, from the pool they could fish in, they managed to get a good amount of heterogeneity and representativeness (participants 9, 12, 13). Moreover, the network is open for everyone so anyone who feels to be underrepresented can weigh in. However, accessibility is a factor not taken into account yet but shown to be an issue both for members in the network and the stakeholders around the network. This accessibility issue could limit inclusiveness of the network.

Mode of governance

Defining which type a network is, two components have to be analysed: brokerage and external governance. These two components can form three modes of governance as discussed in the literature, being self-organised (low brokerage and internal governance), lead organisation (high brokerage and internal governance), and network administrative organisation (high brokerage and external governance). To start with brokerage, the website of Curriculum.nu (2019) depicts the CG to be the central point in the network. Talking the network members a slightly different picture starts to form, yet centralisation is found. Participants were asked to map the network and to describe how they are linked with other parties. Participants had the clearest view of their own interactions. Combining these responses a summarizing map could be made of how the network in practice is organised. The coordination team indeed has contact with varying groups, however, in terms of centralisation, the project team members appear to be the most central actors as they are directly linked to the coordination team and are linked to the design teams. Mapping the network it becomes clear that indeed the project team is central but also the theme coordinator of SLO is a party where everything comes together.

"I take care of the coordination with everything. I have contact with, I am in between SLO and the bureau. I am also, I also coordinate the content supervisors, I also coordinate the content advisors. Once in a while I have contact with Theo D. of the CG, and we have our consultation with OCW at given times" (participant 2) ⁴

⁴ "ik zorg dus eigenlijk voor de afstemming eh ja ha met alles. Ik zit dus, ik heb contact, dat ik tussen SLO en het bureau zit. Ik zit ook eh ik stuur de inhoudelijk begeleiders aan, ik stuur ook de inhoudelijk adviseurs aan. Ik heb af en toe ook eh een lijntje naar Theo Douma van de coördinatiegroep, en we hebben natuurlijk ook ons overleg met OCW op gezette tijden"

Analysing the density of the network one can see relatively little density. The summarized map made of the network and the responses of participants indicate that the network is divided into cliques. The cliques to be distinguished are the CG, the project bureau, 9 design teams cliques, and the design schools. The design schools form a clique with their own community rather than with the other design schools. Each sub-group or clique is somewhat dense but the overall network is divided into these cliques, and those are not tightly entangled with each other. Direct interaction does not occur with many different actors outside the own clique. Solely more central actors - project team and support team – interact with a greater variety of actors. All participants indicate to be working on the own given task and abstaining from involvement in other tasks; the design teams work on their given subject and do not interfere with the other design teams, and the CG does not interfere with the content makers e.g. the design teams and schools.

"The CG does per definition not interfere with content and is more working on making sure that the process goes well" (participant 7) ⁵

"Design schools do not have contact with each other. We see each other when we get invited by a design team to give our contribution." (participant 9) ⁶

Yet participants do see Curriculum.nu as a whole; everyone works on their own piece but it is all brought together and the outcomes of one subject area cannot be viewed entirely exclusive from the other subject areas (participants 1, 6, 13). Moreover, participants speak of the project of Curriculum.nu rather than the project of mathematics and languages. Thus, despite it being a network scoring low on density it still is considered a whole. This low overall density combined with the sentiment of being connected indicates that the network is more centrally organised and thus is a brokered network.

Knowing that Curriculum.nu is a brokered network, the next question is whether the governance comes from within the network or from an external party. In this project, one can see a clear distinction between process and content as all participants stressed this distinction. Both the website of Curriculum.nu (2019) and all participants indicate the principle of 'teacher in the lead'. This principle is used for the content of Curriculum.nu, it is the teachers and school directors who make the final call on what is written down. The process governors do not participate in creating the content and are in place to lead the process. The governors who make the final decisions are the members of the CG. The project bureau is in charge of the general daily process governance. Expanding the scope of the network a bit one can see the house of representatives as mentioned by virtually all participants as an external

⁵ "Die coördinatiegroep per definitie bemoeit zich niet met de inhoud en dus meer met zorgen dat het proces goed loopt"

⁶ "ontwikkelscholen hebben geen contact met elkaar. Wij zien elkaar op een moment dat wij uitgenodigd worden door een ontwikkelteam om ons bijdrage daar te geven"

control through being the mandate giver, providing the time and money for the project, and being in charge of the final decision.

"Here you have the ministry of education, they gave the CG - consisting of PO-raad, VO-raad, you can find that on the website, all representatives of educationally involved organisations – they gave the CG – led by Theo D. – the assignment to deliver building blocks as a basis for a renewal of core goals and end terms. The CG is supported by the bureau Curriculum.nu – led by Ingrid B. – and that bureau is the daily management." (participant 2) 7

Each team is governed by an own process supervisor. Interestingly, the design schools seem to be unaware of who exactly is in charge of governance (participants 5, 6, 9, 10, 14). They indeed indicate that the teacher is in the lead but they point at SLO for further governance and the probability of some sort of project team or organisation being present to govern the overall process. On the website (Curriculum.nu, 2019) it also does not become clear that the coordination team is in charge as 'head of the process' while the bureau takes care of the daily governance instead of being a more advisory support group to the CG. This unawareness of being governed supports the idea that process and content are separated from each other, indicating the presence of an external governor.

Examining the three modes of governance as distinguished by Provan and Kenis (2008) these findings suggest that Curriculum.nu is a brokered network with an external governor. This combination entails that Curriculum.nu can be approached as a Network Administrative Organisation model. In this case the coordination team is the NAO, governing the content designers.

Integration mechanisms and tools

The first aspect of integration mechanisms and tools is if common information and communication systems are present. In the case of Curriculum.nu we can find a variety of these systems as mentioned by the participants. A first system is the use of online tools. These online tools are comprised of the website of Curriculum.nu (participants 2, 3, 11, 12, 13), email (participants 2, 5, 7, 8, 10, 13), social media (participants 1, 2, 8, 9, 13), and an app called Basecamp (participants 2, 5, 10, 13). Besides these online tools, every participant mentioned meetings being held, some on a regular base and some when deemed necessary. What is deemed important by virtually all participants in this network is openness and transparency, that everyone is able to access information and can see what happens with gathered information. In this regards, language needs to be mentioned. Various participants mentioned a

⁷ "Je hebt hier het ministerie van onderwijs. Die heeft de coördinatiegroep – die bestaat weer uit eh PO-raad, VO-raad, dat kun je op de website wel lezen, en dat is allemaal vertegenwoordigers van allemaal bij het onderwijs betrokken organisaties – die heeft de coördinatiegroep – onder leiding van Theo D. – de opdracht gegeven om bouwstenen te leveren als basis voor een vernieuwing van kerndoelen en eindtermen. Die coördinatiegroep die word ondersteund door bureau Curriculum.nu onder leiding van Ingrid B. En dat is eigenlijk het bureau dat het dagelijks trekt zegmaar."

discrepancy in language spoken between cliques causing problems in understanding of each other (participants 3, 4, 5, 6, 7, 10).

"This trajectory is at times really searching with each other for what things mean and you try, well we often talk in policy language because we talk with the ministry of education and then we talk with SLO and they speak more in curriculum language." (participant 3)⁸

"And for example the work assignment, that is given by the CG and they have a very different language. Once I literally gave that t the teams and well the team, they could not do anything with that" (participant 4)⁹

Not only between groups language differs, also within groups language plays a role. What is noted, however, is that the language differences in teams grew smaller over time and that understanding increased (participants 3, 4, 8, 11).

"then you put people together and at the beginning that is really complicated because you speak two languages, you have two frames of reference, but gradually an understanding starts to grow, respect for each other and you start to have a different conversation" (participant 11) 10

Thus, even though information is openly shared with the network, cliques do not always understand each other because of language usage. A second factor impairing understanding is an overflow of information (participants 10, 13, 14). Due to this overflow members have to select what information they do or do not read, possibly leading to gaps in knowledge. Moreover, participants that were relatively new in the network appeared to have difficulty generating a full picture of the history of the network and the exact terminologies used (participants 7, 13), indicating a possible flaw in the integration mechanisms. This integration through understanding has to grow over time as you learn to speak each other's language and what is important and what is not. Besides time, a content supervisor stated to have become key in the language discrepancy. Content supervisors have become actors who connect cliques due to their understanding of the different languages.

⁸ "Dit traject is ook soms heel erg zoeken met elkaar Wat betekent Wat betekenen dingen nou en je probeert, zeg maar wij praten heel vaak in beleidstaal omdat we dan met OCW aan het praten zijn en dan praten we met SLO en die praat dan weer wat meer de echt de curriculum taal."

⁹ "En bijvoorbeeld die werkopdracht, die word vanuit de CG die hebben een hele andere taal. En ik heb die wel eens letterlijk aan die teams gegeven en nou dat team dat eh hij dat dat kon daar niks mee."

¹⁰ "dan zet je mensen bij elkaar en in het begin is dat heel ingewikkeld want dan spreek je in twee talen, je hebt twee denkkaders, maar gaandeweg ontstaat er begrip voor elkaar, respect voor elkaar en ga je een ander gesprek hebben."

"We have become more... like translators from policy to practice, we have a bridging function" (participant 4)¹¹

The next aspect of integration mechanisms and tools is having a common goal and problem understanding. In general, all participants seem to have a similar goal and problem understanding, which is also what is given on the website of Curriculum.nu (2019). The goal is related to creating a foundation based on which new core goals and end terms can be formulated, clarifying what children ought to learn. Yet many participants indicates some discrepancies in interests. There is an overarching common goal but the specific targets are negotiated and renegotiated until it fits all interests, at times leading to the opinion of becoming too broad and abstract (participants 7, 10).

