The impact of PISA on national educational policies: The case of the Netherlands

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MASTER THESIS PUBLIC MANAGEMENT & LEADERSHIP

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August 2nd 2021
Word count (excluding references): 18389

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Foreword

After studying for many years at Leiden University, the time has come to hand in my master thesis and complete my master's degree in Public Management and Leadership. While following this master program, I have gained knowledge about multiple subjects: how to effectively manage public organizations internally and externally and how ambiguous the goals of public organizations can be. Most rewarding, I have developed leadership competencies like, envisioning, motivating and empowering.

This thesis investigates the effect of the Program for International Student Assessment (PISA) on Dutch educational policies. PISA measures the ability of 15-year-olds their reading, mathematics and science. Because of my life experiences, I always had an affinity with the educational sector in the Netherlands. Yet, I would have never chosen this topic if it was not for my thesis supervisor Dr. V.E. Pattyn, who gave multiple suggestions for research topics. The choice to do a qualitative content analysis was the only thing I knew for sure. For my bachelor thesis, I needed interviews with municipalities amidst the Corona crisis. Never have I been more stressed in my life. Statistical analysis was never my strong suit, and I knew that using a content analysis would mean that the only person stopping me would be me.

This thesis would be an exciting read for anyone affiliated with the educational sector or who wants a better understanding of the impact of international benchmarking on a national context. It is a must-read for policymakers in the educational sector

Graduating has been an intense and quite lonely process last year. Get up, move to my desk and move back to my bed. Nevertheless, I am grateful for how Leiden University handled the crisis. Last year I gained skills that will help me for the rest of my lifetime.

I am grateful for all my lecturers at Leiden University for giving their best and providing me with the knowledge to succeed in life. I want to especially thank Dr. V.E. Pattyn. Without her, I would have been lost. She helped me choose a topic, was always available for questions and gave the best feedback I could ask for. She went above and beyond with her guidance, patience and advice throughout the whole research project.

I hope you enjoy reading my research,

Coen van Eijkelenburg

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I | Introduction

In the late nineties, members of the Organisation of Economic Cooperation and Development (OECD) wanted more reliable and regular data concerning their education systems. This way, comparative studies could be done, and member states would notice flaws in their educational systems easier (UNICEF, 2009). In response, the OECD started working on a test that could compare students internationally. In 1997 the Programme for International Student Assessment (PISA) was created (OECD, 2012). This test aims to measure how well students are prepared for integrating into the knowledge society at the end of their compulsory education and is conducted every three years. The test tries to assess students' real-life knowledge and skills instead of focusing on the school curriculum. Such as collaborative problem solving, life-long learning and procedural knowledge (Unicef, 2009).

However, the PISA test indicates that the academic performance of Dutch students is steadily declining, especially in the domain of reading (Van Nieuwstadt, 2019). The most recent PISA test, performed in 2018, show that the Netherlands is currently below the average of the 37 OECD countries (Sleicher, 2019). According to Henrik de Moel, the director of the General Education Union in the Netherlands: "*It is a shame; it is preposterous that we find it impossible to keep our education up to standard in a rich country such as the Netherlands"* (Van Nieuwstadt, 2019). On average, every country's score is declining, but the Netherlands is losing the most in reading skills of any participating country.

Multiple causes within the Dutch education system can be found as an explanation for this phenomenon. On average, a Dutch teacher does not have enough time to focus on helping individual students (De Moel, 2019). When a parent notices their child needs personal attention, they need to pay for tutoring. In 2019, 31% of students in higher education used tutoring outside of regular school hours. It is estimated that the costs are between 142 and 207 million euros each year (De Moel, 2019). The real problem occurs when a parent cannot afford extra tutoring. This creates a rift in possibilities for children, which contributes to a division in education and eventually in society (De Moel, 2019).

Nevertheless, Dutch exam grades are remarkably up to standard. This seems contradictory to the PISA results. In response, the Ministry of Education Culture and Science has appointed an independent organization to explain this discrepancy. They concluded that Dutch schools start to focus their curriculum on the exams in the final year and students have an increased motivation near the end of their compulsory school career (CITO, 2019). However, this does not explain why Dutch students currently perform worse on the PISA tests

than in earlier years. The general education union claims that, if educational policies stay unchanged, the problems of the Dutch educational system will grow. The lack of teachers in primary education and the rise of unqualified personnel teaching classes will further decrease the skills of Dutch children. This will not be limited to reading but will spread to science and math (Van Nieuwstadt, 2019).

1.1 Research Question and motivation

PISA is an international benchmarking tool that shows results over time. The test has two functions. It shows the results of educational performance over time and suggests improvements. These suggestions are based on correlations retrieved from educational systems in countries with above-average PISA results (Schleicher, 2019).

The PISA results cause a global discussion about educational policies and reform every three years. International and national media fuel these discussions across the OECD countries and countries close to them (Cihangir, 2020; Goldstein, 2019). Despite acknowledging that PISA is an interesting topic to discuss, research about its effect on national educational policies and reform is sparse. In 2014 Hanberger tested the validity on which the assumptions of PISA were built. He concluded that PISA at its core has low validity. His paper ends with the following sentence: "*Whether and, if so, why and under what conditions PISA contributes to change in education systems and school practices is an empirical question waiting to be answered."* (Hanberger, 2014 p. 177). Nortvedt conducted research in 2018 about the policy implications of PISA in the Norwegian context. He concluded that international studies such as PISA might be merely used to validate existing policy directions. These questions have already inspired much research on different national contexts, authors include: (Ertl, 2006; Egelund, 2008; Grek, 2009; Takayama, 2008; Martens, et al., 2010; Bieber, 2010; Niemann, 2010; Walkenhorst, 2010; Dobbins, 2010; Hopkins, et al., 2008). However, these papers have one thing in common. They notice an effect but do not explain how the effect occurred. This research, on the other hand, aims to fill that gap by using the theoretical approach of transnational steering and policy diffusion as the mechanism to explain how PISA can establish change and how policies are legitimized using the PISA results. Furthermore, this thesis will be focused on the Netherlands. While many case studies have been performed on European countries, not a single one has explicitly focused on the Netherlands. An in-depth explanation will be provided in the literature review.

In a strongly globalized world, education is the driving force for countries to gain a competitive advantage. The rate of innovation, the workforce's average skill level, and human capital development rely on education (Rae & Sollie, 2007). The increasing influence of international benchmarking on national educational policies (Broome et al., 2017) is relevant for any domestic policy-maker in that field, especially with the rising problems of education in the Netherlands concerning reading, mathematics and science. This research will look at how the PISA test has influenced the national educational laws of the Netherlands and is therefore especially relevant for Dutch policymakers.

This research examines the impact of PISA as an international benchmarking tool on national educational policies in the Netherlands. My research aims to answer the question: *How do the PISA benchmarks affect Dutch educational policies?*

1.2 Outline

In Chapter II, the research literature concerning PISA as an international benchmarking tool will be reviewed. Earlier research and their implications will be discussed. Transnational policy steering and, specifically, policy emulation will be explained. Furthermore, this research will look into how PISA can be used to legitimize current educational policies. This leads to the hypotheses. This chapter concludes with the conceptualization and operationalization.

In Chapter III, the methodology is outlined. The choice for a content analysis will be argued, and the approach explained. The chapter will finish with a summary of the three PISA tests relevant to this research.

In the fourth chapter, the findings will be presented per hypothesis. A table will be presented to give a clear overview. In the fifth chapter the findings are analysed using the theoretical approach used in the second chapter. The sixth chapter consists of the conclusion and discussion in which the research findings are summarized and areas for further study identified.

II | Literature review

This research focuses on the role of international benchmarking in evidence-informed policymaking, specifically PISA. First, the PISA test will be explained. Second, what benchmarking is and connecting this to PISA by explaining how benchmarking is executed in an international context. Third, previous research concerning PISA in OECD countries and which gap this research aims to fill. Fourth, transnational policy steering will be described and connected to PISA. Relevant articles and their implications will be discussed, together with their hypothesized link to changes in the Dutch educational system. Finally, the chapter will conclude with the conceptualization and operationalization.

2.1 PISA

In 1997 the OECD asked themselves the following question: "*What is important for citizens to know and be able to do?"* (OECD, 2017). To answer that question and adhere to the member states' demands, who wanted more data to cross-examine student achievements, the OECD created PISA. PISA tests 15-year-old-students who are near the end of their compulsory education. It measures to which extent these students have gained the necessary knowledge and skills to participate in modern society. The first test was conducted in 2000 (OECD, 2017).

PISA is conducted every three years and has three benchmarks: Mathematics, reading, and science. PISA highlights one of these benchmarks every three years and will give it more attention, about two-thirds of the test. PISA is not interested in reproducing knowledge such as on conventional exams. Instead, the test focuses on how well students can extrapolate from their knowledge and use it in familiar and unfamiliar settings. This coincides with the notion that modern economies reward individuals not for their knowledge but for using their knowledge (OECD, 2017).

The test not only focuses on these three domains, but also has a questionnaire about the home situation of students and approaches to learning. These questionnaires are given to students, teachers, parents, and school principals (OECD, 2017).

While alternating the domains that receive special attention, an in-depth analysis of the three domains is performed every nine years. The trend of the PISA benchmarks is shown each three years. These results combined with the answers to the questionnaires present three types of outcomes. First, indicators show what level of knowledge and skills students possess. Second, in combination with the questionnaires, one can conclude how these levels correspond with socioeconomic background and educational variables. Finally, PISA shows how outcome

levels change through the years. In other words, how the relationships between student-level, school-level, and system-level changes. (OECD, 2017).

PISA is unique. It is the most comprehensive international programme to collect data on student performance. Above that, PISA gathers information on the family situation of students and institutional factors that can explain a difference in performance. The decision of which questions to include in the test and questionnaires to comprehend background situations are made jointly with leading experts and governments of participating countries. The linguistical interpretation of different languages is taken into account in formulating the questions. Furthermore, quality assurance mechanisms are enforced in data collection and translation. Thus, PISA has high reliability and validity (OECD, 2012).

PISA has several distinctive features, the first being policy orientation. Because it couples the students' performance, education method, and background, it becomes easier to notice which policies are working and which are not. Another feature is the innovative way in which literacy is conceptualized. PISA looks at how students can apply knowledge out of their usual confinements, as well as analyse, reason, and communicate effectively while identifying and solving problems. Furthermore, the regularity in which the test takes place is unique. This regularity enables countries to monitor their progress. Lastly, the PISA test is conducted in all 34 OECD countries and 38 partner countries, so it has extensive coverage. (OECD, 2017). The next subchapter will explain what benchmarking is.

2.2 Benchmarking

Benchmarking originated from civil engineers in 1980, they used it in construction to measure against a standard. Nowadays, it has a broad conceptualization and is widely used in the corporate and public domains. (Bessant et al., 2006). International benchmarking has become mainstream in the public policy field. It refers to "the systematic measurement and comparison among countries against a selected set of indicators." (Dominique et al., 2013, p.504). The public sector sees benchmarking as an objective and trustworthy approach to improve performance by measuring and comparing (Bessant et al., 2006).

Benchmarking usually consists of four aspects. First, the best performers need to be identified because then other performers can draw lessons from them. Second, there needs to be a selection of relevant qualitative and quantitative indicators to measure performance. Without these indicators, a comparison would be fruitless. Third, there is realistic implantation of actions that makes improving performance possible. Fourth, the results need to be evaluated

and monitored (Dominque et al., 2013). Defining aspects of benchmarking is identifying an external standard to which can be compared and a measurement approach that is objective and generates action (Leibfried & McNair, 1992). However, this research will focus on international benchmarking, which is slightly different.

In international benchmarking, there is a comparison between countries based on predetermined criteria. International benchmarking is performed to learn from it. Applied to policy learning, it can take several shapes. It could be copying, which is using it directly as suggested. Another shape is emulation. Emulation means that a country is institutionalizing a foreign application as the best option to solve a problem domestically. There is also hybridization; this takes several foreign lessons from benchmarking, combines them, and implements them domestically. Finally, it can serve as an inspiration. Ideas and proposals presented due to international benchmarking can stimulate new ways of thinking domestically (Evans, 2004).

International benchmarking seems like an excellent method to learn and create policies because it is based on three optimistic assumptions, which do not always translate into the real world. It assumes that policy lessons can be applied in different contexts. Also, it presumes that policymakers are driven to take an active interest in other countries and administer information into domestic policy design. Lastly, it theorizes that the approach to policy learning is objective and rational, therefore legitimate (Dominique et al., 2013)

The notion that lessons from international benchmarking can be translated and adapted into domestic policies by policymakers seems to uphold most of the time (Groenendijk, 2009). However, it heavily depends on how diverse the policy context is and that policymakers share common values, at least on the researched issue (Groenendijk, 2009). It is optimistic to think that policymakers are driven and take an active interest in other countries. That would assume that they pursue continuous improvement and are open to reciprocal learning practices. In reality, domestic policymakers can use international benchmarking to advance their agenda (Sisson et al., 2003). The notion that international benchmarking is objective and rational implies that it is a neutral instrument and legitimate. However, in practice, the indicators are being chosen through a normative lens. Which means there is always some bias (Goodin et al., 2008).

Nevertheless, benchmarking has made an entrance into multiple international public institutions concerned with public policymaking. Organizations such as the OECD and the European Commission regard this method of high value because it facilitates learning between

member states. Organizations like the United Nations and the World Bank use international benchmarking to improve their advisory and research capacity (Dominique et al., 2013). More notable examples include the World Bank's Ease of Doing Business Index that compares business regulations between countries, and the OECD's PISA. The next part of this research will explain what research about PISA on the OECD countries has been performed before and which gaps exist in literature that this thesis will answer.

2.3 Earlier research & contribution

When the first PISA results came in from the 2000 and the 2004 tests, there was no massive response from the OECD member states. Only a few countries acted upon the scores that their students had achieved. Countries like Germany, Denmark, and Japan intensively changed their educational policies after the disappointing results compared to other countries (Ertl, 2006; Egelund, 2008; Grek, 2009; Takayama, 2008).

Germany expected much higher results; it sparked a sustained public debate about current educational policies and reform known as the *'PISA shock'* (Ertl, 2006). This debate, created due to the PISA results, led to significant educational reforms. Germany implemented national standards for schools, and support for disadvantaged students was increased, especially for those with an immigrant background (Ertl, 2006). Another comparative study that looked into Germany found the same results (Grek, 2009). Besides Germany, this study also looked into how Finland and the United Kingdom reacted to the first two PISA results. In Finland, the scores from the PISA test from 2000 came as a surprise. This is because of the unexpectedly high scores and international attention (Grek, 2009). The United Kingdom gave the test results little media attention, and no reforms were proposed in reaction. However, the government promoted the results in the media and stated that the country can be proud of the results (Grek, 2009). The research concludes that national governments can use PISA as a governing resource. It enables policymakers to justify their educational reforms based on evidence from international benchmarking (Grek, 2009).

Denmark was another country where the public debate about educational policies was intensified after the PISA results from 2000. The Danish were surprised as to how their well-funded educational system only delivered average outcomes. Furthermore, they did not understand how social equity presented a problem while significant investments in social welfare programs were made (Egelund, 2008). However, despite the impact on public debate, actual changes only occurred after an international review of the results. This moved Denmark

to implement a wide range of reform policies, including increasing the quality and frequency of national evaluation of their educational policies and adopting new strategies to target disadvantaged students and students with an immigration background (Egelund, 2008).

Lastly, Japan had an apparent reaction to the PISA results from 2003. Japan was one of the top performers from the test of 2000. However, the following PISA results in 2003 showed a steep decline (Takayama, 2008). The country responded by reversing a policy change made earlier that year, which promoted a low-pressure curriculum and changed the national assessment methods (Takayama, 2008).

Another comparative study researched if PISA could converge educational policies across Switzerland, Germany, New Zealand, the United Kingdom, and the USA (Martens, et al., 2010). They noticed that Switzerland and Germany made excessive educational reforms because of the lower-than-expected results (Bieber, 2010; Niemann, 2010). While New Zealand, the United Kingdom, and the USA did not reform educational policies at all. However, it should be noted that the United Kingdom's lack of response to its moderate results is due to an overhaul of educational policies in the country a few years prior (Walkenhorst, 2010). New Zealand had a slightly above-average score and was thus content with its existing policies and reassured its current policies were working (Dobbins, 2010). The USA was mentally prepared for its poor results through different domestic evaluation programs. So, unlike Germany, the results came as no surprise (Martens and Niemann, 2010).

In 2008 the OECD requested an external evaluation of PISA's policy impact on its participants (Hopkins et al., 2008). This research studied the relevance, effectiveness, sustainability, and unexpected effects of PISA on participating countries. It was a quantitative study, but Canada, Hong Kong, Norway, Spain, and Poland were picked for a qualitative case study. The research concluded that the reaction was most noticeable at the national level and barely noticeable at the local level of each country. The OECD research further emphasizes that members appreciate the skills tested in PISA. PISA was regularly used as a tool to monitor a country's performance. PISA's influence on national educational policies was slowly growing over time (Hopkins et al., 2008).

Another research aimed to include all the countries in which the PISA test is conducted. Only one national representative of each country was interviewed using a questionnaire sent in 2011 asking about the 2009 PISA results (Breakspear, 2012). Despite the limited respondents, the scale of the research makes it of interest. The study found that nearly all the participating countries integrate PISA into their national policies and use it to evaluate their educational

policies. The gross of the participating countries also state that they use PISA as an indicator for systematic performance. Countries see PISA as capable of setting the agenda about educational policies on the national and local levels. Furthermore, PISA is responsible for creating and improving evaluations of education in its participating countries. Multiple countries have taken the PISA scores as direct targets in which they wish to score a relative rank or absolute points. PISA policy findings have also affected the national policies of several countries. According to the research from Breakspear (2012), PISA-based policy findings, taken from factors that correlate with higher performance, are responsible for the majority of reformed educational policies within the participating countries. The representative of the Netherlands implied that PISA is used as an indicator (Breakspear, 2012)

Research focused on the Netherlands using PISA has been done, but it is limited. For example, the effect of PISA as an international benchmark on educational policies has not been performed. In 2012 research was published which aimed to answer the question: "*Are we heading in the right directio*n?" (Eijkelhof et al., 2012). The research was focused on the sustainability of current educational policies. There were several 'worrying' trends. The neighbouring countries were catching up in absolute PISA scores. Most ambitious innovations concerning the curriculum were conducted in secondary education, and intense debates were going on concerning the merits of said innovation (Eijkelhof et al., 2012). The research suggested that the current knowledge in science of Dutch students is a serious policy concern.

Another comparative analysis concerning PISA and the Netherlands was performed in 2020. Its purpose was to investigate the indirect evidence that Dutch students are less motivated to perform well on a test of which the stakes are low for them (Feskens et al., 2020). In this analysis, students from the Netherlands were compared to students from Denmark, Germany, The United Kingdom, Norway, Flanders, and Sweden.

The literature in Europe shows what the impact of PISA can be on national governments. It can be tremendous, like in Germany, where the educational system is completely overhauled (Ertl, 2006), or practically non-existent such as in the United Kingdom (Walkenhorst, 2010). However, not much is known about how PISA affects countries. Previous research states that PISA affects national policies. It even explains in some cases what kind of changes were put in place, but the process of how it happens is unexplored in most cases. Since so many countries have been affected by the PISA tests and there is no coherent research into the ‘how’ question, this research will fill this gap.

PISA has become a 'social phenomenon,' it can influence public opinion, lead educational policy priorities, and instigate action. (Meyer & Benavot, 2013). To better grasp PISA, there is a need for ongoing cases to see how PISA is used in national educational policymaking. Furthermore, research about PISA in the Netherlands is severely limited. So, using the Netherlands as a case study will help fill this gap as well. In the first place, I will use transnational policy steering to explain how PISA affects the creation of national policies in the Netherlands. In the second place, I will explain how the Netherlands use the PISA findings to legitimize their current policies. This research will examine which impact PISA has had on the Dutch educational policies and reforms in the last seven years. The following section will explain what theoretical approach is chosen in this research.

2.4 Transnational policy steering

This research uses transnational policy steering to explain how PISA as an international benchmarking tool impacted Dutch educational policies. International actions of education policy formation consist of processes that are distinguished by the participation of domestic and international actors, in which national political and governmental representatives participate to formulate policies. These could be any official policy statement, including educational policies (Edwards, 2012).

Earlier studies have used transnational steering as a form of soft power in creating educational policies on the national level (Edwards, 2012). As opposed to hard power that relies on issuing sanctions and rewards, soft power can influence other people to outcomes you want, depending on co-opting instead of coercion (Nye, 2004). A study that looked into soft power by comparing the USA and Switzerland framed how the OECD used the PISA test to guide national educational policymaking (Bieber and Martens, 2011). Instead of claiming that soft power or steering is unguided, they demonstrated how national elements moderate the influence of the OECD. This shows the complicated relationship between international organizations and national educational policymaking. Several other studies have illustrated as well how the OECD changes national educational systems bottom-up and top-down (Lingard & Sellar, 2013, 2014).

Educational policies are being changed on a global scale using international comparisons (Robertson, 2012). This is not a new trend, since the 1980s, there has been a movement towards competitive comparison (Robertson, 2012). International organizations like the OECD use benchmarks and cross-national achievements to compare national educational

systems and rank countries accordingly.

The OECD publicly advertises the increasing importance of the need for systems to make international comparisons concerning education possible (Sellar & Lungard, 2013). By producing comparative information and international indicators relevant to national policymakers concerning education, the OECD shapes policy agendas and promotes international educational policy convergence (Grek, 2009). One of the most influential combinations of educational indicators is the OECD's 'Education at a Glance' (Gorur, 2014). It helps countries in goal setting, measuring system-wide progress and legitimising education ideas nationally (Rutkowski & Rutkowski, 2010).

While participating in the PISA test is voluntary, an increasing number of countries do so (Engel & Frizell, 2015). Existing literature has used the concept of 'voluntary policy convergence' to seek out how soft power is used and to explain the motive for participating in international comparative assessments (Bieber & Martens, 2011). Increased participation in international comparative research makes the OECD more powerful. They will be able to act as agents instead of only data collectors within countries and direct the course without actually being there (Robertson, 2012).

PISA is also becoming more powerful through diffusion (Bieber et al., 2014). Diffusion is a way in which transnational policy steering can occur. The diffusion approach presumes that international organizations and programs can aggravate changes in policies, such as educational policies, by advocating specific policy models (Bieber et al., 2014).

There are three different kinds of diffusion mechanisms that can explain the dissemination of policies. These are policy emulation, policy learning, and regulative competition. Policy emulation implies that states copy international models while making domestic policies to increase their legitimacy (Bieber et al., 2014). Policy learning claims that international organizations promote specific policies. Policies are adopted because they assure better results. Regulative competition is seen when a country is focused on improving its effectiveness of national institutions compared to national institutions of other countries (Bieber et al., 2014).