"So compromises have to be found between various contradictions, interests, people with an opinion and difficulties. Because of that it sometimes becomes a woolly situation, because everyone needs to be able to find oneself in it." (participant 7) 12

Asking for the problems this project addresses, no discrepancies were found amongst the answers of the participants. All participants have mentioned multiple problems with the current curriculum. A first problem is the need for renewal because the current curriculum is outdated. The clearest example of this is the absence of digital literacy in the current curriculum while in our modern time digital tools are all around us. A second problem is the currently lacking connection between primary education and secondary education. A common example given is the level of English; some primary schools do teach a lot of English while others focus on this not so much. These children come together in the same classroom in secondary school so in the first year some children repeat what they already learned in primary school while others learn a lot of new things. A third problem is the high workload of teachers with little room for personal input in the teaching program. A fourth and last problem is that the connection between subjects is lacking.

"First of all, the curriculum is outdated, so it is necessary to revise the curriculum, in all skills needed, in what do we actually think all children should learn and that is truly the starting point ... The assignment we got as Curriculum.nu as coordination group is truly

¹¹ "Dus wij zijn meer ... vertaler geworden van beleid naar praktijk, en dus we doen een bruggen functie."

¹² "Dus er moet een soort compromissen worden gevonden tussen allerlei tegenstellingen, belangen, mensen die wat vinden en ingewikkeldheden. Daardoor wordt het soms een hele wollige toestand want iedereen moet zich er ergens een beetje in kunnen vinden."

working on cohesion, continuous learning, overload of the program, and making sure more attunement takes place, that really is a needed side effect. "(participant 8) 13

Not much has been said about joint activities. There are 3-day meetings in the design teams which could be regarded a joint activity and one participant explicitly spoke of working on group dynamics.

"Next to that, process supervisors do a lot on group dynamics. For example, in my team there have been a couple of small conflicts between teachers, well discuss that with the group, as you have with any group process." (participant 3) ¹⁴

Overall one can see that cliques have formed that interact more with each other than with other cliques. For this inter-clique interaction, a coordinating agent is present. This coordinating agent does not simply bridge cliques but also coordinates his/her clique to facilitate intra-clique communication. The coordinating agents are the director of the project team, and in each design team and their respective schools the coordinating agents are the support team members — content supervisor, content advisor, process supervisor, and accountholder. In short, various integration mechanisms and tools have been set in place to make a whole of the network. Especially the support team seems to be an important factor for this integration as they are the coordinating agents connecting everyone and making sure the cliques can understand each other by taking up the role as translator.

Rules

In the network, various types of rules as distinguished by Ostrom (2011) can be found. To start with, there are certain *boundary rules* as shown by the selection procedure for the design teams and schools to enter the network (Dekker, 2017). Schools and teachers selected receive a subsidy from the government. In order to receive this subsidy also certain *pay-off rules* have to be complied to (Dekker, 2017). *Position rules* also have been established, whether formally or informally, regarding the role of each participant. An aggregation of the website and information provided by the participants led to the conclusion that the possible roles are CG member, project team member, advisory group member, content supervisor, content advisor, process supervisor, accountholder, design team member, and design school member. Moreover, roles have changed over time to fit the needs of a given context (participants 2, 3, 4). Besides these formal roles within the network, a couple of influential external stakeholders have

¹³ "allereerst natuurlijk is dat het curriculum verouderd is, dus het is gewoon echt nodig dat het Curriculum moet worden herzien. In alle vaardigheden die er nodig zijn, in wat vinden we nou eigenlijk dat nou ja de jongelui moeten leren in het onderwijs en dus dat dat dat is eigenlijk wel echt het startpunt ... de opdracht die wij ook als Curriculum.nu hebben als coördinatiegroep is wel echt wat gaan doen aan de samenhang, aan de doorlopende leerlijnen, aan de overladenheid van het programma en wel te zorgen dat er veel meer afstemming plaatsen vinden dus dat is soort van bijvangst die ook echt nodig is"

¹⁴ "Daarnaast doen proces begeleiders ook heel veel op groepsdynamica. Dus het is bijvoorbeeld bij mij in het team zijn er ook een paar akkefietjes tussen leraren geweest, nou dat met de groep besproken, gewoon precies zoals je een groepsproces hebt."

been identified, being SLO, the house of representatives, and the feedback givers. Most participants indicate that it is clear who is accountable for what, and participants keep each other in check to stick to their role (participants 8, 11, 12). Some indicate however that the spillover of roles sometimes causes unclarity of accountability (participants 2, 4, 7). Regarding the design participants state that also some choice rules apply in the form of a work assignment which provides the broad lines of what the teams should work on at a certain point in time. No rules are stated regarding the manner of generating feedback and ideas. These choice rules, however, are stated to be a tad too broad or too subject-specific as they generated major differences in the type of outcomes per subject group (participants 3, 4, 5, 10, 13). Scope rules have been established in the sense of a timeframe within which the members have to work, the subject being assigned to, and that it has to fit within the whole of the Netherlands (Curriculum.nu, 2019). This timeframe is shown to be somewhat adaptive to the process and content as it has been prolonged. As for information rules, it is stated that information is openly shared in the network without too many restrictions. The last type of rules, aggregation rules, were not clearly mentioned. In the design teams and schools, all participants have the same level of control over decisions on the content. All other network members have a sole advisory role on the content but do have control over the process. Besides there being no clear regulations on aggregation, no one seems to clearly take up this role of checking content and decisions and taking a lead over this (participant 2, 7). Research of van der Wel and Krooneman (2019) has found that participants deemed the resources made available to the teachers and schools somewhat limited, and that the network might profit from clearer preestablished formats and planning that do not change as much. In sum, the network has multiple rules in place which are somewhat dynamic; rules are adaptive to the context of the network, especially with regards to positions and scope. Some rules, however, are too broad or too unspecified, being in need of more rigidity.

Network inner stability

To start with collaboration versus competitiveness actors speak more of collaboration. Even though at all levels of the network there exist differences in interests and goals, there are little detrimental conflicts within the network and clashes in views are most often resolved through meetings

"You actually cannot do without each other and that means per definition those interests are on the table, but if you can conquer those with each other you could say that you stand stronger with each other." (participant 1)¹⁵

Thus, despite there being some clashes, network members cannot do it without each other (participants 1, 3) and the fact that the network is still a whole indicates there not being too big conflicts. Whereas

¹⁵ "je kunt eigenlijk niet zonder elkaar en dat betekent dat er per definitie dus die belangen op tafel liggen maar als je dat overwint met elkaar, zou je wel kunnen zeggen dan heb je dan sta je wel sterker met elkaar."

the network stresses the importance of actively including critics for the design (participants 2, 5, 11), one participant, however, indicated that at times interests are not made explicit enough which indeed avoids clashes but also does not allow for clarity and specificity (participant 7). Moreover, when speaking about Curriculum.nu the participants refer to what "we" did instead of what "I" did, indicating a sphere of collaboration. Also, examining media channels as Twitter, Facebook and NOS, no signs are found of the network crumbling or not functioning. Regarding media channels, these external parties can also reflect the stability of the network in how is dealt with critics. This aspect, however, is perceived in opposing manners; whereas participant 8 indicated the presence of a safety net to support network members in dealing with critics, participant 13 felt this was lacking. Analysing inter-organisational links, various organisations are linked together in the network. In the CG and the project team various educational organisations work together (Curriculum.nu, 2019). In the design groups one can see that various schools are linked.

Analysing the interaction patterns within the network indicates how strong ties are between actors. Parties that meet often, face-to-face, and that are more dependent on each other have stronger ties. In this network, a variety of tie strengths is found. In general, ties are stronger within the distinguished cliques than the ties with other cliques. The CG meets about once a month unless more is needed. Moreover, it is seen as standing a bit separated from the rest of the network. Their interactions with each other are business-oriented and to the point (participants 1, 7, 8). Thus, the interaction intensity is rather low, indicating weak links. The project bureau works fulltime on this project meaning that the interaction intensity is higher (participants 1, 2, 3, 12) and thus ties are expected to be stronger. However, the composition of the project team varies greatly with a stable core of about five members (participants 3, 13), causing the tie strength to remain weaker. The advisory group does not meet frequently, indicating low interaction intensity and thus mainly weak ties (participant 2, 12). As for the design teams and schools, everyone can decide for themselves what suits them best, leading to some teams and schools to interact more often with each other than other teams and schools. In general the teams have frequent contact with their corresponding team members and support team (participants 2, 5, 6, 13). The design schools barely have contact with each other (participant 9, 10, 14). The members of SLO (the content supervisors and content advisors) are brought together by an SLO coordinator once every three weeks (participant 2). Each support team generally interacts frequently with each other, at times having weeks of solely working on Curriculum.nu (participant 3, 4, 13). Especially the content and process supervisor are strongly linked to each other and those are strongly linked to the design teams (participants 4, 13). The SLO coordinator has weekly meetings with the project bureau (participant 2, 3). This indicates that ties with the support team members are rather strong.

Beside the frequent change in project team members, the other members of the network remain relatively stable with a few changes due to factors as pregnancy or illness. The clique linking pins also remain present and stable over time causing the network to not change much in composition or communication flow. Despite this stability, many underscore the dynamics and learning abilities in the

network (participants 1, 2, 3, 4, 8, 11, 13). A frame has been set but within that frame there is room for change which is also deemed necessary. The manner the network has changed over time to fit the needs of the members.

"you have to. The whole process is trying, no this is not fancied, okay, we need to do something differently. There is no blueprint so we just do it and yeah...(hope that it works)... that it works yes. Ideally, you would say 'Oh let's work out everything in detail' but well it isn't for nothing that things around design, product design, those kinds of elements come to live more because only once you start working you eventually figure out which things are handy or not." (participant 3)¹⁶

Hence, in general we can see a quite stable network where members of different organisations collaborate and remain in the network. Both strong and weak ties can be found in the network, with stronger ties in cliques and weaker ties between cliques. Moreover, there is room to change structures in the network when needed.

Trust

To start with professional trust, most participants explicitly stated that they deem the chosen participants professionals who are able to deliver a good job.

"I trust these 150, with everyone around them, that they did a good job" (participant 8) 17

"These are all people who are good at their job, have passion, know what they want, have differences in opinion, who can talk about those differences at a professional level. Yes, that is the professional of nowadays." (participant 11)¹⁸

Social trust, on the other hand, has not much been explicitly spoken of. No links were made to specific people whether trust existed in a particular person. A couple of more general comments were made in this regards stating that in a way Curriculum.nu works on a trust-based system that everyone will do the task they were set out to do (participants 5, 10) and do this to their best capacities (participant 7). In this sense, social trust and professional trust are deemed equal. Curriculum.nu is a network in which

.

¹⁶ "Ja maar dat moet ook gewoon. Dat hele proces is ook van oké, we proberen wat, onee dit eh is niet goed bevallen oke dan moeten we iets anders gaan doen. Ja er is ook geen blauwdruk dus ja we doen het ook maar en dan eh ja ... (Hopen dat het werkt)...Dat het werkt ja. Kijk het is, idealiter zou je zeggen o we werken alles helemaal tot in detail uit maar het Ja het is niet voor niks dat er wat meer dingen rondom design, product design, dat soort elementen steeds meer opleven want uiteindelijk als je gaat werken dan loop je pas tegen dingen aan die wel of niet handig zijn."

¹⁷ "En ik vertrouw die 150 met iedereen erom heen dat ze dat gewoon goed hebben gedaan."

¹⁸ "Er zitten allemaal mensen die gewoon goed zijn in hun vak, die passie hebben, die weten dat ze willen, die meningsverschillen hebben, die het daarover kunnen hebben, op professioneel niveau, ja dat is wel de professional van nu."

professionals work together with a similar ambition, once you are such a professional, you will abstain from opportunistic behaviour and give the input you were asked to give.

"That is a piece of leadership which you show, that assumes trust that we as a school will give the input asked from us and that another school also gives their input" (participant 5)¹⁹

"[it is a] system of trust, that they do not count the hours we make to see if we lived up to the regulations and how many people did you ask for feedback" (participant 10)²⁰

Even though not explicitly mentioned, in the 'higher spheres of the network' signs can be found of possible lack in trust. All organisations remain professional, representing the voice of their followers. However, in their professionality there is the tendency to behave in a political manner, being cautious in what is said and not expressing what is actually desired. A participant stated the process might at times be too political, posing a risk for the content (participant 1). Another participant stated that this might be of fear that the network would crumble if conflicting interests are expressed (participant 7). If there indeed is a fear that the network would not hold when conflicts arise, this could indicate that there is low trust in each other that the other will refrain from opportunistic behaviours or are willing to collaborate and compromise.

Some participants also indicate some doubts in the chosen network structure. They agree that teachers should be given a voice and they trust the people but they feel like a somewhat different structure might have been better. The teachers are socially speaking trustworthy, and they are professionals in their field, however, they may not be professionals in curriculum design (participants 10, 13) and we might need to put some more explicit trust in scientists or SLO (participant 1, 14).

"In that regards I am critical, not on the chosen design of Curriculum.nu because it was with the best intentions to include everybody. I just think it is too complicated to really do it in a network manner." (participant 10)²¹

Furthermore, there is doubt in the trust of the mandate giver of the network; the house of representatives. Members are aware that the house of representatives is the final decision maker and all participants express the uncertain future of Curriculum.nu due to politics. Also, politics has entered the process in the sense that politics sets the agendas and provides the funding (participants 2, 7, 11), as such politics

¹⁹ "dat is natuurlijk ook een stuk leiderschap wat je daarin toont dat die gewoon heel erg uitgaat van vertrouwen wij als school toch wel onze input leveren die er van ons gevraagd wordt en een andere school ook hun input levert"

²⁰ "[Het is een] systeem van vertrouwen dat ze ons niet de uurtjes zitten te tellen van heb je je aan de regeltjes gehouden en hoeveel mensen heb je feedback gevraagd"

²¹ "Dus ik ben daar in wel eh kritisch, niet zozeer op de gekozen opzet van Curriculum.nu want het waren de beste intenties om iedereen te betrekken. Ik denk alleen dat het veel te ingewikkelde kost is om het echt op die netwerk manier te doen."

has a greater influence on the network than portrayed to be. If politically speaking interest is lost in Curriculum.nu, it is unlikely that the political parties will accept the work that has been done. Trust in further external parties is not much talked about.

"So the scary thing is daring to let go, trusting the professional, do we really dare that? Does politics really dare that? I stand behind it but that I find the scary part, do we dare that." (participant, 8) ²²

All in all, trust exists in the professionality of the parties involved, that they do their job and refrain from freeriding and opportunistic behaviours. Yet, some doubts exist regarding the structure chosen and regarding the follow-up steps where politics comes in.

Summary of the network structure in Curriculum.nu

Based on the above analysis a picture can be generated of the network structure of Curriculum.nu. Table 11 provides a summary of the network structure found.

Table 11: Summary of the network structure of Curriculum.nu

Mode of governance	Integration mechanisms and Size and heterogeneity		
	tools		
Externally governed	Little joint activities	Big network	
High brokerage	Moderate use of common Moderate/high diversity		
	communication and	High openness	
	information systems Moderate inclusiveness		
	High common goal and		
	problem understanding		
	Coordination agent is present		
	Low shared language		
Network inner stability	Rules	Trust	
High level of collaboration	Moderate amount of rules Moderate/high professional		
Moderate/high amount of inter-	present social trust		
organisational links present	Moderate clarity of		
Strong and weak ties are	accountability		
present	Moderate rigidity of rules		
Long lifetime in the network			

²² "Dus ja het spannende in het los durven laten, het vertrouwen van de professional, durven we dat echt he? Durft de politiek dat ook echt? Ik sta er achter maar durven we dat echt, dat vind ik het spannende eraan"

53

4.3 Outcomes in Curriculum.nu

In general, participants were wary about mentioning concrete things about outcomes as the project is still ongoing. Many stressed this fact that the outcomes are still unknown and that the documents are still changing. Not all aspects came forward in each interview, yet indications were found that participants seem generally pleased with the work that has been done both on content and on process factors.

Content outcomes

Participants who mentioned something about innovation think that certainly some new things have been created but a great deal remains the same (participants 6, 11, 14). It is also deemed unnecessary to change a lot, as some basis will always remain the same or some aspects have already been changed recently (participants 1, 2).

"In international curriculum revisions a maximum of 5% of the supply changes. Dumbly said, 1+1 is still 2, before and after this revision, and 'he becomes' you still write as such so grammar and mathematics et cetera, there are nuances but the world is not turning upside down. The biggest part remains the same. But there will be some change." (participant 1)²³

The question of content contribution elicited more and clearer answers that participants genuinely recognised their contribution to the products (participants 5, 6, 9, 10, 14). And when feedback is not directly visible it is recorded what has been done with the feedback (participants 1, 2, 3, 8), adding to the idea that contribution is recognisable.

"we as design school sometimes see our feedback almost literally back." (participant 5)²⁴

"all incoming feedback needs to be documented in a manner that if you delivered feedback and you ask in a year 'what happened to my feedback' it should be almost retrievable in the system 1 on 1 what you contributed and what happened with it" (participant 1)²⁵

²³ "nou op internationale curriculum herziening veranderd eigenlijk hooguit 5% van het aanbod. Heel stom gezegd, 1+1 is nog steeds 2, voor en na deze herziening en hij wordt schrijf je nog steeds met dt dus spelling en rekenen enzo, er zijn wel nuance verschillen maar de hele wereld gaat niet op de kop ofzo. Het gootste deel blijft echt wel overeind. Maar er gaat wat verandering komen."

²⁴ "als ontwikkelschool zelf zien we af en toe bijna letterlijk onze feedback terug"

²⁵ "alle feedback die binnen komt die moet zo goed gedocumenteerd zijn dat als jij feedback heb geleverd en je vraagt over een jaar wat is er met mijn feedback gebeurd dat het bijna 1 op 1 terug te halen moet zijn in het systeem wat jij heb ingeleverd en wat er daarmee gebeurd is."

The integrative nature of the outcomes can elicit different responses. On the one hand, the network addresses multiple problems as stated in the integration mechanisms and tools section and they are all part of the document. On the other hand, some participants state to be curious about the development of one problem, the overload of the curriculum. The designers may want to incorporate so many ideas that this problem might actually be increased instead of decreased (participants 5, 12). This, however, is to become clear once the documents are completely done and processed, which is not the case at this moment in time.

Effectiveness generated more answers however also greater variety in opinions. What is stressed is that the document is not yet finished and that it still can and will change (participants 12). Moreover, this document will in itself not bring any change in the curriculum, politics has to decide what will happen with the documents and then schools still need to implement it. Most agree that overall the document is effective in forming a basis for the curriculum renewal, and participants are content with or even proud of the results.

"I think, I have an educational background and that definitely does not make me an all-knowing being, I am also just one of these people, but when I see what has been made, then I am actually really proud. Then I think that what has been made is really good." (participant 11)²⁶

"Yeah, while talking to you I think it is a masterpiece what has been made by Dutch education. Yes, proud. That I got to contribute to that" (participant 14)²⁷

Thus, most participants state that the document forms a good basis and is a step in the right direction of change but, as one of the participants stated, there is a world between what is written down and what is done in practice (participant 3). Moreover, it does not mean there is no room for improvement in that which has been written down. A stated, especially regarding the issue of overload and clarity there are some doubts. Even though effectiveness has grown over time there seems to be a tendency to refrain from choosing one side and instead incorporate as many ideas as possible and remain quite abstract (participants 4, 7, 10, 12, 13). As such that which has been written down can still be improved.