This research focuses on policy emulation. I believe policy emulation is the best mechanism to use in this research because it describes how a national entity can be influenced to change by an international actor. As opposed by policy learning where an international actor directly suggests what a national entity should do. When policymakers are confronted with high uncertainty, they may try to increase the legitimacy of their proposals by copying the best

practices from other countries or international organizations (Heritier and Knill, 2001). Policy emulation legitimizes new policies because they originate from international models (Bieber et al., 2014). While simultaneously, states or international organizations that are seen as successful introduce which political resolutions should be legitimate. In this context, peer pressure from other actors such as OECD member states plays a sizeable part. Through this mechanism, domestic policymakers are influenced by their colleagues and contemplate their suggestions. Applying this to international benchmarking and, specifically, PISA can lead to a transformation of educational policies (Bieber et al., 2014). This leads to the first hypothesis:

H1: PISA benchmarks enable policy emulation and affect Dutch educational policies

PISA benchmarks can legitimize existing educational policies if countries are performing consistently well in the test. The report "Education at a glance" (Gorur, 2014) shows correlations between countries with high PISA scores and their educational policies. By manufacturing this evidence, PISA permits the OECD to validate soft power through direct influence such as policy recommendations based on correlations or indirect influence such as the benchmarks being used as national indicators. Therefore, it can help countries set targets and make vague terms like increasing efficiency or raising the quality into measurable goals (Engel, 2015). Concrete indicators on the national level are becoming increasingly aligned with international benchmarking. These indicators can legitimize current policies (Engel, 2015). A national government could choose to incorporate the benchmarks of PISA into national indicators. Countries like Denmark, Germany, Finland, and many more already have chosen to do so (Grek, 2009; Rangvid, 2008; Waldow). Policymakers could legitimize their own policies using these indicators to show a positive signal or when the targets are met. Research performed in Canada showed how the government legitimized existing policies that were designed to combat low student performance by referring to the increased PISA benchmarks. (Engel & Frizzel, 2015). An international comparison from Fischman et al. (2017) showed that international benchmarks such as PISA are regularly used to justify existing reforms or validate and legitimize current policies to maintain the status quo. This leads to the second hypothesis:

H2: PISA benchmarks legitimize existing educational policies in the Netherlands

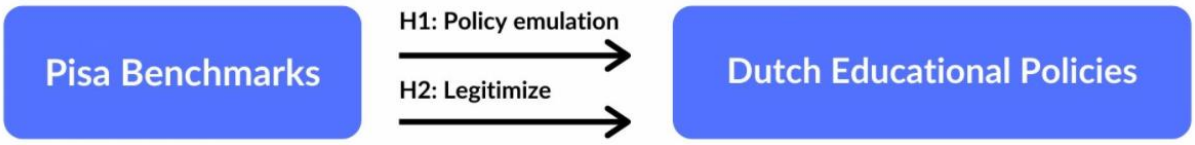
The first hypothesis tests the influence and legitimization of new policies; the second hypothesis only focuses on existing policies. The choice to only focus on existing policies was made to prevent overlap between the hypotheses.

2.5 Conceptual model

Based on the theoretical approach in which PISA is presented as an evidence-informed benchmarking tool, it is expected that international benchmarking conceives competitive- and normative pressure on Dutch educational policies through transnational policy steering. The ongoing results from PISA, in which national policymakers compare their results with other countries, are expected to stimulate Dutch policymakers to revise their educational policies.

The PISA benchmarks are the scores of the Netherlands in math, reading, and science absolute or relative to other countries and through the years. Besides these scores, the test also requires schools and parents to fill in questionnaires about the students' background and their schools. This information is used in combination with the benchmarks to show correlations. So, both the scores, answers to the questionnaires and found correlations will be used.

Dutch educational policies will be studied on the national level in the Dutch Parliament and adhere to the definition provided by Birkland (2001); policies are the government's decision to act, or not to act, to change or maintain some part of the status quo. Below is the model that shows the relationship between the PISA benchmarks, the independent variable, and the Dutch educational policies, the dependent variable. The arrows represent the two hypotheses.



2.6 Operationalization

Besides conceptualizing the variables, it is necessary to operationalise them in ways that enable measurement. The definition of policy used by Birkland (2001) will be used in this research. He states that policies are the government's decision to act, or not to act, to change or maintain some part of the status quo. That means this research will look into accepted educational reforms and proposed educational policies based on PISA that were not ratified.

To see whether PISA benchmarks enable policy emulation in the Netherlands, Breakspear's (2012) research will be used. He describes the primary way how countries use the PISA results; this is policy emulation. Breakspear (2012) describes it as: "If the PISA results are used in the policymaking progress, and educational policies and reforms are presented due to the countries' performance in the PISA test. It indicates that a country legitimizes new policies because they originate from the PISA results". (Breakspear, 2012, p. 8). If evidence of this kind is found, it would support the first hypothesis that PISA benchmarks enable policy emulation in the Netherlands.

To find support for the second hypothesis that the PISA benchmarks are being used to legitimize existing policies, the research of Broome and Quirk (2015) is used. They found that benchmarks help to reinforce established policies and organisational practices. This occurs when national leaders and other political actors repeatedly claim credit for an improvement in a benchmark or global rating. Benchmarks, therefore, become an instrument in legitimizing the status quo, and political actors may even use them to deflect or dismiss a different course of action. If evidence is found that the Netherlands uses the PISA benchmarks to repeatedly claim credit or use it to deflect or dismiss suggestions for a different course of action, it would strongly support the second hypothesis. This means that if the PISA test shows positive results on a subject for which the Dutch government implemented new laws and they use this to claim credit for said policy, the PISA results could be used to legitimise these policies. The same results can also be applied to critique on whether specific policies should change. This is because if the PISA benchmarks show positive results, the Dutch government could legitimize the current laws instead of creating new ones. These assumptions will be used to see in which way the PISA benchmarks affect Dutch educational policies.

III | Methodology

This section justifies the methodology used in this research. This thesis will use qualitative content analysis to research which way PISA influences Dutch educational policies. The study focuses on educational policies as described in the operationalization, reports about educational policies, resolutions for educational policies, and ministerial notes that mention PISA. The period and how educational policies are chosen can be found in this chapter.

3.1 Content Analysis

Qualitative content analysis is a known way to approach textual content analysis (Berelson, 1952). It is a method that originated in Social and Health Sciences and only recently has been used to study policies (Hall & Wright, 2008). Content analysis is a systematic way and objective means of describing phenomena (Schreier, 2012). It is performed based on the notion that data can be reduced to concepts (Morgan, 1993). This chapter will describe how the analysis was performed.

In order to delve into resolutions for educational policies, ministerial notes, and eventually educational policies, content analysis is ideal for several reasons. First, unlike interviews or observation, it is unobtrusive. It does not disturb people, so it is based on what has been recorded, unlike an interview in which someone can misremember. Second, unlike most qualitative studies, it is easily replicable. The documents are permanent, and therefore it is easy to replicate this study exactly. Third, it is a relatively simple research method. Instead of relying on statistical data, questionnaires, or interviews, content analysis is highly practical to complete (Educational Research Techniques, 2017). These are the strong points of qualitative content analysis. However, there are also some weaknesses. The validity is hard to assess because the analysis is a subjective opinion of the researcher. This problem can be partly tackled using a coding scheme to reduce subjectivity as much as possible. Another problem is the limited data due to a content analysis being limited to the recorded content. This means additional information is left out and therefore left out of consideration (Educational ResearchTechniques, 2017).

In my opinion, content analysis will be the best way to perform this research. This is mainly due to the scope of this research. It will delve into the last seven years of policymaking concerning education. It is the best way to analyse large amounts of verbal data (Schreier, 2012). Therefore, another research method is not feasible because it would be unable to extract the data needed to answer the research question.

3.2 Sample identification

In May 2021, https://www.tweedekamer.nl/ was used to retrieve all reports and resolutions concerning educational policies in which PISA was mentioned in the Netherlands. https://www.tweedekamer.nl/ is the official website of the Dutch Parliament. The website has the agenda of the Dutch Parliament and every report and discussion presented to and within the Dutch Parliament.

The first PISA test in the Netherlands was conducted in 2003, and the results of that test were published in December 2004. The most recent test was conducted in 2018, and those results were published in December 2019. Due to the research being performed by a single researcher, it was decided to start not with the PISA test results from 2003 but with those from 2012, published in December 2013, and end with the PISA results from 2018, published in December 2019. Therefore, this research will span seven years of data, starting in December 2013 and ending in December 2020. 2020 is chosen because it is a full year after the PISA results. Therefore, it is likely most discussions and policy amendments will have taken place concerning the PISA results. Each policy document will be critically reviewed in search of any mention of PISA concerning educational policies.

The search term 'PISA' and 'Programme for International Student Assessment' were used to retrieve all relevant information from https://www.tweedekamer.nl. That might seem underwhelming, but the search engine is susceptible. Even if it appears just once in the sources of an article or parliamentary debate, every mention of PISA shows up. Typing PISA into the website resulted in 401 hits, of which 278 met all the inclusion criteria of this research. These can be found in appendix A.

First, all 278 documents were organized according to date. Then they were read, all information concerning PISA was retrieved, and the document was summarized. The documents were divided per hypothesis. For H1, the documents were further divided per policy in chronological order. For H2, several quotes were retrieved from the policy documents and translated into English.

3.3 Data preservation

Searches were conducted in May 2021. All documents were reviewed, recorded and coded in May 2021 as well. These documents are most likely indifferent to change because they are a published report or a transcript from discussions in Parliament. Nevertheless, these documents were downloaded and preserved using Adobe Acrobat Reader DC software.

3.4 Brief summary of the PISA results

The PISA tests in 2012, 2015 and 2018 had different main findings. A brief summary of each of the three tests will now follow.

3.4.1 PISA 2012 results

In December 2013, the PISA scores from the test of 2012 were published. In the Netherlands, the absolute score of the three benchmarks was slightly below the 2009 results but, the relative position improved compared to other countries (Kamerstukken VII, 33750, nr. 75, 2013). Overall, Dutch 15-year-olds performed well above average compared to the OECD average (Kamerstukken VII, 33750, nr. 75, 2013). However, Dutch Parliament stated that there is a threat from emerging economies in Asia which could potentially overtake the Dutch PISA ranking in the following few tests (Kamerstukken VII, 33750, nr. 75, 2013). From 2013 until 2016, there was much discussion in Parliament with regard to the PISA test. This discussion also included the question how the test should be interpreted and if new educational policies were required. The Netherlands ranked 10th out of all the countries that participated (Kamerstukken VII, 33750, nr. 75, 2013).

3.4.2 PISA 2015 results

In December 2016, the PISA scores of 2015 were published. Again, Dutch students scored well above the OECD average. However, the number of countries in the EU that achieved the same score as the Netherlands had increased as well, and Asian countries have taken the top in all the benchmarks. The slightly downward trend of decreasing results in the benchmark continued. Math has become an issue for HAVO and VWO, science for VMBO (Kamerstukken VIII, 34550 nr. 99, 2016). The number of underperforming students has increased and requires the attention of Parliament. On a more positive note, there is an upward trend in overperforming students (Kamerstukken VIII, 34550 nr. 99, 2016).

It should be noted that in 2015 the PISA test was conducted digitally on a computer for the first time and not on paper. This is the new standard, and every test hereafter will be conducted digitally (Kamerstukken VIII, 34550 nr. 99, 2016). Overall, the Netherlands ranked 14th out of all the countries that participated (Kamerstukken VIII, 34550 nr. 99, 2016).

3.4.3 PISA 2018 results

In December 2019, the PISA scores from the 2018 test were published. Dutch students performed above the OECD average in science and math. There even was a slight improvement in math, which would end the declining trend (Kamerstukken VIII 35300 nr. 135, 2019). In absolute terms, science scores declined, but this occurred in most other countries as well; the drop was not significant. However, the decrease in reading scores was substantial, especially in the sub-domain evaluating and reflecting (Kamerstukken VIII 35300 nr. 135, 2019). About a quarter of students enrolled in VMBO did not possess the necessary reading skills to participate in current society (Kamerstukken VIII 35300 nr. 135, 2019). Overall, The Netherlands dropped significantly in the OECD ranking and occupied the 26th position.

3.5 Education in the Netherlands

PISA can create changes in different levels of education. To clarify for the reader what the different levels of education mean and how they relate to each other in the Netherlands, a brief explanation is provided. In the Netherlands, the secondary education of students is decided by the teachers at primary school, and it has four independent levels. The first one is 'voorbereidend middelbaar beroepsonderwijs' (VMBO) which is mostly focused on practical skills, and it takes four years to complete (Ministerie van Onderwijs Cultuur en Wetenschap, 2020b). Second, is 'hoger algemeen voortgezet onderwijs' (HAVO), this lasts five years, the pace and difficulty is higher than VMBO (Ministerie van Onderwijs Cultuur en Wetenschap, 2020a). Third is 'voorbereidend wetenschappelijk onderwijs' (VWO). This takes six years and is required to attend a university after secondary education (Ministerie van Onderwijs Cultuur en Wetenschap, 2020c). Finally, there is 'praktijkonderwijs' (P.O.) for students who cannot attain VMBO due to a handicap or behavioural issues. Students who attend P.O. are prepared for life in general and being self-reliant (Ministerie van Algemene Zaken, 2020). Students in secondary education can transfer from one education level to the other after one is finished. For example, after four years of VMBO a student can start in the fourth year of HAVO (Ministerie van Onderwijs Cultuur en Wetenschap, 2020b).

IV | Findings

In this chapter, the findings of this thesis are presented and analysed. The findings will be presented using the two hypotheses. To start the findings for the first hypothesis will be presented, then for the second hypothesis. The findings conclude with a summary.