"...that, of course, happens with the feedback, that people say 'yeah but there are no...', 'you left this out' or that they say 'yeah but this needs to be added'...And you see there,

²⁷ "Ja, al pratend zo met je denk ik is het toch wel een huzarenstukje wat gedaan is hoor door het Nederlandse onderwijs. Ja Trots. Dat ik daar aan bij mocht dragen."

55

²⁶ "Ik vind ook, Ik heb zelf een onderwijs achtergrond en dat maakt me zéker geen alwetend persoon en ik ben ook maar gewoon één van die mensen, als ik zie wat er ligt, dan ben ik daar eigenlijk wel heel trots op. Dan denk ik van wat er ligt is eigenlijk wel heel goed."

and that is the difference, that they think 'yes that should also be added, it is also important'. And that we think with a helicopter view 'yep uhm you are making the curriculum bigger than it was'." (participant 13)²⁸

"Sometimes I am a bit scared that it remains too much in abstraction and that it remains too vague of what exactly the students will need to learn." (participant 7)²⁹

The last factor of the content outcomes being future robust is not much talked about. Participants mention the insecurities of what will happen with the documents created now and therefore refrain from giving any indications of the results being future robust. Some do mention that even when the documents are not accepted by the house of representatives, the work done in Curriculum.nu may still be helpful as it challenges you to think more critically and you learn from the contact with different types of schools (participants 5, 6, 9). Participants in the network indicate to have grown personally and professionally (van der Wel & Krooneman, 2019). This, however, are participant-level outcomes which were not included in the scope of this thesis.

"Then I think that we as school still can work with it, that we examine like okay, this we had as school, we stood behind this, and which part in our education is already present and which isn't and which are we going to develop ourselves" (participant 5)³⁰

However, it is also mentioned that for the future robustness motivation is needed and that it works as long as there are subsidies or funds (participant 14). Thus, the outcomes based on the factor of future robustness are unclear as it is dependent upon more factors as external parties and motivation.

"The moment the subsidies stop, many good intentions stop. So when they say 'okay you have had 2 years of subsidies uhm this was Curriculum.nu thank you' and we go back to our normal course of the day, then it is just done. Everyone will take their old methods. Perhaps method makers will use the new building blocks to be innovative but then it does not come from bottom-up anymore and then it is still the method makers who dictate

²⁸ "...dat gebeurt natuurlijk ook met die feedback dat mensen roepen 'ja maar er zitten geen' 'dat hebben jullie weggelaten' of dat ze zeggen 'ja maar dat moet er ook in'. En eigenlijk zie je nu ook wel en dat dat is ook dat verschil dat dat zij denken Ja moet er ook in, is ook belangrijk en wij denken eh weer met die helikopterview, ja eh je maakt het curriculum nog groter dan dat het was eigenlijk"

²⁹ "Soms ben ik een beetje bang dat het veel teveel in abstracties blijft hangen en dat het daardoor best wel vaag blijft of het nou, wat er nou precies van die leerlingen v/wat die leerlingen nou precies moeten gaan leren"

³⁰ "Dan nog steeds denk ik dat wij als school daar wel wat mee kunnen doen dat we eens kijken van oke weet je, dit hadden wij eigenlijk als school stonden we hier achter en welk stuk in ons onderwijs doen we al welk stuk doen we nog niet en gaan we als school zelf ontwikkelen."

education. That would be a shame because then these sessions would have been for nothing." (participant 14)³¹

Process outcomes

Examining the productive use of differences, participants overall seem to be content. Some clearly state that in the process there is made use of the strengths of people and that the different people in the process are all needed because it cannot be done without each other (participants 2, 3, 4, 5, 13, 14).

"I think they really look at which school is good at what, all schools are invited to each session but some a bit more consciously so than others. Like, okay we think that you can give a great contribution to this." (participant 5)³²

"They look closely at who is being involved and when." (participant 2)³³

Despite this positive sound, some participants feel like the differences could have been used more effectively. The analysis of Curriculum.nu indicated that tasks could be better divided, making more use of everyone's strengths, resources, and personal networks (van der Wel & Krooneman, 2019). Especially the role of experts is thought to have been set a tad too much to the background at times or coming in somewhat late in the process (participants 1, 7, 10), even though the help of experts appears to be greatly valued (van der Wel & Krooneman, 2019). Moreover, some groups have been separated while doing similar work, indicating ineffective use of differences (participants 2, 4). Thus, there is some productive use of differences however this can still become more effective.

"...in the past years you have built a great number of good things and these good things can be found in SLO because they always work on it. Those are the experts, the specialists, and those have been involved too late. They were kept on the background...but if that input of how to build a good curriculum was given earlier, we could have been done earlier in a faster manner with great results." (participant 14)³⁴

³¹ "Op het moment dat de subsidie stopt, stoppen heel vaak de goede intenties. Dus als er straks gezegd word, oke, je hebt twee jaar subsidie gehad ehm dit was curriculum.nu, bedankt en we gaan weer over tot de orde van de dag, dan is het gewoon klaar. Dan pakt iedereen zijn oude methodes weer terug en dan gaan misschien de methode ontwikkelaars gaan wel aan de slag met de nieuwe bouwstenen om vernieuwend te kunnen zijn. Maar dan word het weer niet vanuit eh de onderkant van het veld zeg maar naar boven gedragen maar dan zijn het nog steeds de programma makers die het onderwijs bepalen. En dat zou jammer zijn want dan is heel je sessie voor niets geweest."

³² "Ja en ik vind dat ze ook goed kijken waar welke school zeg maar goed in is, dus die nodig/ alle scholen worden bij alle sessies uitgenodigd maar sommige misschien net nog wat bewuster van oke we denken dat dit dat jullie hier een mooie bijdrage in kunnen leveren. Jullie kunnen daar mooie bijdrage leveren."

³³ "er word heel gericht gekeken van wie wanneer ingezet word"

³⁴ "... in al die achterliggende jaren heb je ook een heleboel goede dingen opgebouwd maar dat goede, die goede dingen, die die goede dingen liggen al bij het SLO want die zijn er altijd mee bezig. Dat zijn ook de experts, de specialisten. En die zijn er té laat bij betrokken, die werden echt naar de achtergrond gehouden ... Maar als die input van hoe bouw je een goed curriculum op er eerder ingezet was hadden we eerder, sneller, en groots klaar kunnen maken."

Participants in the network seem to generally support the manner Curriculum.nu is organised and the decisions are taken. As for the process, when asking about how participants would visualize an ideal set-up of Curriculum.nu, majority of the participants state they would keep the set-up quite similar. Participants agree with the separation of process and content decisions, truly giving the teachers voice. The teachers are deemed professionals who know what they are doing, especially with the help of some extra experts. As such, also the network and its content are deemed legitimate.

Legitimacy coming from stakeholders outside the network as analysed is a whole different story. In this regards many participants are wary for the legitimacy of Curriculum.nu as given by the outside world. This point becomes clear when examining media sites where there seem to be many critics towards the network and their work (twitter, facebook, internet columns). For example, a group of teachers has emerged – *Commissie Boerenverstand* – protesting against the work of Curriculum.nu (BON, 2019). Also on the online news of NOS it is stated that:

"[t]he manner of working of Curriculum.nu receives critics. Teachers fear increased work pressure due to the propositions. In 2018 the Onderwijsraad called this manner of curriculum revision not 'sharp and directing enough'." (NOS, 2019) 35

Moreover, the amount of critical messages might have to be taken with a grain of salt as it might be a small group of people making lots of noise, whereas positive voice often do not let themselves be heard (participants 1, 2, 7, 13). A quick scan of Facebook massages revealed that many reports of Curriculum.nu did not elicit many responses, and if they did it was often by the same persons. For example, a Facebook post by Curriculum.nu (2019, October 10) elicited 43 responses of which many critical. However, 17 of those 43 were made by the same person. Also, minister Slob - the Dutch minister of education, culture and science - is openly affiliated with the network. This public connection between the minister and the network indicates some political support. The network members do not seem too afraid of the possible lack of support as they stand by the work they have done; there will always be people who stay behind and have critics, but change is needed, so this project was a good thing.

"I always picture the model of early adopters, early majority, the late majority, and the laggards. Those laggards will also be present here but we want to focus on this peak of the parabola. Yeah I think, depending on how things go you can move faster or slower, but no

³⁵ "Op de werkwijze van curriculum.nu is kritiek. Leraren vrezen dat de nieuwe voorstellen nog meer werkdruk opleveren. In 2018 noemde de Onderwijsraad deze vorm van curriculumherziening "niet scherp en richtinggevend genoeg"."

matter what, the field needs to move forward, because the way things are now cannot remain like that..." (participant 11) ³⁶

Efficiency is an aspect where the network can still gain some success. Due to language differences, a lot of time is spent on discussing and figuring out what people actually talk about (participants 4, 7). Also, a participant mentioned there was no one to cut the chase and make a decision which at times caused discussions to last longer than needed (participants 3, 7). Moreover, participants indicate that there is a difference in design teams regarding the delivery of the work. Some teams were done while others were still a couple of steps behind, leading to a prolongment of the project (participant 5). It did not become clear however if this difference occurred due to misjudgement of the resources needed or whether it was due to inefficient working. These are likely to be related.

Summary of the outcomes of Curriculum.nu

The collected data can be summarized as shown in table 12. In general outcomes receive a positive note. However, many outcomes could be optimized and are therefore labelled as moderate. Future robustness did not elicit clear results.

Table 12: Summary of the outcomes of Curriculum.nu

Content outcomes	Process outcomes	
Moderate innovation	Moderate productive use of differences	
High recognisable content contribution	High legitimacy by actors; Moderate legitimacy	
Moderate integrative nature of the outcomes	by other stakeholders	
Moderate effectiveness of the solution	Moderate efficiency	
Unclear results of future robustness		

4.4 Network structure-outcome relationship in Curriculum.nu

Based on the above sections we can examine which elements of governance network structure are related to content and process outcomes. Each element of governance network structures is examined separately to see whether and how this element has an influence.

Mode of governance

Following the results, it was concluded that Curriculum.nu could be analysed as a NAO (being brokered and externally governed). It was expected that brokerage and external governance are positively related

³⁶ "Ik zie dan altijd dat model van die early adapters eh de voorlopers de vroeger adaptie, de volgers, de late volgers en de achterblijvers. Ja die achterblijvers zullen er hier ook zijn maar we willen vooral die piek van die parabool meekrijgen. Ja dan denk ik van afhankelijk van hoe het loopt kun je sneller of minder snel maar het veld moet hoe dan ook door want zoals het er nu staat kun je ook niet blijven"

to process and content outcomes if networks are big, diverse, and/or highly integrated. Separately looking at centralisation, density, and external governance however some relation can already be found.

Curriculum.nu is a rather big, diverse network with more than 300 members which would fit with the usage of a NAO. This mode of governance can be positively related to the process and content outcomes. The findings suggest however that the positive relation could be greater, especially with regards to the process. An explanation for this, given by one of the participants, lies within density and the external governance. The centralisation is agreed upon to be good for this project. As for density, it is said that some cliques could be linked more to form a whole (participant 2, 4). Also, it is stated that the clear-cut division of process and content is not necessarily deemed good. Because things are not discussed together, there is room for unclarities and disrupted communication flow. The integration of cliques and as such a somewhat less brokered network could account for more efficiency and productive use of differences as resources are better shared and communication flows more easily.

Thus, the brokerage and the external governance are deemed relevant aspects in this network for the process and content outcomes. For the size and diversity of the network it was deemed good to be brokered and externally governed as this was positively related to content and process outcomes. However, the positive relationship between the mode of governance and process outcomes can be greater as the network was experienced as too brokered and not integrated enough.

Integration mechanisms and tools

As stated above, less brokerage is thought by some to improve the network. Integration mechanisms and tools might play a role in this level of brokerage. In this regards, Provan and Kenis (2008) solely look at goal consensus, which for a NAO would need to be high. Whereas this indeed is one aspect, the view is broadened to include other factors. The assumption following the theoretical framework was that integration mechanisms and tools are positively related to process outcomes, and that integration mechanisms and tools are positively related to content outcomes if there remains some degree of diversity and non-uniformity.

As could be seen in the analysis of integration mechanisms and tools, there are multiple media available and used to share information. Perceptions of goals and problems are aligned and coordinating agents are present. These aspects all indicate the presence of integration mechanisms and tools and positively affect outcomes. The lack of a shared language and little joint activities are factors indicating that integration can increase, especially the linkage of cliques is mentioned as disrupting the outcomes in the sense of efficiency. Once the content supervisors started to step up as translators the communication improved. This was not initially part of their role and not taken into account in the original structure. Moreover, the sharing of information was by many regarded as too much, causing them to omit information or not use it in its entirety. This latter aspect could be an example of too much integration negatively affecting outcomes. In sum, the integration mechanisms and tools as present in Curriculum.nu are positively related to outcomes but on a moderate level.

Size and Heterogeneity

The size and heterogeneity of the network were expected to be negatively related to process and content outcomes unless the network was integrated or coordinated. This case fits this assumption. The network was deemed big and diverse enough. The size and inclusion of everyone in the feedback rounds are stated to negatively influence efficiency and effectiveness, yet the presence of a coordinating agent is given to facilitate the network and as such positively influence the outcomes. As for diversity, there is doubt if the members are representative enough of the field and are included sufficiently, which could influence the outcomes on a community level. This is not stated by participants to influence the process outcomes on the network-level, however. Coordinators are present to make sure also the critical voices are heard and represented, and that participants move along in their differences, indicating the positive relationship with process outcomes due to the coordination. Thus, the size and heterogeneity in Curriculum.nu appears to be moderately positive related to outcomes.

Network inner stability

In the case of curriculum.nu a rather stable network can be found. The network consists of both strong and weak ties. Participants appear to be collaborative. These factors are positively related to process outcomes as people can work without too many obstructions and different ideas are used. However, as participant 7 pointed out, at times diverging opinions are not explicitly spoken and conflicts within the network are avoided. This indeed keeps the network together but at the same time hinders the network. Because people do not speak their mind, unclarities remain existent causing inefficiency in the process and less effective or innovative outcomes of content. Thus, network inner stability indeed appears to be positively related to content outcomes insofar as the network remains somewhat diverse and unstable. The process outcomes, however, might also benefit from this somewhat lesser stable force. Hence, in Curriculum.nu the relationship between network inner stability and outcomes appears to be positive in a moderately high degree.

Rules

Various types of rules have been identified in the network, creating a clear picture for participants where they stand and what they need to do. In general, the rules in place were positively related to process and content outcomes, and rules were deemed necessary to organise a big and diverse network as Curriculum.nu. For example, without pay-off rules, participants might do minimal effort while still receiving subsidy; without a time-frame, some groups will move fast whereas others are far from clear results; without boundary rules, quality and professionality of the network members cannot be assured, negatively influencing legitimacy and effectiveness. Two types of rules were found where no positive relation existed, being choice rules and aggregation rules. To start with choice rules, choices were limited through a given format or given work assignment. This given format was rather broad as to leave

a great amount of room to participants for own ideas and thoughts and to work in the manner they preferred. Whereas this is a plus side, it also led outcomes to be very different from each other, making it hard to create a coherent whole of the different subjects and having to revisit many of the outcomes. Moreover, these rules were not discussed with the teachers. Thus, the teacher is in the lead but within externally pre-given borders (participant 4), hampering the legitimacy of the process.

As for aggregation rules, all members had the same level of control on the content. On the one hand this leaves more room for equal contribution, on the other hand this led to decisions being made on a very abstract level and the attempt to include as many opinions as possible, leading to less effective documents. Participants indicated the network could better distribute the roles of members according to their resources, which would lead to great use of differences (van der Wel & Krooneman, 2019). Moreover, in general, participants seemed to be in favour of more explicit, in advance made, regulations or deals to manage expectations. This expectation management then would lead to a more positive view of the process outcomes. Especially with regards to time management virtually all participants indicate that a misjudgement was made in how much time would go into the project. To conclude, rules are indeed an important factor in the network structure influencing outcomes. Having rules positively affects content and process rules and they need to remain somewhat dynamic to account for changes in context or unexpected events. These rules need to be set beforehand and manage expectations well. Thus, a balance needs to be found between restrictions and freedom. In Curriculum.nu a moderately positive effect is found between the rules and outcomes.

Trust

As the analysis showed, participants held a great deal of professional trust towards each other. This trust is directly related to a sense of legitimacy and productive use of differences. However, some cracks in trust were found. To start with a common doubt in governance networks, is the field qualified enough to be involved in this type of work? This doubt negatively affects the view on content effectiveness and legitimacy of the process. A second dent in trust was found in politics involved in the current process and the next steps of the way. In the current process, politics influences the CG. The CG members all have their own interests which are not always clearly and explicitly communicated which could be explained through a lack of trust. This is negatively related with both content and process outcomes as the outcomes remain vague and thus ineffective - too broad documents, inefficient - constant renegotiations and discussions on what is actually talked about, and no productive use of differences – differences are avoided and thus cannot be used. The trust of external parties has not majorly influenced the network outcomes. This external support might influence the community outcomes but the network outcomes were the focus of this thesis and therefore this is not much elaborated on. If there was no trust at all from any external party, the network would probably have been dissolved and therefore not have outcomes. Irrespective of critics or voices of support, the network worked on their product. It can be concluded that trust, whether in a social manner or professional manner, is positively related to process and content outcomes. Overall there seems to be a positive relation between trust and outcomes in Curriculum.nu but this relationship could be greater.

4.5 Taken together

Examining the network structure and outcomes of Curriculum.nu, the chosen structure appears to be positively related to network outcomes. However, in each factor of the structure there is room for improvement to establish a greater positive relationship which fitted the assumptions made.

- 1. *Mode of governance*: with the mode of governance it was assumed that brokerage and external governance would be positively related to process and content outcomes if networks are big, heterogeneous, and/or highly integrated. In the case of Curriculum.nu it was found that the network was big and heterogeneous, however integration was only moderate. It is therefore believed the network outcomes could profit from somewhat less brokerage. Density is not high as actors had contact with a central actor but not with many other actors. A higher density could connect the various cliques and strengthen their relationships.
- 2. Integration mechanisms and tools: the assumption of this factor was that they relate positively to process outcomes and are positively related to content outcomes if there remains some degree of heterogeneity and non-uniformity. In Curriculum.nu various integration mechanisms and tools are present, with plenty of opportunities to share information. Their actual use however is found to be limited, with especially the lack of a shared language and an information overload hampering the outcomes. The amount of heterogeneity is not sufficiently adapted to and could profit from more integration mechanisms as joint activities or more efficient mechanisms in which only that is shared which is relevant for a certain actor.
- 3. Size and heterogeneity: this factor was expected to be negatively related to process and content outcomes if the network was not integrated or coordinated. The findings suggest that the size and heterogeneity were generally regarded as positive for the outcomes. Clear coordination agents were present and there was some integration, especially on the clique level. Participants did mention room for improvement on the aspect of inclusiveness to better outcomes. Following the assumption, this would ask for a higher degree of integration and coordination, which fits the finding that integration was deemed limited.
- 4. *Network inner stability*: it was assumed that network inner stability had a positive relationship with process outcomes, and a positive relation to content outcomes if the network pertains some level of heterogeneity and instability. In the case of Curriculum.nu this assumption is supported. The network scored high on stability, but was found to profit from somewhat less stability and more inclusiveness to spur innovation and effectiveness.