4.1 PISA benchmarks enable policy emulation and affect Dutch educational policies

This paragraph will treat all the policies in which PISA presumably played a role in their creation or progress from December 2013 until December 2020. The policies presented in this paragraph were recovered from the studied documents and were generally discussed in combination with the PISA results. The analysis will show if there is a causal connection between PISA and each of these policies individually.

4.1.1. Excellent schools

Even though the Netherlands performed about the same on average in the 2008 and 2012 PISA tests, several trends worried elected officials. Compared to other countries, the Netherlands has a low percentage of students who score in the top tier. Therefore, Parliament decided to invest heavily in improving education to maintain or increase their ranking (Kamerstukken VIII, 21501-34 nr. 221, 2014); as a result, new policies were created.

Students who perform above average, called excellent students, are doing worse in the Netherlands than in neighboring countries on the PISA test. While the average Dutch student performs well, exceptional students tend to get bored quickly and do not achieve such high results as Germany or Belgium, for example (Kamerstukken VIII, 2014D00693, 2014). The downward trend of Dutch students in international benchmarking such as PISA is part of why the policy 'Excellente scholen' (translated excellent schools) was created (Kamerstukken VIII, 33750 nr. 112, 2014). As the minister of Education, Culture and Science stated when referring to the PISA results:

> *"Comparing the achievements from our students on the top level with other countries shows that a fair number of countries perform better than the Netherlands [...] Here is where we differ from other countries, where it is usual to offer top talents extra possibilities. This is why I am proposing a plan of action to create more action, and chances for top talents"* (Kamerstukken VIII, 33750 nr. 112, 2014, p. 7).

This is a broad policy that applies to all three Dutch education levels. There were four sub-aims of this policy: recognition and appreciation of excellence, visibility of achieving

excellence, enrichment of the public debate about education, and the positioning of excellent schools in the system (Kamerstukken VIII, 2015D02543, 2015). The central aim was to increase and challenge excellent students in Dutch education. (Kamerstukken VIII, 2015D02543, 2015). (Kamerstukken VIII, 2015D02543, 2015). If a school wants to become excellent, they must apply yearly and state why they are excellent. An independent commission then judges them (Kamerstukken VIII, 2015D02543, 2015).

After the results of PISA 2015, the policy had been in effect for three years. The results thus far were mixed. (Kamerstukken VIII, 34550 nr. 99, 2016). The number of schools labelled as excellent increased steadily in those years, but the number of excellent students increased only slightly (Kamerstukken VIII 34725, nr. 15, 2017). Many schools created separate 'talent classes', and according to a national assessment, fewer students tend to seem bored in class in 2016 than in 2013 (Kamerstukken VIII 34725, nr. 15, 2017). Flexibility in the laws concerning how schools can be labelled as excellent has increased. Schools can offer an innovative curriculum, have a high student motivation or a high percentage of students who go to the next year or graduate (Kamerstukken VIII 34725, nr. 15, 2017).

Flexibility concerning the laws about students themselves has also increased. Students who outperform their peers can take the exams at a higher level, so a VMBO student can do HAVO exams or take their exams a year earlier. The possibility to graduate cum laude has been expanded from colleges and universities to high schools. Despite all these changes, the number of top-performing students did not increase, especially in science and math (Kamerstukken VIII 34725, nr. 15, 2017). Therefore, Parliament has requested additional national research to determine how this number can increase. (Kamerstukken VIII 34725, nr. 15, 2017). The State Secretary of Education, Culture and Science stated the following:

> *"For example, if you look at the PISA benchmarks for math and science, you see that the top performers have been under pressure for years. We would like it if the increased challenges presented to these students would translate into better achievements. In the letter concerning PISA, we already made Parliament aware how we are planning to present better challenges to students"* (Kamerstukken VIII 34725, nr. 15, 2017, p.52).

After the PISA results from 2018, the number of excellent students in math increased considerably; in reading, there was a significant drop while there was a minor drop in science. Parliament did not make any adjustments to the policy. It noticed that collaboration between

excellent schools and traditional schools only happened on the director level and recommends collaboration on every level (Kamerstukken VIII 2020Z16830, 2020).

4.1.2 Tailor-made education and equal chances

Partly due to the disappointing results of PISA 2012 from the students who are in the lowest percentile, Dutch Parliament was made aware that there was a need for improvement. Therefore, a new law was ratified in 2014 called *'passend onderwijs'* (translated: tailor-made education) (Kamerstukken VIII, 2013D49809, 2013). To quote a report from the independent commission that was created due to this policy:

> *"The government has partly inspired by the slowly descending PISA results, increased their attention on raising learning outcomes. In past conversations, school leaders and directors pointed out that more students from P.O. education are transitioning to regular education. This would lead to decreasing learning outcomes on average"* (Kamerstukken VIII, 2013D49809, 2013, p.27).

Tailor-made education gave schools the official duty to care for their students. This means schools are responsible for providing help to every student who needs more attention. This law applies to students who apply to a school and those already enrolled (Kamerstukken VIII, 2013D49809, 2013). The law further increases the requirements of special-needs schools. To raise the quality of education for children with learning disabilities or behavioural issues, this would make the transition to regular schools easier and fit every child in the right place (Kamerstukken VIII, 34000 nr. 1, 2014). It aims to provide suitable education to every child in the Dutch educational system.

After the results from 2015, there was another increase in students who scored poorly on the PISA test. Furthermore, the results showed that only 42.5% of students from a migration background achieve academic success and are socially and emotionally adjusted. This is on the high end compared to the OECD countries and Europe, but to paraphrase the Minister of primary and secondary education: *"Sadly, the average is lower over there."* (Kamerstukken VIII 2019D04212, 2019, p. 8). 42.5% Was too low for him, and it is sad that it is lower in other countries. The OECD further pointed out that a high social and ability stratification is helpful to increase the learning opportunities for every child. Low social and ability stratification would put the low achievers together bundled up (OECD, 2015). So, Parliament made an effort to combine the two problems. A new policy was introduced to supplement the tailor-made education policy to level the playing field for every child regardless of descent. *"Every child*

in the Netherlands deserves a chance" (Kamerstukken VIII 2019D04212, 2019 p. 9). The equal chances alliance policy was ratified in December 2016 (Kamerstukken VIII 2017D23156, 2017). Parliament stated the following about the ratification of the equal chances alliance:

> *"On the national level, we see risks. Last year the national inspection of Dutch education and the OECD indicated that the chances in the education of children with less-educated parents and highly educated parents are drifting further apart. This is why Dutch Parliament ratified the equal chances alliance on 31 October 2016"* (Kamerstukken VIII 2017D23156, 2017, p. 5).

The equal chances alliance is a network of professionals within and outside of education. Bringing these professionals together should lead to knowledge generation, inspiration and increase proven successes. Like the PISA correlation, high levels of social and ability stratification can positively impact the learning opportunities available to students and thus their outcomes (OECD, 2015). Parliament hoped that the positive effects of this network and their interactions would multiply (Kamerstukken VIII 2017D23156, 2017).

In 2018 a secondary national analysis was performed on the PISA results concerning equal chances for every child in the Netherlands, and the policy got expanded. The research concluded that the differences in education between children having a high and low economic status were substantial (Kamerstukken VIII 2018D27023, 2018). The networks of professionals were localized to municipalities and expanded. In 2018 there were twenty-eight of those networks, and the goal of 2019 was to get the number up to fifty (Kamerstukken VIII 2018D27023, 2018).

Besides local networks, Dutch Parliament used the PISA results of 2015 for other new measures to increase equality in education. Transitions between VMBO and HAVO are made more accessible by creating extra classes in the first year of secondary school that consist of both levels (Kamerstukken VIII 34775, nr. 147, 2018). The Minister of Education, Culture and Science said the following about the PISA results concerning education:

> *"By comparing inequality in students their educational career, the OECD concludes that most problems occur at the start of education. [...]. We support and stimulate smooth transitions by creating broad first-year classes in secondary education and making the transition from VMBO to HAVO more accessible"* (Kamerstukken VIII 34775, nr. 147, 2018, p. 2-3).

An old law was revoked called the ‘cascaderegel’ (cascaderule), which gave VMBO schools a financial nudge if students graduated within the allotted time of their education. Finally, equality has become one of the three core goals in the VMBO (Kamerstukken VIII 2019D04212, 2019), which is significant because PISA 2015 shows a strong correlation between equality of opportunities and increased school performance (OECD, 2018).

After the 2018 results, the goal of reaching fifty networks was reached in early 2020. The program seemed to be paying off, the local networks started to communicate nationally, and a few significant trends could be distinguished (Kamerstukken VIII 35570, nr. 174, 2021)—the most critical being parental involvement. If a parent is motivated to help their child, their achievements in class will increase as well. After parental involvement, two themes arise which coincide with the recommendations of PISA. Extra attention to the core subjects Dutch language and math. And smooth transitions between educational levels (Kamerstukken VIII 35570, nr. 174, 2021).

4.1.3 Curriculum changes

Due to the PISA results from 2012 Dutch Parliament noticed that Dutch students do relatively well in reading and mathematics on average (Kamerstukken VIII, 2014D05109, 2014). However, they could be improved. Dutch Parliament states that there should be attention to these primary-, secondary- and higher education skills in an ever-changing, more demanding society. The Minister of Education, Culture and Science and the Minister of Economic Affairs stated the following:

> *“According to the educational report from the inspection of Dutch education, and from international comparisons like PISA and PIAAC the Netherlands scores average on these basic skills, but there is also room for improvement. […] Parliament wants to investigate with school leaders and directors how the curriculum can be altered to prepare students better in 21st-century skills”* (Kamerstukken VIII, 27406, nr. 209, 2014, p. 8).

That is why in 2013 Dutch Parliament started talks with directors of schools, teachers, and regional boards of education to see what could be changed to improve students' basic skills to better prepare them for the 21st century (Kamerstukken VIII, 27406, nr. 209, 2014). At the end of 2013, the ‘*kernvakkenregel*’ (core-subjects rule) was introduced to increase the score of Dutch students on the benchmarks reading and mathematics (Kamerstukken VIII, 34550 nr. 99, 2016). This rule means that a student can only graduate from secondary school if the student

finishes with a 5.5 in at least two out of the three core subjects: Dutch, English, and Mathematics (Kamerstukken VIII, 34550 nr. 99, 2016). The State Secretary of Education, Culture and Science said the following about the core-subjects rule when referring to PISA:

> *"In light of the previous found downward trend, we invested last period in the establishment of reference levels for math and language and implemented the core-subjects rule in higher education to increase achievements in these skills"* (Kamerstukken VIII, 34550 nr. 99, 2016, p. 4).

When the results from PISA 2015 came in, the Dutch government worried because, besides talks with experts in the educational field, nothing concrete except the core-subjects rule had changed (Kamerstukken VIII, 34550 nr. 99, 2016). A national analysis was proposed to try and find the root of the disappointing results of the PISA test. The research investigated the progress in science for the VMBO. The decrease of math on HAVO and VWO is troubling and will therefore take priority (Kamerstukken VIII, 34550 nr. 99, 2016). For the benchmark reading, the Dutch government will research if the current language curriculum fits into a strongly digitalized society. For math, if students are prepared enough to solve problems in a real-life situation like PISA asks it in its test (Kamerstukken VIII, 34550 nr. 99, 2016). Or to put it as the Minister of Education, Culture and Science states:

> *"For reading, for example, it is examined whether the current language curriculum is sufficiently in line with the complex language tasks expected of students in a highly digitized society. For mathematics, it is examined whether the curriculum sufficiently prepares students for solving problems in a 'real-life' situation, such as requested by PISA[…] The results can be given a place in the explorations in the initiated curriculum review process"* (Kamerstukken VIII, 34550 nr. 99, 2016, p. 5-6).

At the start of 2020, there were some additions made to the curriculum. New subjects focused on sustainability, citizenship, and digital literacy (Kamerstukken VIII 31293, nr. 517, 2020). A new policy required primary schools to make reading more enjoyable for their students (Kamerstukken VIII 31293, nr. 517, 2020). However, around halfway into 2020, Parliament acknowledged that there is still no uniform curriculum (Kamerstukken VIII 35300 nr. 202, 2020). That is why Parliament asked schools in 2020 to come up with ideas and implement them to see which approach works (Kamerstukken VIII 24515 nr. 574, 2020). In 2022 and 2023, the best ideas will be piloted at different primary and secondary schools to see what

works and what does not. So, eventually, the roots of the curriculum can be altered for every subject practiced (Kamerstukken VIII 24515 nr. 574, 2020, p. 3).

4.1.4 Reading assault

The PISA results of 2015 showed another problem that was not noticed before because local research revealed a much lower percentage than the PISA test. The illiteracy among Dutch students is slowly growing (Kamerstukken VIII 24515, nr. 530, 2020). National research shows an illiteracy percentage of 1-2%. In contrast, the PISA results show that 10% percent of Dutch students have a reading level below the required level of the last year of primary school (Kamerstukken VIII, 2018D16125, 2016). However, Dutch Parliament took no concrete action at the time. The Minister of Education Culture and Science was confronted with these results and said the following:

> *"When I talk about 98% and 99%, I refer to the most recent report of the achieved reference levels in the schoolyear 2015-2016. We do not have more recent research. . . If my opinion is disproved through research, I am always prepared to adjust my policy"* (Kamerstukken VIII, 2018D16125, 2016, p. 3).

After the results from the PISA 2018 test, this changed. Dutch Parliament was shocked that the reading score of Dutch students was well below the OECD average and that some students could not even read well enough to participate in society (Kamerstukken VIII 35300 nr. 135, 2019). This problem was evident in the VMBO, where about 25% of the students scored below the reference level for their age (Kamerstukken VIII 35300 nr. 202, 2020). The drop in the domain reading is a continuous downward trend that started in 2003 when the Netherlands first participated in the PISA test (Kamerstukken VIII 2020D03829, 2019). This is a problem for secondary schools and further education because they need to go out of their way to teach students proper Dutch (Kamerstukken VIII 2020D03829, 2019). The PISA results further show that about 63% of Dutch students only read if required, and they do not enjoy it (Kamerstukken VIII 35300 nr. 135, 2019). Further national research suggested that a solution should start in primary education (Kamerstukken VIII 2020Z16752, 2020).

In response, the Minister of Education Culture and Science proposed a law called 'het leesoffensief' (Reading assault). The minister of Education, Culture and Science stated the following when talking about what to do with the PISA 2018 results:

> *"The results concerning reading skills are worrying and stress the importance of active reading promotion policies. Concerning the measures, I am going to take … In there, the reading assault is announced. Where there is special attention for students in the VMBO. This is much needed because almost a quarter of our students reads below the basic level that PISA has defined as necessary to participate in society"* (Kamerstukken VIII 35300 nr. 135, 2019, p. 7)

This law is focused on increasing the joy of reading for students. It is a collaboration different in each Dutch municipality that brings library's, welfare organizations and schools in the region together. This is because Dutch Parliament strongly believes in local approaches (Kamerstukken VIII 2020D13003, 2020). These networks communicate nationwide to see what works and what does not. So, that eventually, a uniform national strategy can be created and used (Salamon, 2020).

Preliminary research already showed that student involvement is essential. The Dutch government suggests groups activities in primary education like reviewing a text together with students or making it a project. This could increase the meaning of reading and make students more motivated about it (Kamerstukken VIII 2020Z17096, 2020). According to the PISA results of 2018, the problem of reading is mainly focused on the sub-domains evaluating and reflecting texts (Kamerstukken VIII 28760 nr. 105, 2020). The Minister of Education, Culture and Science stated the following:

> *"In this schoolyear together with the Ministry, a massive project was launched. Called: 'After PISA the Spring' to help students become better in reading. The students score the worst on the PISA test in the categories evaluating and reflecting… This project develops a handle for teachers to target these skills specifically… There will be a handbook available in short notice to help teachers target these skills"* (Kamerstukken VIII 28760 nr. 105, 2020, p. 8)

With this knowledge, the Ministry of Education, Culture and Science started another project with teacher trainers and linguists to target these two skills specifically. A handbook was eventually created for teachers in primary and secondary education to teach these skills appealingly. (Kamerstukken VIII 28760 nr. 105, 2020).

4.1.5 The teacher shortage

The professionalization of Dutch teachers compared to other countries is worrying. The PISA results from 2012 show that the Netherlands has the highest number of unqualified and underqualified teachers in the OECD. This problem is most prominent in mathematics (Kamerstukken VIII, 2014D13783, 2014). Despite these results, no concrete action was taken at the time by Dutch Parliament.

The results of 2015 show again that internationally the quality of Dutch teachers is low. What makes this trend more worrisome is the decrease in people studying to be teachers (Kamerstukken VIII, 2017D11761, 2017). While little action was taken in 2013 after the results from the first test, 2016 was a wake-up call. According to the PISA data, a just reward and growth perspective are both critical for the status and image of being a teacher (Kamerstukken VIII 22112 nr. 2370, 2017). The Minister of Education, Culture and Science said the following:

> *"Education at a Glance 2016 states that the teacher salary in the Netherlands is well above the OESO and European average. There have already been made great strides in increasing the attractiveness of the profession and improving the salary. However, the career prospects for teachers are still shallow. That is why the Ministry discusses with employers and employer organizations how these prospects could be improved".*
> (Kamerstukken VIII 22112 nr. 2370, 2017, p. 6.)

That is why the Dutch government decided to explore with teachers, school directors, social partners, and other stakeholders how to improve teachers' career paths.

On the other hand, the results from PISA 2015 showed that there was an increase in teachers participating in internal training and workshops (Kamerstukken VIII 34550 nr. 139, 2017). The Dutch government was pleased and decided to extend the possibilities of teachers cooperating internationally even further. They increased the 'Erasmusbeurs+' (Erasmus scholarship+) budget, which makes it possible for Dutch teachers to travel abroad, financed by the Dutch government, to learn from their colleagues and teach in another country (Kamerstukken VIII 22112 nr. 2370, 2017). This scholarship was already popular with teachers who teach bilingually in the Netherlands. Still, the Dutch government wants to promote it more and make teachers of all school levels attend (Kamerstukken VIII 22112 nr. 2370, 2017).

After the results from the PISA test from 2018, the OECD concluded that teacher salaries directly impact the attractiveness of the teaching profession. When confronted by this fact in Parliament, the Minister of Education, Culture and Science stated the following:

> *"Parliament is aware and therefore this administration has invested substantially in Education. In the salary of teachers but also to decrease the teacher shortage and reduce the work stress. This is why the salaries of teachers in primary education were raised immensely. The salary of a teacher in primary education increased on average by 14%. A teacher's salary in secondary education has improved by about 8%"* (Kamerstukken VIII 35570 nr. 133, 2020, p. 12).

4.1.6 New relationships in accountability

In a sector agreement in 2015 between the Ministry of Education, Culture and Science and the advocate for schools in the Netherlands called the 'VO-raad', several agreements were made (Kamerstukken VIII, 33495 nr. 59, 2014). These agreements were made just after the Minister of Education Culture and Science visited schools in Massachusetts and Ontario. Both these places made significant progress on the PISA ranking in the last ten years (Kamerstukken VIII, 33495 nr. 59, 2014). One of these agreements is of particular interest for this thesis; it concerns how accountability from schools internally and externally should change. The Dutch government stated:

> *The best recipe for good results is a high degree of autonomy of governing and schools combined with public accountability. That is what research shows […] In light of these developments, directors, school leaders, and teachers will take accountability for the quality of education. This means that systems and working methods for internal accountability and supervision will be strengthened* (Kamerstukken VIII, 33495 nr. 59, 2014, p. 6).

The footnote from the quote shows that this 'research' is the PISA 2012 test.

The agreed-upon changes are the following: to start an increase in transparency. Every primary and secondary school in the Netherlands is obligated to join the project '*Schoolkompas*' (Schoolcompass). This makes it possible for parents to compare every primary and secondary school in the Netherlands on thirteen different subjects like the percentage of students passing a class, the graduation percentage or the various subjects the schools offer (Kamerstukken VIII, 2014D14278, 2014). Furthermore, the increase in horizontal and vertical accountability increases. Schools are required to visit other schools to discuss their norms and accreditation with other schools. This will lead to harmonization in school policies; if and when this is successful vertical supervision will decrease (Kamerstukken VIII, 2014D14278, 2014). The development of instruments that measure the quality of schools is to be harmonized across

schools to make the progress of schools and students clear (Kamerstukken VIII, 2014D14278, 2014). Finally, schools are required to develop a multi-year plan that shows what goals schools want to achieve. They need to account for these plans each year and discuss the progress with the horizontal and vertical stakeholders (Kamerstukken VIII, 2014D14278, 2014).

In 2020 these agreements were reviewed to increase the overall quality of the Dutch educational system. Parliament found that they were lacking in stating clear quality goals for the schools nationwide. When the Minister of Education, Culture and Science was asked how she was going to monitor the quality of Dutch education, she responded the following:

> *"International research like TIMMS, PIRLS, PISA and PIAAC enable us to monitor the skills and knowledge of children, youngsters and the labour force. This also gives us insight into the quality of the educational system… The program 'Accountability' enables better accountability from education partners"* (Kamerstukken VIII 35300 nr. 202, 2020, p. 35).

International research such as PISA gives uniform insights into the skills and knowledge of the Dutch youth. A new program called '*Verantwoording*' (accountability) was started. It aimed to make quality agreements with every school in the Netherlands. To make them more uniform and set single quality standards (Kamerstukken VIII 35300 nr. 202, 2020).

4.1.7. The math test

In 2010 an obligatory math test was introduced in secondary education nationally. The goal of the test was to increase the math skills of students, and the test was made mandatory to make sure schools took it seriously (Examenoverzicht, 2019). After the PISA results from 2015, the first substantive protest was made in Parliament. There was a massive discrepancy in the PISA results and the math test results. The PISA results showed that students did reasonably on average while their performance in the math test was dramatic (Kamerstukken VIII, 31332, nr. 26). This can be partially explained by the difference in content, measurements and goals of the test. Nevertheless, the discrepancy required further research (Kamerstukken VIII, 31332, nr. 26). There were multiple discussions in Parliament in 2014 about the quality of the math test. The test did not test the necessary skills, and students who wanted to go to college were rejected because of the results. In contrast, the students who performed well on the PISA test scored poor on the math test (Kamerstukken VIII, 33930, nr. 12, 2014).

In 2016 parliament requested the Ministry of Education Culture and Science to find an alternative for the math test since it does not correspond well enough with required day to day skills (Kamerstukken VIII 2018D18164, 2018). To quote the Minister of Education, Culture and Science when she was asked about the intended math education:

> *"In middle school, the course mathematics will adhere to the prescribed reference levels. Math will have new content, and the students of HAVO and VWO will learn to abstract this content into mathematical concepts. Students in the VMBO will be taught to use them functionally"* (Kamerstukken VIII 2018D18164, 2018, p. 15)

The reference levels indicated in this quote are the same as the reference levels PISA adheres since they refer with a footnote after reference levels to the results of PISA 2015 (Kamerstukken VIII 2018D18164, 2018). In 2018 this new plan was presented to Parliament. The project entailed that the math test was mandatory to pass secondary education, but it was up to schools to decide how to implement it. It could be an independent course, or for example, be an extension of economics (Kamerstukken VIII 2018D18164, 2018). However, in 2019 the math test was rejected in Parliament again. The new form of the test was not changed enough, and the freedom that schools had in planning and implementing the test only confused. This does not mean that the math test is permanently gone (Kamerstukken VIII 35300 nr. 135, 2019). Parliament is looking into how it can be integrated with math class in general, but thus far, there is no conclusion (Examenblad, 2019).

4.1.8. Financial literacy of 15-year-olds

In reaction to the report: 'Investing in the future, the financial literacy of 15-year-olds in PISA 2015', the State Secretary of Education, Culture and Science has decided to work together with the Minister of Finance (Kamerstukken VIII 24515, nr. 430, 2018). The Minister of Education, Culture and Science stated the following:

> *"In reaction to the report 'Investing in the future, the financial literacy of 15-year-olds in PISA 2015' from the OECD, the then State Secretary of Education, Culture and Science stated that he would investigate together with the Minister of Finances how the PISA results can be used to improve the financial literacy of students with a lower social economic status and students with a migration background who speak another language than Dutch at home*" (Kamerstukken VIII 24515, nr. 430, 2018, p. 13).