- 5. *Rules*: the assumption was that rules are positively related to process outcomes, and positively related to content outcomes if the rules are somewhat dynamic and leave room for adaptations. With analysing rules it became clear that presence of rules and their somewhat dynamic aspect is necessary but not sufficient for a positive relationship with outcomes. In this network aggregate rules and choice rules were found to be underdeveloped in the former case or not properly developed in the latter case. Besides having rules, rules need to be clear and agreed upon.
- 6. Trust: trust was assumed to be positively related to process and content outcomes. In general a great deal of trust appears to be present in the network which positively impacts outcomes. It was found that trust could increase within the CG and in the process itself. This fits with the finding that outcomes were deemed open for improvement and the link made between trust and the outcomes of the network.

Other: non-structure related factors

During the analysis of the data certain factors not included in the theoretical framework stood out as they were mentioned regularly. These factors are not directly related to network structure and will therefore not be expanded on majorly. Yet, due to the frequent mentioning they are shortly addressed and can be regarded as points of further research. Moreover, these factors highlight that the network structure does not operate in a vacuum and is dependent on externalities in producing outcomes.

The first factor points at the relevance of reputation. This reputation is built through the history of the project. In this case, the predecessor or Curriculum.nu, Onderwijs2032, was not received with open arms, leaving Curriculum.nu with a negative start. Research has indeed indicated that starting conditions play an important role in the functioning of collaborative networks (Ansell & Gash, 2008). Moreover, reputation is built through media and communication. A mentioned aspect is that while indeed the teacher is in the lead as prominently portrayed, researchers and educational experts also play a great role while this might have been placed a bit too much to the background. This creates the image of teacher in the lead but at the same time does not account for the often mentioned critic that more experts are needed in the process, as such not improving their reputation. Moreover, it is also stated that there is no clear representative who publicly and regularly provides arguments against the critics. This reputation goes hand in hand with the next aspect to be mentioned: external support.

This second factor is already touched upon in the section on trust. The network is dispersed and uncertain over the question of whether there is enough external support. A bad reputation decreases the external support and trust in the network. When there is no external support and low trust, the network might cease to exist or the outcomes might be deemed illegitimate and useless. As such, a negative relationship exists between a bad reputation and low external support, and community-level outcomes. In their book, Eshuis and Klijn (2012) highlight the relevance of branding in governance processes, shaping the perceptions of people on certain governance processes and policy contents. Expanding the

scope to include perceptions of the community rather than solely network members, it could be important to add the presence of public relation mechanisms to the network structure.

The third factor points at the relevance of individual aspects of actors. Participants spoke of commitment, culture, time/availability, personal importance, sense of responsibility and the like; all sorts of factors which are personally dependent. These aspects shape the approach to the network and as such influences the outcomes. When talking about co-production and including citizens in addressing complex problems, people need not solely be able to participate with sufficient resources, they should also be willing. In complex problems, willingness is mainly derived from internal motivation to generate 'good' outcomes (Alford, 2002).

Chapter 5. Conclusion

This thesis examined the question of 'Which factors of governance network structure explain outcomes of a new curriculum design in the case of Curriculum.nu'. Based on thorough literature research first a theoretical framework was developed addressing the characteristics that are part of network structure and of network outcomes. The factors found that comprise the network structure were: (1) mode of governance, (2) integration mechanisms and tools, (3) size and heterogeneity, (4) network inner stability, (5) rules, and (6) trust. Outcomes were divided into two broad categories, being content outcomes and process outcomes. Having established which factors are part of the network structure and which of outcomes, the two were analysed in relation to each other, leading to 6 assumptions. The next section of the thesis delved into the case of Curriculum.nu. Interviews were held to gather an understanding of the structure and outcomes of the network. With regards to the network structure, Currirulum.nu was found to be an externally governed and brokered network - a NAO - as mode of governance. The network knows various integration mechanisms and tools, which are moderately used. It is a big and moderately diverse and inclusive network. The network inner stability is high, there is a moderate presence and clarity of rules, and trust is moderately high. With regards to the outcomes, all content and process outcomes were found to on a moderate to high degree. The network members of Curriculum.nu seem generally pleased with the structure and the outcomes.

The assumptions of the theory regarding the structure-outcome relationship fitted the case with all network structures being (seemingly) related to the outcomes of the network. Thus, to answer the research question, the factors of governance network structure that can explain outcomes of a new curriculum design in the case of Curriculum.nu are mode of governance, integration mechanisms and tools, size and heterogeneity, network inner stability, rules, and trust. What has to be highlighted however is that these factors do not operate in a vacuum separately from each other. As Provan and Kenis (2008) proposed, the combination of factors should be right in order to generate the desired outcomes. Public administrators engaged in governance networks should balance each factor and tailor it to the needs of the network. For example, in a big and diverse network, centralisation might indeed be needed to structure and govern the network more efficiently. This is done by an external governor to keep the process and content separated, giving the stakeholders truly a voice. However, density should not be overlooked as this also brings value to outcomes. The network being too brokered can lead to problems in information sharing, knowledge distribution, and understanding. This in turn negatively affects innovation, effectiveness, and productive use of differences. Thus, when establishing a network as Curriculum.nu, the key appears to lay in moderation; all structures should be present but all to 'the right degree'. The network needs to be integrated, but not too integrated, as too much integration hampers the generation of novel ideas. Moreover, whereas the network knows a certain degree of diversity, inclusiveness is a challenged facet. It has proven difficult to be completely inclusive leading to a negative relationship with process outcomes. This moderation principle is also found in the factors of stability and rules. The network needs to be stable, but some diversity, conflict, and competition are of value, therefore, there is the need to bring about some type instability. As for rules, networks need to have rules, but not too strictly as change is needed if things do not work out as planned. In short, as found in the case of Curriculum.nu, all identified aspects of governance network structures impact outcomes of a new curriculum design. The type and level of outcomes is determined by the combination of how these structural aspects are shaped and to what degree they are present.

Coming back to Curriculum.nu specifically, in the Netherlands it is the first time the curriculum is revised in conjunction with the educational field rather than imposed top-down. Some improvement of the network is possible but it is deemed a good 'first try'. Whether a next curriculum revision will take place in a similar manner is unknown as first community level outcomes need to become clearer. Despite this there have been ideas of a constant curriculum revision committee in which teachers might also get a role. This however is sole speculation and only time will tell whether this network has been such a success that it will inspire for repetition. All in all, Curriculum.nu seems to be rather successful on the network level.

Recommendations

Based on the findings some recommendations are given to possibly generate better outcomes in case the network would continue working. For starters, the network might benefit from somewhat more interrelated cliques, in other words, somewhat less brokerage and more density. This integration can be brought about through integration mechanisms and tools as for example more meetings and events where both content and process actors are present and can learn about each other's language. This will not only increase the efficiency and effectiveness as less time is needed for translation, it can also contribute to greater trust. Secondly, it was found that inclusiveness was a matter of concern for the network and their support from external parties. To improve inclusiveness the network could more actively promote itself and positive media coverage, and make clear the possibilities for involvement. A public relations specialist could help in this aspect of reaching more people. Thirdly, related to this inclusiveness, the network could profit from more actively seeking and expressing different opinions. This point could be seen as challenging the network inner stability, however, once those differences are overcome more people will support the outcomes and the network could come out stronger. The content is likely to be more specific and clearer as the different opinions have been talked through, meaning there is no reason to remain on a high abstract level. Fourthly, Curriculum.nu already has a body of actors ensuring the coherence of the documents made by the various groups. However, in the results the coherence still appeared to be a matter of concern. The network could profit from bringing this body more to the fore and involving this group more actively in the creation process. Related to this, there appears to be need of some aggregate rules to guide the decision making process and to give some actor(s) greater authority to settle on decisions.

Limitations and further research

There seems to be no magic formula for networks to function successfully and create the desired outcomes; the 'right degree' spoken of earlier is different per case. This makes it important to study cases before, during, and after the process as the factors surrounding the case will change, asking for a different structure. Overall participants were satisfied with the network structure and the outcomes on the network level and thus, on this level, Curriculum.nu can be termed a success. However, what use is it if the network functions well but does not get support from the outside? Success on a network level does not guarantee success on a community level. Analysis of media sources elicited conflicting results regarding external legitimacy. Moreover, media often highlights drama and negative aspects (Bennett, 2016). The manner Curriculum.nu is construed a great focus is placed on the network itself and not so much on the broader community (despite the openness for everyone to provide feedback). As stated in the recommendations, a public relations officer could be put in place to manage the connection of the network with the broader community. To get a proper understanding of the external legitimacy of Curriculum.nu and what can be recommended, a study on itself it required which focusses on both media sources and questions the stakeholders involved. This research does know some further limitations, leaving room for further research. To start with, only a limited number of people in the network were interviewed due to accessibility and time constraints. This limited amount of participants and the main use of self-reported data might limit the objectivity and generalization of what has been found. Further research might profit from more extensive research including more participants. Furthermore, this research is limited in its scope. To gather a full picture of the workings of a governance network, analysing the network structure is not sufficient. As this thesis pointed out, the history of the network, the external environment of the network, and the specific actors in the network play a role, which also needs to be researched. Other factors one could research are the network processes and the network manager. It would also be interesting to analyse the next steps of the curriculum design. Does the government stick with the bottom-up approach or does it take back charge?

Even though this thesis solely focussed on one aspect of governance networks, it does contribute to its complex puzzle by adding a piece. More specifically, this research contributed scientifically through the test of the theories of governance networks on a practical case. By doing this, it has been shown that governance theories are applicable in practice. This immediately links to the social contribution of this thesis. Knowing how networks function can aid in setting up new governance networks. Moreover, this specific case is of high social relevance due to its pressing nature of the educational sector asking for changes. Curriculum.nu is a step in the direction to bring about change and solve problems experienced by many teachers and other educational staff. Instead of using all top-down measures, the government decided to take a different approach and work more bottom-up. The network members seem to be pleased with the network, its structure, and its outcomes. Thus, whereas the community-level outcomes are still unknown, and we do not know what the future will bring with this initiative, examining the network level Curriculum.nu has made a positive step towards change.

References

- Ackerman, F., & Eden, C. (2001). *Stakeholders Matter: Techniques for Their Identification and Management*. Department of Management Science, University of Strathclyde.
- Agranoff, R., & McGuire, M. (1999). Managing in network settings. *Review of Policy Research*, 16(1), 18-41.
- Alford, J. (2002). Why do Public Sector Clients Co-produce? Towards a Contingency Theory. *Administration & Society*, 34(1), 32-56.
- Ansell, C., & Gash, A. (2008). Collaborative Governance in Theory and Practice. *Journal of Public Administration Research and Theory*, 18(4), 543-571.
- Axelrod, R., & Hamilton, W. D. (1981). The Evolution of Cooperation. Science, 211(27), 1390-1396.
- Ball, S. J. (2008). New Philanthropy, New Networks and New Governance in Education. *Political Studies*, *56*, 747-765.
- Bennett, W. L. (2016). News: The Politics of Illusion. Chicago: The University Of Chicago Press.
- Bless, H., Diedler, K., & Strack, F. (2004). *Social Cognition: How Individuals Construct Social Reality*. East Sussex: Psychology Press.
- Blom-Hansen, J. (1997). A 'New Institutional' Perspective on Policy Networks. *Public Administration*, 75, 669-693.
- BON. (2019). Commissie Boerenverstand: Curriculum.NEE!. Retrieved November 11, 2019, from https://www.beteronderwijsnederland.nl/nieuws/2019/05/commissie-boerenverstand-curriculum-nee/
- Brown, M. M., O'Toole Jr., L. J., & Brudney, J. L. (1998). Implementing Information Technology in Government: an Empirical Assessment of the Role of Local Partnerships. *Journal of Public Administration Research and Theory*, 8(4), 199-526.
- Burns, T., Köster, F., & Fuster, M. (2016). *Education Governance in Action: Lessons from Case Studies*. Paris: OECD Publishing.
- Castells, M. (2000). Toward a Sociology of the Network Society. *Contemporary Sociology*, 29(5), 693-699.
- Chaskin, R. J. (2001). Building Community Capacity: A Definitional Framework and Case Studies From a Comprehensive Community Initiative. *Urban affairs review*, *36*(3), 291-323.
- Conrad, D. A., Cave, S. H., Lucas, M., Harville, J., Shortell, S. M., Bazzoli, G. J., ... & Margolin, F. (2003). Community Care Networks: Linking Vision to Outcomes for Community Health Improvement. *Medical Care Research and Review*, 60(4_suppl), 95S-129S.
- Curriculum.nu. (2019). Curriculum.nu. Retrieved February 20, 2019, from https://www.curriculum.nu/
- Curriculum.nu. (2019, October 10). In *Facebook*. [Page]. Retrieved November 10, 2019, from https://www.facebook.com/curriculum.nu/
- Dekker, S. (2017). Beleidsregel Regelementen Curriculumontwikkeling Po en Vo. Staatscourant,

52221.

- Edelenbos, J., & Klijn, E. H. (2007). Trust in Complex Decision-Making Networks. *Administration & Society*, 39(1), 25-50.
- Elizondo-Montemayor, L., Hernandez-Escobar, C., Ayala-Aguirre, F., & Aguilar, G. M. (2008). Building a Sense of Ownership to Facilitate Change: The New Curriculum. *International Journal of Leadership in Education: Theory and Practice*, 11(1), 83–102.
- Eshuis, J. & Klijn, E. H. (2012). *Branding in Public Governance and Management*. New York: Routledge.
- Forsyth, D. R. (2014). *Group Dynamics*. Wadsworth: Cengage Learning.
- Freeman, J. (1997). Collaborative governance in the administrative state. *UCLA Law Review*, 45(1), 1-98.
- Gerrits, L. (2012). *Punching Clouds an Introduction to the Complexity of Public Decision-Making*. Litchfield Park: Emergent Publications.
- Hajer, M., & Versteeg, W. (2005). Performing Governance through Networks. *European Political Science*, 4(3), 340-347.
- Hardre´, P. L., Ge, X., & Thomas, M. K. (2006). An Investigation of Development Toward Instructional Design Expertise. *Performance Improvement Quarterly*, 19(4), 63–90.
- Hasnain-Wynia, R., Sofaer, S., Bazzoli, G. J., Alexander, J. A., Shortell, S. M., Conrad, D. A., ... & Sweney, J. (2003). Members' Perceptions of Community Care Network Partnerships' Effectiveness. *Medical Care Research and Review*, 60(4_suppl), 40S-62S.
- Haythornthwaite, C. (1996). Social Network Analysis: An Approach and Technique for the Study of Information Exchange. *Library & Information Science Research*, 18(4), 323-342.
- Hoad, T. F. (2003). Govern. In *The Concise Oxford Dictionary of English Etymology* (pp. 332). Oxford: Oxford University Press.
- Huizinga, T., Handelzats, A., Nieveen, N., & Voogt, J. M. (2014). Teacher Involvement in Curriculum Design: Need for Support to Enhance Teachers' Design Expertise. *Journal of Curriculum Studies*, 46(1), 33-57.
- Inspectie van het Onderwijs. (2018). *De Staat van het Onderwijs Onderwijsverslag 2016/2017*. Utrecht: Inspectie van het Onderwijs.
- Janis, I. L. (1982). *Groupthink: Psychological Studies of Policy Decisions and Fiascos*. Boston: Houghton Mifflin.
- Jennings Jr, E. T., & Ewalt, J. A. G. (1998). Interorganisational coordination, administrative consolidation, and policy performance. *Public Administration Review*, *58*(5), 417-429.
- Jessop, B. (1998). The Rise of Governance and the Risk of Failure: the Case of Economic Development. *International Social Science Journal*, 50(155), 29-45.
- Keast, R., Mandell, M. P., Brown, K., & Woolcock, G. (2004). Network Structures: Working Differently and Changing Expectations. *Public Administration Review*, 64(3), 363-371.

- Kenis, P., & Provan, K. G. (2009). Towards and Exogenous Theory of Public Network Performance. *Public Administration*, 87(3), 440-456.
- Klijn, E. H. (2008). Governance and Governance Networks in Europe. *Public Management Review*, 10(4), 505-525.
- Klijn, E. H., Edelenbos, J., & Steijn, B. (2010). Trust in Governance Networks: Its Impacts on Outcomes. *Administration & Society*, 42(2), 193-221.
- Klijn, E. H., & Koppenjan, J. F. M. (2012). Governance Network Theory: Past, Present and Future. *Policy and Politics*, 40(4), 187-206.
- Klijn, E. H., & Koppenjan, J. F. M. (2016). *Governance Networks in the Public Sector*. Oxon: Routledge.
- Klijn, E.H., Steijn, B., & Edelenbos, J. (2010). The Impact of Network Management Strategies on the Outcomes in Governance Networks. *Public Administration*, 88(4), 1063-1082.
- van der Wel, J., & Krooneman, P.(2019). De Leraar aan Zet De Rol van Leerkrachten en Schoolleiders binnen Curriculum.nu. Amsterdam: Regioplan
- Levi-Faur, D. (2012). From "Big Government" to "Big Governance". In D. Levi-Faur (Ed.), *The Oxford Handbook of Governance* (pp. 3-18). Oxford: Oxford University Press.
- Lynn Jr., L. E. (2012). The Many Faces of Governance: Adaptation? Transformation? Both? Neither?. In D. Levi-Faur (Ed.), *The Oxford Handbook of Governance* (pp. 49-64). Oxford: Oxford University Press.
- Maassen, P., Moen, E., & Stensaker, B. (2011). Reforming Higher Education in the Netherlands and Norway: The Role of the State and National Modes of Governance. *Policy Studies*, *32*(5), 479-495.
- Matthews, F. (2012). Governance and State Capacity. In D. Levi-Faur (Ed.), *The Oxford Handbook of Governance* (pp. 281-293). Oxford: Oxford University Press.
- Milward, H. B., & Provan, K. G. (1998). Measuring Network Structure. *Public Administration*, 76, 387-407.
- Ministry of Education. (2012). Enabling Innovation: Transforming Curriculum and Assessment.