Several projects were already aimed at increasing the financial literacy of Dutch students, but the PISA 2015 results show that current efforts are not enough (Kamerstukken VIII 24515, nr. 430, 2018). In response, the Dutch governments started to subsidize independent projects to increase students' financial literacy (Kamerstukken VIII 24515, nr. 430, 2018). After the results from PISA 2018, the framework from PISA that explains how students can create a healthy financial understanding was taken and applied to the Dutch context (Kamerstukken VIII 2019D52963, 2019). The Nibud, the think tank of responsible consumer spending in the Netherlands, has created financial competencies that students should know based on the OECD framework. The Minister of Finance said the following:

> *"The Nibud created learning goals that indicate what children and young people should know at a certain age concerning financial literacy. The learning goals align with adult money management and the framework established by the OECD to measure financial literacy, knowledge and skills within the PISA program"* (Kamerstukken VIII 2019D52963, 2019, p. 3).

First, it is up to the parents to teach their children how to handle money in a responsible manner. However, not every parent might be able to perform this task. That is why in the second place it is up to the schools. They should integrate education about financial matters to even the playing field for students (Kamerstukken VIII 2019D52963, 2019). Social workers should be up to date with what is taught in school and elaborate on that if necessary (Kamerstukken VIII 2019D52963, 2019).

4.2 PISA benchmarks legitimize existing educational policies in the Netherlands

In this paragraph, instances of when PISA was used to legitimize existing policies will be presented from December 2013 until December 2020. The excerpts presented in this paragraph were recovered from the studied documents.

4.2.1 Legitimizing by using PISA as national indicators

Besides being an inspiration for new laws, it seems PISA is also used to legitimate current policies. When the PISA results from the test of 2008 came in 2009, The Netherlands scored significantly lower than neighbouring countries. So, Dutch Parliament started to focus educational policies on mathematics and reading skills. When the PISA results from 2012 were published and the relative position of the Netherlands increased, Parliament saw it as a

confirmation its approach worked and continued focusing on reading and mathematics. As the Minister of Education, Culture and Science stated:

> *"We can be satisfied with the achievements of our students. Schools and teachers can be proud of this. Now is the time to continue this success and build upon it. This is why Parliament will continue investing in the further improving the quality of our education"* (Kamerstukken VII, 33750, nr. 75, 2013 p. 5).

The PISA results from 2009 put something else in motion as well that the results from 2012 expanded upon. Reference levels for language and math were created. These levels indicate what each Dutch student should be capable of at the end of every school year. Its purpose was to increase the performance of these skills and make the switch from different levels of education easier (Kamerstukken VIII, 33750, nr. 76, 2013). After the results from PISA 2012, this policy was expanded. First, The Netherlands ratified a law that obligated its participation in the 2015 and 2018 PISA tests. Second, the Netherlands set goals in absolute scores for each benchmark it wanted to reach in the two upcoming tests. These scores were progressive, and if they were not achieved, it would indicate that more work was needed. Or as the Minister of Education, Culture and Science stated:

> *"The target values for the CITO final test in primary education and the PISA scores in secondary education have not yet been achieved […] The target values serve as a guideline for results-oriented working, but the possibilities of results-oriented working are in the practice of class not yet fully utilized […] That is why we ask schools to make significant efforts to improve their education through results-oriented working and tailor-made education"* (Kamerstukken VIII 2015D50553, 2015, p. 4).

Right after the 2012 PISA results were announced, the OECD published a report based on these results called "*high cost of low educational performance*". This report states a strong relation between mathematic capabilities and the BNP of a country (Kamerstukken VII, 33750, nr. 75, 2013). This makes the monitoring of PISA indicators critical to Parliament to see how the Netherlands compares internationally (Kamerstukken VIII, 34000, nr. 10, 2014). PISA has even become the primary indicator to show what students know and can do at a given time (Kamerstukken VIII, 2014D08457, 2014). Or to quote the Minister of Education, Culture and Science:

> *"To the question 'what are Dutch students capable of and what do they know at any given time?' the reference levels and primarily indicators from international research like PISA can be used"* (Kamerstukken VIII, 2014D08457, 2014, p. 40).

However, since the PISA test is only every three years, it is combined with other indicators (Kamerstukken VIII, 2014D39902, 2014).

Even the Dutch board of education stated three years after the results of the PISA 2012 test in their advice on how education can be improved that:

> *"The policies that have been introduced to improve students in the core subject's language and mathematics originates from the governments' wish to increase quality. The results from international benchmarks (including PISA) were an important source of legitimization for Parliament"* (Kamerstukken VIII, 2015D03881, 2015, p. 22).

After the well below average scores from the PISA 2018 test on the domain reading, the reading assault was implemented. When the Minister of Education, Culture and Science was asked how the government would track the progress of this policy. The Minister stated that the PISA test would be one of the most critical measurement tools to track the progress next to a yearly research that tracks whether the reference levels are achieved (Kamerstukken VIII 28760 nr. 107, 2020). To put it in the words of the Minister:

> *"Concerning reading skills, we strive for all students who are able to do so, to sufficiently master the basics. The central exams and the PISA test are important indicators […] Together with the cross-sector research into basic skills from the Inspectorate, PIRLS and PISA, this provides sufficient information about the reading skills of our students"* (Kamerstukken VIII 28760 nr. 107, 2020 p. 14).

4.2.2 Legitimizing by appealing to correlations and deflecting

PISA measures more than the benchmarks of math, reading, and science. It also measures many other factors through questionnaires like the percentage of students who skip school (OECD, 2009). In the years leading up to 2012, Dutch Parliament ratified laws intended to counter school skipping (Kamerstukken VIII, 26695, nr. 96, 2014). A national system was introduced that monitored individual students who skipped school, the civil servants who monitor these numbers were also professionalized and re-educated. Furthermore, the law that makes it mandatory that children go to school started being monitored in 2012 (Kamerstukken VIII, 26695, nr. 96, 2014). This creates a better picture for local officials to intervene when

necessary. The Netherlands, compared to other countries, is in the top percentage of students attending school according to the PISA 2012 results. That is important because, according to PISA, there is a connection between high school attendance and educational results. Based on that correlation, Dutch Parliament believes its current measures are working, and no new policies are required. There should only be extra attention to existing policies (Kamerstukken VIII, 26695, nr. 96, 2014). To put it in the words of the Minister of Education, Culture and Science:

> *"We have not included the recent OECD data in this letter. In the letter, we see that the Netherlands is actually at the top compared to other countries. School skipping is much lower than the OECD average. The Netherlands, for example, is doing much better than Finland. That country is often used as a benchmark […] About half of the school attendance officers are very well aware of this article and know how to apply it. The other half does not. I do not know if additional guidelines will help with this. Then we try to close it all, which does not do justice to the complexity of this target group"* (Kamerstukken VIII, 26695, nr. 96, 2014, p. 34-35).

PISA also extends toward measuring the relation between class size and educational achievements. In 2015 a research from Sweden showed positive effects on education when classes are smaller. As a result, a discussion in Parliament took place (Kamerstukken VIII, 31293, nr. 255, 2015). The Minister of Education, Culture and Science stated that she would take no action based on this research and defended this position in the following way:

> *"Recently Andreas Schleicher of the OECD published on the 'Seven big myths about top-performing schools'. One of the myths that Schleicher addresses is the importance of class size. He concludes that the extensive PISA studies show no relationship between class size and quality. He emphasizes the importance of good teachers. The recent research from Sweden is not a reason for me to take extra measures"* (Kamerstukken VIII, 31293, nr. 255, 2015, p. 12).

At the start of 2017, there was a discussion in Parliament concerning how secondary schools are financed in the Netherlands. The Dutch government gives every school in the Netherlands a lump sum at the start of each year, and it is up to schools how they spend it (Kamerstukken VIII, 31289 nr. 347, 2017). Some opposition members were convinced that the initial goals of the lump-sum were not being met. The schools should be more restricted in allocating financial resources to ensure all schools in the Netherlands are up to standard (Kamerstukken VIII

2018D17335, 2017). The Minister of Education, Culture and Science disagreed and responded with three arguments of which the second one was:

> *"The OECD concludes based on PISA 2009 that students perform better in countries where schools have more freedom about the content of their lessons and where schools have greater autonomy over the use of their resources"* (Kamerstukken VIII 2018D17335, 2017, p. 23).

When 'Education at a Glance 2017' (OECD, 2017) was published, Parliament even concluded that the information from the report would be used to legitimize existing policies. To quote the Minister and State Secretary of Education, Culture and Science:

> *"Education at a Glance 2017 provides us with valuable information to support our current policies. Based on the figures from Education at a Glance 2017, we conclude that the Netherlands occupies a strong position in education internationally. We also see that there is room to even get better. In this respect, the conclusions of Education at a Glance are in line with the international studies on skills in primary education, TIMMS, and secondary education PISA published in 2016"* (Kamerstukken VIII 34550, nr. 148, 2017).

Bullying is a subject that is frequent on the Dutch political agenda. The policy '*veiligheid op school'* (School safety act) has given the formal responsibility to take care of their students to schools. (Kamerstukken VIII 22112 nr. 2370, 2017). This means that schools need to have confidants for the students and their parents and make up their regulations on keeping the school safe and actively counter bullying. The PISA test of 2015 included questions about bullying. The results showed that Dutch students are being bullied the least out of all the participating countries. This was used as a base of legitimization for the safety at school law. The Minister of Foreign affairs stated the following:

> *"PISA 2015 shows that Dutch students from the OECD and EU are the least bullied. Students, including immigrant students, feel at home at school. Bullying already receives a lot of attention within national policy. With the School safety act, the school's competent authority has been given the duty to ensure safety at school. From August 2016 on, the inspection of Dutch education will monitor the compliance and pursuit of schools regarding this policy. The inspection also has access to the monitoring data of schools. This puts the inspection in a better position to enter into a dialogue with the*

> *school about improving safety at school"* (Kamerstukken VIII 22112 nr. 2370, 2017, p. 5).

In 2020 RTL news, which is a news network in the Netherlands, published a report. This report states that placing children too high in secondary education harms their mental health and school career. In the Netherlands, teachers in primary education have the final say whether a child attends VMBO, HAVO or VWO for secondary education. The Minister of Education Culture and Science responded by stating that the PISA test shows that students in the Netherlands are content and happy at school, almost the happiest in the world. Another research into the potential effect is not available. To quote the Minister:

> *"Concerning the health and wellbeing of students: what is at least known from PISA research is that the vast majority of students in the Netherlands are satisfied and happy. There is no specific data on the effect of a 'too high' placement on student well-being"* (Kamerstukken VIII 2020D10608, 2020, p. 3).

4.3 Overview

In the first part of the findings, several educational policies are mentioned where it is likely that PISA influenced their creation. In the second part, several ways are introduced how the Dutch parliament used PISA to legitimize existing educational policies. I will now present a table to make all the previous information easier to ascertain. Table 1 will present the policies and Table 2 how Dutch Parliament used PISA to legitimize existing policies. The information in the tables will be presented in chronological order.