 Retrieved April 5, 2019, from https://www.curriculum.gov.bc.ca/curriculum-info
- Ministry of Education. (2013). Exploring Curriculum Design: Transforming Curriculum and Assessment. Retrieved April 5, 2019, from https://www.curriculum.gov.bc.ca/curriculum-info
- Nieneen, N., & Berendsen, M. (2019). Curriculum waaier. Retrieved June 8, 2019, from https://magazines.slo.nl/curriculumwaaier#
- Nieveen, N., & Kuiper, W. (2012). Balancing Curriculum Freedom and Regulation in the Netherlands. *European Educational Research journal*, 11(3), 357-368.
- NOS. (2019). Advies: Lesstof voor Alle Nederlandse Leerlingen Moet Anders. Retrieved November 11, 2019, from https://nos.nl/artikel/2305462-advies-lesstof-voor-alle-nederlandse-leerlingen-moet-anders.html

- OECD. (2016). PISA 2015 results (volume II): Policies and Practices for Successful Schools. Paris: PISA, OECD Publishing.
- OECD. (2018). Education at a Glance 2018: OECD Indicators. Paris: OECD Publishing.
- Onderwijsraad. (2014). Advies: Een Eigentijds Curriculum. Den Haag: Drukkerij Excelsior.
- Onderwijsraad. (2018). Advies Curriculumvernieuwing. Retrieved, February 12, 2019, from https://www.onderwijsraad.nl/publicaties/adviezen/2018/12/13/curriculumvernieuwing
- O'Toole, L. J. (1997). Taking Networks Seriously: Practical and Research-Based Agendas in Public Administration. *Public Administration Review*, *57*(1), 45-52.
- O'Toole, L. J. (2014). Networks and Networking: The Public Administrative Agendas. *Public Administration Review*, 75(3), 361-371.
- Peters, B. G. (1994) Managing the Hollow State. *International Journal of Public Administration*, 17, 739–756.
- Platform Onderwijs2032. (2016a). Ons Onderwijs2032 Eindadvies. Den Haag: Impressed druk.
- Platform Onderwijs2032. (2016b). Over Onderwijs2032. Retrieved April 2, 2019, from http://magazine.onderwijs2032.nl/onderwijs2032-in-de-praktijk#!/over-onderwijs2032
- POinActie. (n.d.). Manifest. Retrieved February 2, 2019, from https://www.poinactie.nl/manifest/
- Provan, K. G., & Kenis, P. (2008). Modes of Network Governance: Structure, Management, and Effectiveness. *Journal of Public Administration Research and Theory*, 18(2), 229-252.
- Provan, K. G., & Milward, H. B. (2001). Do Networks Really Work? A Framework for Evaluating Public-Sector Organisational Networks. *Public Administration Review*, *61*(4), 414-423.
- Provan, K. G., & Sebastian, J. G. (1998). Networks within Networks: Service Link Overlap,
 Organisational Cliques, and Network Effectiveness. *The Academy of Management Journal*,
 41(4), 453-463
- Raab, J., Mannak, R. S., & Cambré, B. (2013). Combining Structure, Governance, and Context: A Configurational Approach to Network Effectiveness. *Journal of Public Administration Research and Theory*, 25(2), 479-51.
- Raab, J., & Milward, H. B. (2003). Dark Networks as Problems. *Journal of Public Administration Research and Theory: J-Part, 13*(4), 413-439.
- Retrum, J. H., Chapman, C. L., & Varda, D. M. (2013). Implications of Network Structure on Public Health Collaboratives. *Health Education & Behavior*, 40(1_suppl), 13S-23S.
- Rhodes, R. A. W. (1994). The Hollowing Out of the State: The Changing Nature of the Public Service in Britain. *Political Quarterly*, 65, 138–151.
- Rhodes, R. A. W. (1996). The new governance: Governing without government. *Political Studies*, 44(4), 652-667.
- Rijksoverheid. (2019). Toekomstgericht Curriculum. Retrieved February 2, 2019, from https://www.rijksoverheid.nl/onderwerpen/toekomst-onderwijs/toekomstgericht-curriculum
- Saz-Carranza, A., & Ospina, S. M. (2010). The Behavioral Dimension of Governing Interorganisational

- Goal-Directed Networks—Managing the Unity-Diversity Tension. *Journal of Public Administration Research and Theory*, 21(2), 327-365.
- Sekaran, U., & Bougie, R. (2013). *Research Methods for Business. A Skill-Building Approach*. West Sussex: John Wiley & Sons Ltd.
- Senge, P. M. (1997). The Fifth Discipline. *Measuring Business Excellence*, 1(3), 46-51.
- Shaw, M. E. (1964). Communication Networks. *Advances in Experimental Social Psychology, 1*, 111-147.
- Slaman, P. (2018). Inleiding. In P. Slaman (Ed.), In de Regel Vrij (pp. 11-16). De Bilt: HaEs Producties.
- Slob, A. (2018) Verloop en Vervolg Curriculumherziening Primair en Voortgezet Onderwijs [kamerbrief]. Retrieved February 2, 2019, from https://www.rijksoverheid.nl/documenten/kamerstukken/2018/12/20/kamerbrief-over-het-verloop-en-vervolg-curriculumherziening-primair-en-voortgezet-onderwijs
- Sørensen, E., Torfing, J. (2005). The Democratic Anchorage of Governance Networks. *Scandinavian Political Studies*, 28(3), 195-218
- Stoker, G. (1998). Governance as Theory: Five Propositions. *International Social Science Journal*, 50(155), 17-28.
- Torfing, J. (2005). Governance Network Theory: Towards a Second Generation. *European Political Science*, 4(3), 305-315.
- Torfing, J. (2012). Governance networks. In D. Levi-Faur (Ed.), *The Oxford Handbook of Governance* (pp. 99-112). Oxford: Oxford University Press.
- Turrini, A., Cristofoli, D., Frosini, F. & Nasi, G. (2010). Networking Literature about Determinants of Network Effectiveness. *Public Administration*, 88(2), 528-550.
- Tushman, M. L., & Scanlan, T. J. (1981). Boundary Spanning Individuals: Their Role in Information Transfer and Their Antecedents. *Academy of Management Journal*, 24(2), 289-305.
- Veugelers, W. (2004). Between Control and Autonomy: Restructuring Secondary Education in the Netherlands. *Journal of Educational Change*, 5(2), 141-160.
- VOinActie. (2019). Manifest. Retrieved February 2, 2019, from https://voinactie.nu/ons-manifest/
- Waslander, S., Hooge, E., & Drewes, T. (2016). Steering Dynamics in the Dutch Education System. *European Journal of Education*, 51(4), 478-494.

Appendix A: Topic list interviews

Original, Dutch version

Algemeen

- Wie
- Hoe bij Curriculum.nu
- Wat is Curriculum.nu
- Waarom Curriculum.nu (Probleem & doel)
- Eigen rol in Curriculum.nu

Structuur

- Netwerk in kaart (rollen + verbindingen)
- Communicatie (hoe, wat, naar wie)
- Netwerk sturing (wie, waar)
- Regels (verantwoordelijkheid duidelijk, formeel/informeel)
- Integratie (diversiteit, representatie, open, gebruik bijdrages, eenheid)

Uitkomsten

- Support? Vertrouwen?
- Efficiency?
- Effectief? Innovatief?
- Problemen opgelost? Doel bereikt?
- Gebruik in toekomst van document & groep?
- Wat gaat goed, wat minder? Curriculu.nu 2.0: Wat zelfde, wat anders?

English translation

General

- Who
- How part of Curriculum.nu
- What is Curriculum.nu
- Why Curriculum.nu (probelm & goal)
- Own role in Curriculum.nu

Structure

- Mapping the network (roles & connections)
- Communication (how, what, to whom)
- Netwerk steering (who, where)
- Rules (responsibilities clear, formal/informal)
- Integration (diversity, representation, open, use of contribution, wholeness)

Outcomes

- Support? trust?
- Efficiency?
- Effectiveness? Innovative?
- Problems solved? Goals achieved?
- Future use of documents & group?
- Plusses, minusses? Curriculu.nu 2.0: what same, what different?

Appendix B: Informed consent

At the beginning of each interview the following points regarding informed consent were discussed:

• The topic of the research.

Original, Dutch version

Naam:

- The reason of this research.
- The anonymity of the respondent.
- The non-publication of the research other than the Erasmus University.
- The collection, use and archiving of the data.

Voor vragen kunt u contact opnemen met Eva Blom.

Email: evablom96@gmail.com

- The possibility to always withdraw from the research.
- Contact details of the researcher for further questions.

Followed by a written consent given in an informed consent form.

deelname aan het onderzoek. Ik geef toestemming tot het verzamelen en verwerken van mijn respons en het archiveren van de data. Ik begrijp dat ik mij en mijn toestemming terug kan trekken uit het onderzoek zonder een reden hiervoor te geven. Ik ga akkoord dat de resultaten van het onderzoek beschikbaar worden gesteld aan de Erasmus Universiteit.
Handtekening respondent:
Onderzoeker: Ik heb mondeling toelichting verstrekt over de aard, methode en doel van het Onderzoek, en anonymisering. Ik verklaar mij bereid nog opkomende vragen over het onderzoek naar vermogen te beantwoorden.
Handtekening onderzoeker:

Respondent: Ik verklaar uitleg te hebben gehad over het onderzoek en ik ga akkoord met

Engl	ish	transl	ation
111121	1911	u ansi	auon

Email: evablom96@gmail.com

Name:

Respondent: I declare having received an explanation on the purpose of the research and I agree to participate in the research. I consent to the collection and use of my response and the archiving of the data. I understand that I can withdraw from the research at any point in time without having to give an explanation. I consent to making the results of the research available to Erasmus University.

Signature respondent:
Researcher: I gave verbal explanation on the method and aim of this research, and the anonymisation of responses. I declare myself open to answer any questions to my best possibilities.
Signature researcher:
For questions, please contact Eva Blom.

Appendix C: List of participants

Participant 1 – PO-raad employee

Participant 2 – SLO employee

Participant 3 – Project bureau

Participant 4 – Content supervisor

Participant 5 – Design school

Participant 6 – Design school

Participant 7 – Coordination group

Participant 8 – Coordination group

Participant 9 – Design school

Participant 10 – Design school

Participant 11 – Coordination group

Participant 12 – Advisory group

Participant 13 – Content supervisor

Participant 14 – Design school

Transcriptions of the interviews are available per request, after further consent of the respondent.

Appendix D: Coding scheme