Table 1. Summary of policies presented in 4.1

PISA test	Policy	Year of implementation
-	Math test	2010
2012	Tailor-made education	2013
2012	Core-subjects rule	2013
2012	Sector agreement	2014
2012	Schoolcompass	2014
2012	Excellent schools	2014
2015	Equal chances alliance	2016
2015	Increasing financial literacy	2018
2018	Reading assault	2020
2018	Increasing the pay of teachers	2020
2018	Accountability	2020

Table 2. Summary of legitimization by Parliament presented in 4.2

Subject	Argument related to PISA	Date
Educational policies concerning mathematics and reading skills	After the results from PISA, 2012 Dutch Parliament was pleased and saw the benchmarks as confirmation its current approach on math and reading worked.	December 12, 2013
Reference levels for reading and math. Obligated participation in PISA and setting targets what score should be attained.	Targets for absolute scores for the PISA benchmarks were set. If these targets were not achieved, it would indicate current policies needed additional work.	May 18, 2014 December 21, 2014
Skipping school	PISA data shows that the Netherlands is among the countries with the lowest number of students that skip school. Therefore, earlier policies have an effect and should be built upon instead of making it more complex by creating new policies.	June 5, 2014
PISA indicator	After the PISA test of 2012, PISA became an essential national indicator of what a student can do at a given time. The Dutch board of education even stated that PISA results were a critical source of legitimisation for parliament concerning policies in language and math.	December 3, 2013 March 7, 2014 March 24, 2014 October 29, 2014 October 30, 2014 February 4, 2015
Class size	A discussion in Parliament concerning that research showed that smaller classes had a positive effect on students was quickly dismissed by the Minister of	May 1, 2015

	Education, Culture and Science by referring to a study from the OECD based on PISA 2015 that found no correlation between the two subjects.	
Bullying	The results of PISA 2015 showed that there was no need for Parliament to create additional laws concerning bullying.	July 7, 2017
Education at a Glance 2017	The report legitimized existing Dutch educational policies based on the PISA results.	September 12, 2017
Lump-sum	The lump-sum law was defended in Parliament by the Minister of Education, Culture and Science by referring to a correlation found in PISA 2009.	December 6, 2017
Students being placed in secondary school	After a news article that stated that students too often get placed above their level in secondary school, that is bad for their mental health. The Minister responded by stating that Dutch children are one of the happiest in the world, according to PISA 2018. No other research is available, and the matter was handled.	March 13, 2020
Tracking progress of the reading assault	When the Minister of Education, Culture and Science was asked how the progress of the reading assault would be measured. She stated that PISA would be the most crucial indicator next to a yearly research that tracks if the reference levels are achieved.	December 22, 2020

V | Analysis

The analysis will use the theory used in chapter two and the hypotheses in chapter three to analyse the findings of chapter 4. This will be done per hypothesis.

5.1 H1: PISA benchmarks enable policy emulation and affect Dutch educational policies

This research used transnational policy steering and specifically the mechanism of policy emulation to see how the PISA benchmarks affected Dutch educational policies. Policy emulation implies that a national state copies international models and applies them to its national context (Bieber et al., 2014). It was suggested this could be the case for the PISA benchmarks and their effect on Dutch national policies. In the findings, eleven policies were presented where it is likely that the PISA benchmarks may have had an impact on their creation. This thesis will now analyse each policy separately. Except for the sector agreement, schoolcompass and accountability since they all originated from the sector agreement.

5.1.2 Excellent schools

The excellent school policy was created due to the Netherlands' lack of excellent students compared to other countries (Kamerstukken VIII, 21501-34 nr. 221, 2014). The PISA results exposed this fact and showed the lack of motivation these students have (Kamerstukken VIII, 2014D00693, 2014). The Minister of Education, Culture and Science stated that the Dutch approach concerning top talents differed from other countries and proposed a new plan of action to challenge top talents (Kamerstukken VIII, 33750 nr. 112, 2014, p. 7). Schools were motivated to become excellent. To not only create and motivate more excellent students but become excellent themselves (Kamerstukken VIII, 2015D02543, 2015). The creation of the policy can be attributed to the PISA benchmarks. The Dutch government ratified this policy to become more like other countries that scored better on the PISA test. Therefore, policy emulation occurred, and it can be stated that the PISA results had a causal effect on the creation of the excellent schools policy.

However, after 2015 the results from the excellent school policy were mixed. The number of schools labelled excellent increased. This was primarily due to the relaxation of the requirements to become an excellent school, not due to the PISA benchmarks but rather to the Dutch government giving its own interpretation to the law. The number of excellent students increased only slightly (Kamerstukken VIII 34725, nr. 15, 2017). However, the Dutch government was made aware of the slight increase due to the PISA benchmarks and acted by

presenting new challenges (Kamerstukken VIII 34725, nr. 15, 2017). Thus, the PISA benchmarks prompted the Dutch government to make further changes. These changes cannot be attributed to policy emulation, because yet again, the Dutch government gave its own interpretation in how to challenge top talents more (Kamerstukken VIII 34725, nr. 15, 2017, p.52).

In 2019 the number of excellent students in math increased considerably while there was a drop in reading and science. Dutch parliament chose not to adjust the policy after the PISA 2018 results (Kamerstukken VIII 2020Z16830, 2020).

So, it can be stated that the Netherlands copied the international model after the first test. But after the results from 2015, when the requirements to become an excellent school were made more accessible and the challenges presented to top talents were renewed, the Dutch government gave its own interpretation to the law. Therefore, the origin of the law points to policy emulation, but the amendments do not.

5.1.3 Tailor-made education

The creation of the tailor-made education policy is partly due to PISA, as stated by the commission who was appointed because of this policy (Kamerstukken VIII, 2013D49809, 2013, p.27). It was the PISA benchmarks from 2012 that made the Dutch government acutely aware of the size of students that could not keep up (Kamerstukken VIII, 2013D49809, 2013). However, the Dutch government was already planning on improving the way students are placed within the educational system (Kamerstukken VIII, 2013D49809, 2013). So, the interpretation of the law coincides better with the aim of the Dutch government to decentralize the youth services to a local level (Rijksoverheid, 2021) than what the PISA correlations recommend. It is hard to ascertain whether there is a causal link between the PISA benchmarks and the components of tailor-made education. Therefore, it is unlikely that the PISA benchmarks are emulated into the policy tailor-made education.

5.1.4 The Equal chances alliance

The equal chances alliance was created due to the PISA results. The PISA results from children with highly educated parents, and less educated parents drifted substantially apart (Kamerstukken VIII 2017D23156, 2017, p. 5). It seems Dutch Parliament directly took the correlation from PISA that a high social and ability stratification is helpful to increase the learning opportunities for every child. Low social and ability stratification would put the low achievers together bundled up (OECD, 2015). The amendments that further supplemented

this policy seem to support the claim for policy emulation as well. These amendments made a smoother transition between education levels possible, and equality became one of the core goals of the VMBO. These changes seem to derive straight from the PISA 2015 results as well (Kamerstukken VIII 34775, nr. 147, 2018, Kamerstukken VIII 2019D04212, 2019).

It seems highly likely that some form of policy emulation from the PISA benchmarks took place in the design, amendments and implementation of this law. Therefore, the PISA benchmarks had a causal impact using the mechanism policy emulation on the equal chances alliance policy.

5.1.5 Core-subject rule

The core-subject rule is another educational policy that has a strong connection to the PISA benchmarks. Dutch Parliament stated that the downward trend of PISA caused the establishing of the core-subject rule to increase achievements in these skills (Kamerstukken VIII, 34550 nr. 99, 2016, p. 4). The core-subject law is focused on Dutch, math and English, (Kamerstukken VIII, 27406, nr. 209, 2014). Those are two of the three benchmarks in the PISA test. The results of 2015 even prompted the Dutch government to see in what way the Dutch curriculum could be improved to cohere better with the PISA test (Kamerstukken VIII, 34550 nr. 99, 2016). This clearly shows that the Dutch government tries to fit their curriculum to better adhere to the PISA standards. Therefore, it can be stated that that it is highly likely there is a causal connection between the PISA benchmarks that emulated in the core-subject rule.

5.1.6 Reading assault

The PISA test results of 2015 showed that the Netherlands has a growing problem of illiteracy among 15-year-olds. (Kamerstukken VIII, 2018D16125, 2016). However, due to a discrepancy between the national measured levels and the PISA levels, no concrete action was taken at the time (Kamerstukken VIII, 2018D16125, 2016 p. 3).

When the results from PISA 2018 were published, and they showed that the Netherlands were well below the OECD average concerning reading, Parliament's stance quickly changed. As a response, the reading assault was ratified. The reading assault was primarily focused on increasing the joy of reading among students. PISA 2018 showed a correlation between enjoying reading and attaining a necessary reading level to participate in society (Kamerstukken VIII 2020D13003, 2020). Therefore, the law was focused on increasing the enjoyment instead of, for example, a new test or reference level. The reading assault is another law that can be said with certainty that it would not exist without PISA. In the first

place for bringing the problem to the attention of the Dutch government (Kamerstukken VIII 35300 nr. 202, 2020). In second place of how the law is organized. It focused on increasing joy, just as the PISA results from 2018 imply (Kamerstukken VIII 2020D13003, 2020). After learning in which reading domains the students struggled according to PISA 2018, the Dutch Minister of Education, Culture and Science even had a handbook explicitly made for these skills. That was to be mandatory for teachers and teacher trainers (Kamerstukken VIII 28760 nr. 105, 2020). Therefore, it can be stated with certainty that policy emulation of the PISA benchmarks helped create the policy reading assault.

5.1.7 The teacher shortage

The teacher shortage is a complex issue. In 2012 the Netherlands had the highest number of unqualified and underqualified teachers of all participating countries of the PISA test. Yet, no concrete action was taken by Parliament to combat this issue (Kamerstukken VIII, 2014D13783, 2014).

After the PISA test of 2015 showed that a decent wage and a growth perspective were significant, the Dutch government started talks with stakeholders on how to improve salary and career paths (Kamerstukken VIII 22112 nr. 2370, 2017). This action of Dutch Parliament can be attributed to the PISA results after the publication of Education at a Glance 2017. (Kamerstukken VIII 22112 nr. 2370, 2017). However, no concrete law was formed.

The results from 2018 finally pushed the Dutch government into taking action. Together with the information that besides internal motivation, an increased salary would make a huge difference, Parliament invested directly into the salary of teachers (Kamerstukken VIII 35570 nr. 133, 2020). This would suggest that policy emulation of the PISA results occurred in the decision to increase the salary of teachers. It is likely that the PISA results affected the actions of parliament designed to combat the teacher shortage (Kamerstukken VIII 35570 nr. 133, 2020).

5.1.8 New relationships in accountability

The sector agreement between the Ministry of Education, Culture and Science and the VO-raad showed how PISA had an influence. A high degree of autonomy combined with being publicly accountable was central to the negotiations (Kamerstukken VIII, 2014D14278, 2014). Which came directly from the PISA 2012 results (Kamerstukken VIII, 33495 nr. 59, 2014). The increase in horizontal accountability and schools learning from other schools was an important milestone in this agreement (Kamerstukken VIII, 2014D14278, 2014). The law

schoolcompass that was ratified as a result increased the public accountability of schools, and parents could see which schools were succeeding and which were not (Kamerstukken VIII, 2014D14278, 2014).

The PISA 2018 results showed significant differences among schools concerning accountability and quality in the Netherlands (Kamerstukken VIII 35300 nr. 202, 2020). The program accountability was started, which forced schools into new quality agreements with the Dutch government (Kamerstukken VIII 35300 nr. 202, 2020, p. 35)

The content of the agreement between the Ministry and the VO-raad was emulated by the PISA results. The law schoolcompass came from this agreement, but it is unlikely that it is emulated from the PISA results. However, while the quality of Dutch education will be monitored using international research like PISA, there is no evidence that the program accountability was emulated from the PISA results. Therefore, it cannot be stated that this program is causally linked to policy emulation from the PISA benchmarks.

5.1.9 The math test

The math test was introduced in 2010, which is technically outside the scope of this research. However, the math test was a point of discussion during the period of this investigation, and this was primarily due to PISA. The math test was even directly altered and eventually disregarded.

When in 2016, the PISA results showed a discrepancy between the math scores of PISA and the national math test, its relevance was put into question (Kamerstukken VIII, 31332, nr. 26). In response, the test was revised and was meant to connect more with the necessary skills of the 21st century. In essence, Dutch Parliament wanted the test to look more like the PISA test. When the new test was presented in 2019, the test was rejected because it looked too much like the old test (Kamerstukken VIII 35300 nr. 135, 2019).

The math test may have been disregarded, but it is clear PISA had a substantial influence on its track record. Without PISA, it would have been likely the test was not altered at all. Therefore, it can be stated that there is a causal connection between the PISA test and its emulation into the math test.

5.1.10 Financial literacy of 15-year-olds

Finally, there were new laws introduced concerning the financial literacy of 15-year-olds. The necessity of creating laws surrounding this topic was brought to attention by the 2015 PISA results (Kamerstukken VIII 24515, nr. 430, 2018, p. 13). The Dutch government started to

research how the results could be used in a national context and financed independent projects to increase students' financial literacy (Kamerstukken VIII 24515, nr. 430, 2018, p. 13). After the results from PISA 2018, the Dutch government took the framework of PISA and applied it to the national context (Kamerstukken VIII 2019D52963, 2019). This is clearly a policy emulation from the PISA results upon the financial literacy of 15-year-olds.

5.1.11 Overview analysis H1

The PISA benchmarks have influenced all the policies mentioned in the first part of the analysis. However, this research focused on policy emulation, and not all policies mentioned were emulated through the PISA benchmarks. I will present a table to show to what extent there is evidence for policy emulation for each of the eleven policies.

Table 3 Causality of PISA emulation on national policies

Policy	Evidence for policy emulation
Excellent Schools	+
Tailor-made education	-
Equal Chances Alliance	++
Core-Subject Rule	+
Reading Assault	++
The Teacher Shortage	+/-
The Sector agreement	+
Schoolcompass	-
Accountability	--
The Math Test	++
Financial Literacy of 15-year-olds	++

5.2 H2: PISA benchmarks legitimize existing educational policies in the Netherlands

Besides policy emulation, this thesis tried to determine whether the PISA benchmarks were used to legitimize existing educational policies in the Netherlands. When a country achieves a high score on a specific subject in international benchmarking, existing policies related to said subject could be used to legitimize these policies (Engel, 2015). Indicators established from PISA could also be used to legitimize current policies (Fischman et al., 2017). For instance, when national leaders take credit due to benchmarks from PISA being positive or waive

critique away based on the PISA results, resulting in a means of legitimization. These are methods that can be used to defend a specific policy. Each instance found in the document study will now be analysed.

5.2.1 Legitimizing by using PISA as national indicators

The reference levels for Math and language created due to the PISA 2009 results were an indicator to see whether Dutch students possessed the necessary skills concerning these subjects (Kamerstukken VIII, 33750, nr. 76, 2013). The thought was that if these levels were being met, current educational policies were working. Eventually, these reference levels were translated into the PISA benchmark scores (Kamerstukken VIII, 2014D47726, 2014). Each level of education should at least achieve a specific score on the PISA test. Therefore, Parliament uses the PISA test in a broad sense to see whether their current educational policies on language and math are effective (Kamerstukken VIII, 33930, nr. 1, 2014). This means the PISA scores are used to legitimize educational policies.

When the Minister of Education, Culture and Science was asked how she would track what Dutch students could do at any given time, she responded that primarily indicators from international research like PISA were used. She also pointed to the reference levels, but these originate from PISA as well (Kamerstukken VIII, 2014D08457, 2014). As long as the PISA benchmarks show a positive trend, existing educational policies are legitimized. The Dutch board of education explicitly stated that the PISA test was an essential source of legitimization for laws concerning the core subjects (Kamerstukken VIII, 2015D03881, 2015). When the Minister of Education, Culture and Science was asked how she would track the progress of the reading assault, she stated that she would use cross-sector research, PIRLS and PISA (Kamerstukken VIII 28760 nr. 107, 2020). This excerpt shows again that PISA is being used to monitor the progress of specific educational policies.

Indicators are a way of legitimizing policies when the targets of the indicators are met. As is clearly shown, the Dutch government uses the PISA benchmarks as indicators to track the progress of their policies and legitimize them.

5.2.3 Legitimizing by appealing to correlations and deflecting

The Dutch government just ratified new laws before the PISA 2012 test to counter school skipping (Kamerstukken VIII, 26695, nr. 96, 2014). The PISA 2012 results showed that the Netherlands had one of the lowest percentages of students skipping school (Kamerstukken VIII, 26695, nr. 96, 2014). When Parliament discussed whether amendments were necessary,

the Minister of Education, Culture and Science stated that new laws would only cause confusion. According to the PISA research, the existing laws seem to work, but the awareness of them should be raised (Kamerstukken VIII, 26695, nr. 96, 2014). Thus, the Minister uses the PISA correlation to legitimize a national law.

Another instance was when Swedish research showed a connection between smaller class sizes and better student performance. The Minister of Education, Culture and Science was confronted about this research in parliament. She responded using research from the OECD based on the PISA correlations that showed no connection between class size and student performance. Therefore, new laws to reduce class sizes would not be necessary (Kamerstukken VIII, 31293, nr. 255, 2015). Another discussion averted and current choices legitimized by simply referring to PISA results.

When the lump-sum was discussed in Parliament, the Minister of Education, Culture and Science referred to the notion that according to the PISA results of 2009, students perform better in countries where schools are allowed more freedom regarding their financial resources (Kamerstukken VIII 34550, nr. 148, 2017). Another instance in which the Minister used PISA to legitimize a policy.

The Dutch government even directly used Education at a Glance 2017 to legitimize their current policies. In the response from the State Secretary, it even looks like the research is a tool for their legitimization (Kamerstukken VIII 34550, nr. 148, 2017)

Bullying is another subject in which Dutch Parliament tried many different approaches prior to the PISA test results from 2015 (Kamerstukken VIII 22112 nr. 2370, 2017). The results from PISA 2015 showed that the Netherlands has the least number of students being bullied out of all participating OECD countries (Kamerstukken VIII 22112 nr. 2370, 2017). The Minister of Foreign Affairs stated that the Netherlands already did a lot and will only increase the monitoring of this law (Kamerstukken VIII 22112 nr. 2370, 2017). In addition, the Minister referred to the PISA results when asked what further steps could be in the bullying campaign and stated that only the monitoring of existing policies would increase, which shows that the Minister uses the PISA results to legitimize the Dutch approach against bullying.

A report from RTL news that showed students' potential unhappiness if they left primary school and got placed too high in secondary school was disregarded as well (Kamerstukken VIII 2020D10608, 2020). The PISA test shows Dutch students are among the happiest in the world. There are already broader starting classes at the start of secondary education (Kamerstukken VIII 2020D10608, 2020). There was no other research available that

directly investigated the connection yet; the matter was closed after the response from the Minister. This effectively means that a suggestion regarding a new policy or research was deflected using the PISA results.

VI | Conclusion & Discussion

6.1 Conclusion

This thesis tried to answer the question: *How do the PISA benchmarks affect Dutch educational policies?* A qualitative content analysis on Dutch educational policies linked to PISA in the period December 2013 till December 2020 was performed.

To answer the main question, two hypotheses were formed. The first hypothesis relied on transnational policy steering. Transnational policy steering is a guided form of soft power that can influence the national level. In this research, it was argued that policy emulation, a form of transnational policy steering, could explain how PISA affects Dutch educational policies. When national states are uncertain of their policy proposals, they can use the mechanism of policy emulation. In which domestic policymakers copy the best practices from international models or other countries. International organizations and states that are seen as successful introduce which educational policies should be legitimate. So, the OECD and their test PISA can lead to a transformation in educational policies. The first hypothesis was: *PISA benchmarks enable policy emulation and affect Dutch educational policies.* This was operationalized by seeing if the PISA results are used in the policymaking progress and if educational policies and reforms are presented due to the Netherlands' performance in the PISA tests.

Eleven policies were found where it was likely that the Dutch government emulated from the PISA results. It was established that out of these eleven policies; there was a causal connection for four policies. The equal chances alliance, the reading assault, the math test, and the financial literacy of 15-year-olds were copied from the PISA recommendations. It is highly likely that the excellent schools, core-subject rule, and the sector agreement were emulated from the PISA results, but this cannot be stated with absolute certainty. PISA influenced the salary increase concerning the teacher shortage, but it is unlikely that the policy was emulated from PISA. For the policies tailor-made education, schoolcompass and accountability, it is highly unlikely that the Dutch government emulated the PISA results. Nevertheless, it can be stated that the PISA benchmarks enable policy emulation and affect Dutch educational policies; the first hypothesis is confirmed.

The second hypothesis was: *PISA benchmarks legitimize existing educational policies in the Netherlands.* And focused on existing educational policies. If the Netherlands scored well on the PISA test, this could be used to legitimize current policies. PISA would then enable the OECD to exhibit soft power through recommendations or correlations on which national policymakers could extort legitimization for current policies. If indicators are being made based on the PISA test and these were being met, this could also be a source to justify existing reforms or validate and legitimize current policies to maintain the status quo. This was operationalized by looking at whether national leaders or political actors claim credit for the PISA results. Or if they dismiss or deflect a different course of action by referring to the PISA results.

Several cases were found. Multiple international indicators were nationalized and were used as a means to legitimize current educational policies. For instance, reference levels for math and reading and the progress of the reading assault were tracked by mainly using the PISA results. Dutch Parliament referred to correlations found in the PISA test to defend their current policies more than once. Like the Dutch policies concerning school skipping, lump-sum or bullying. The Minister of Education, Culture and Science even used the PISA results to deflect questions in Parliament concerning educational policies. When asked about a research comparing class size and student's performance or school advice and student's happiness. These findings and their analysis prove that PISA benchmarks legitimize existing educational policies in the Netherlands.

To answer the central question of this research: *How do the PISA benchmarks affect Dutch educational policies?* This research has shown that the PISA benchmarks are emulated into Dutch national educational policies. Furthermore, the benchmarks are used to legitimize existing educational laws in the Netherlands.

This research has shown that policy emulation occurs through PISA and current legislation is legitimized using PISA. By using qualitative content analysis, I have shown how this mechanism occurs in a national context. How national policies are affected by international benchmarking and that the reach of the 'social phenomenon' PISA, is a powerful force, able to overhaul a complete educational system like in Germany or have next to no impact like in the United Kingdom. Through this research I have made a start in filling the literature gap concerning how PISA affects the national context. It can be concluded that PISA has their roots in the Dutch educational system as well and should not be taken lightly by Dutch policymakers or any domestic policymaker for that matter.

6.2 Discussion

Earlier research and this research show the importance of PISA as a governing actor in European education. It seems the Netherlands is not oblivious to its effects and is starting to adopt more PISA recommendations into its national educational policies.

However, it is of importance that PISA results are used sensibly in policymaking and reforming educational systems. The PISA tests produce much more information than politicians and the media currently use. PISA is an important international benchmarking tool for national governments who wish to improve their education in a strongly globalized world. Using the PISA results to enhance the life of students and teachers is a continuing challenge.

This thesis made some methodological choices that lead to limitations in its results. For example, there were no interviews to provide an in-depth explanation of the policies created from December 2013 to December 2020. Another issue could be that the analysis is partly the subjective opinion of the researcher. This research tried to prevent this as much as possible by using only theories from peer-reviewed articles, documents from Dutch parliament, and coding said documents. Future research could try to implement interviews alongside a qualitative content analysis or doing quantitative research.

This thesis has a few recommendations for future research. First, the agenda-setting of PISA is an exciting topic to research. When a new report concerning the PISA results was published, the Dutch parliament immediately asked questions and put it on the agenda. The same can be said for correlations and recommendations from PISA. It could be promising to research how the PISA results affect Dutch, European or even global policy agendas. Furthermore, another interesting point is how easily the Dutch parliament disregards other research or suggestions by referring to the PISA results. Future research could look if this is also the case for other international benchmarking tools in the Netherlands or other countries. Dutch Parliament often chooses to do secondary national research of the PISA correlations. Future research could investigate whether the results from these analyses differ from the PISA results in any way or they produce the same results. To measure how powerful PISA is, if the national context of the Dutch educational system makes an impact or that they regularly point to the same result. I can only aspire that, just as PISA has lead to policy emulation in the Netherlands, this thesis will also lead to new opportunities for science.

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Appendix A

There were a few general exclusions, these are listed below. When documents:

1. Focus on a local level.
2. Refer to a plant called PISA.
3. Summarize how potential newcomers to the European Union were doing, which mention PISA.
4. Mention the airport located in Pisa, Italy
5. Mention the tower of Pisa

The documents that remained were divided into three themes:

Theme	Definition of theme	Inclusion criteria	Exclusion criteria
Educational Policies	An educational policy or an amendment for an educational policy is disregarded or ratified in Parliament.	Parliamentary document that has an educational policy and refers to PISA	Parliamentary document that refers to PISA unrelated to the educational policy
Parliamentary Discussion	A discussion between Dutch political parties and the Minister take place. Transcribed or written.	The discussion concerns educational policies and PISA correlations/benchmarks are mentioned	N/A
Reports	A (year) report or evaluation by a Ministry, Public knowledge institute or independent council	The report concerns educational policy(ies) and refers to PISA.	Nothing in the report concerns education or is based on the PISA results

Theme	Number of themes	Percentage of themes
Educational Policies	46	17%
Parliamentary Discussion	98	35%
Reports	134	48%