



Department of Sociology

# **Inadequate educational attainments**

-A study of boys in a small fishing village in Iceland

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Master Thesis, SIMT21  
30 Credits  
Autumn 2010  
Tutor: Johanna Esseveld

## **Abstract**

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In this thesis I have presented possible indicators affecting boys' educational attainments and learning behaviors. In my study I used both quantitative and qualitative methods. First, I studied the relationship between knowledge of relational concepts and later academic achievements. The data consisted of two different types of tests (Boehm Test of Basic Concepts and National Standard Tests). The Boehm Test of Basic Concepts taken by at the beginning of compulsory education was correlated with later academic attainments on National Standard Tests taken in fourth, seventh and tenth grade. Students' knowledge of relational concepts when entering compulsory education was found to be significantly related to later academic attainments. This relationship was found to be apparent throughout compulsory education. However, questions were raised whether the BTBC measures students' ability to focus and concentrate for a long period of time or whether it measures students' true conceptual knowledge. Second, I used qualitative data from the collected interviews to studied possible indicators on boys' learning behaviors and how educational processes within school surroundings can affect boys' academic attainments. By leaning on Post-structuralist theorizing and former research I analyzed the interviews and found that parental interaction, peer networking and recreations can all be considered as influential factors on the boys' learning behavior and their academic attainments while in compulsory school.

**Key words:** Education, attainment, boys, Iceland, Post-structuralism

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## 1. Introduction

In the new economy, the fundamental requisite for a good life is rising ever more. This implies that life expectancy depends increasingly on the culture, social and cultural capital that citizens can amass. The fundamental life phase is in childhood, and the crucial issue lies in the inter-play between parental and societal investment in children's development (Esping-Andersen, 2002). As knowledge becomes more and more essential in a modern society it determines more than ever how nations, organizations and individuals prosper. We live in a so called knowledge-society that crystallizes in nearly all aspects of our daily lives. The labor market has undergone considerable changes and the value of skilled, complex and creative work is growing fast. As a result, economic success for countries and for individuals relies increasingly on human capital - our knowledge, skills learning, talents and abilities (Jónsdóttir et al., 2003). Education is the key factor in forming human capital. Globalization increases the need for technological skills and adaptation, the importance of human capital will only grow in the years to come (Keelay, 2007). Youngsters who do not get the chance to finish a college degree are therefore worse off when it comes to further education and good employment opportunities. Research has shown that the economy suffers if a high proportion of youths drop out of college. Community taxes will decrease and welfare expenses will increase (see Catteral, 1985; Levin, 1972; Steinberg, et al., 1984).

The opportunities of getting a good education are far greater than before and young people's expectations have undergone considerable changes as well. The idea of having a steady occupation, no matter what it is called, is not a common dream anymore. Alternatively, youth dreams revolve more around the future, full of gratifying surprises and future occupations that are well paid, flexible, demanding and enjoyable (Jónsdóttir et al., 2003). In fact, scholars have called this generation "the ambitious generation" (Schneider & Stevenson, 1999). With the rapid pace of economic development set to continue, it will become ever more important for us to understand how human, cultural and social capital can potentially help equip individuals and societies to cope with the changes that lie ahead.

Researchers have suggested and confirmed that boys are in general doing worse than girls in their educational attainment. Their mean scholastic grades are considerably lower than those of girls and their general attitude toward school is less positive than among girls (Björnsdóttir, et al., 2008; Downey & Yuan, 2005; Sigfúsdóttir, 1999). For a long time, girls have obtained higher grades in school than boys. Even in the 1950's and 1960's girls had higher grades than boys and had higher class standing in high school (Alexander & Eckland,

1974; Alexander & McDill, 1974; Mickelson, 1989). Nowadays, from pre-school through high school and even in college, girls get better grades in all major subjects, including mathematics and science (Perkins et al., 2004).

Gender difference in academic attainments is a recurrent issue in Icelandic newspapers and publications focusing on parents and teachers in the field. Schools are often accused of not taking boys' areas of interest sufficiently into account and that curriculum is not tailored well enough in informal ways to capture their attention. Teacher-student relationship is also considered to be more positive for girls than for boys. Issues such as the predominance of women as teachers and consequently stronger 'female culture' within schools, as well as the lack of role models for boys is frequently raised in debates relating to this matter (see Guðnadóttir, 2001; Sigfúsdóttir, 2004; Jóhannesson, 2005). Boys' negative trend in educational attainments has even been called a 'boy crisis' (Helgason, 2007).

## **1.1 Objectives**

The aim of this study is to find possible reasons that might affect boys' educational attainments and/or their lack of enthusiasm to study and do well in school. The starting point will be to look at tests that the boys in this study have taken during their time in compulsory education. These tests (Boehm test of basic concepts and National standard tests) are then compared to see if the former is a possible indicator of the latter. Qualitative findings are presented in the second part of this study, followed by discussions regarding former research of possible indicators on boys' inadequate educational attainments and negative attitudes towards education. The results from interviews are discussed and possible connections between former research, dominant discourse and the interviews taken for this study are suggested.

Let me emphasize that my intent is not to catalogue, or explain, the full range of variables that could have an effect on the educational attainments of boys in this study. Rather I seek to touch upon former findings that have been presented as possible indicators of these outcomes and compare them with the sample I have chosen to study. Hence, by considering the boys' educational issues, researching their attainments and conducting the interview study from a post-structuralist point of view, I contribute to the scholarship of men and women who use this approach to understand education.

## 1.2 The main research questions of this study

In the quantitative section of my study I aim to answer two questions:

1. Is there a relationship between the understandings of relational concepts of first grade students, as measured by Boehm Test of Basic Concepts, and academic achievements in The National Standard Tests in Mathematics and Icelandic in fourth, seventh and tenth grade?
2. Can the Boehm Test of Basic Concept be used as an indicator for a student's later academic attainments?

In the qualitative section of my study I seek to answer the following questions:

1. How can educational processes within the school surroundings affect boys' academic attainments?
2. What are the influential factors on boys learning behaviors?

## 1.3 Structure of thesis

This thesis is divided into eight main sections. The thesis starts with an introduction to and the objectives of this study. In section two the theoretical framework of this study is discussed. Poststructuralist view is introduced along with its two major thinkers Michel Foucault and Pierre Bourdieu. How post-structuralism can be applied to education is also discussed and the strength and weaknesses of post-structuralism. The third section of the thesis introduces previous research on influential barometers on educational attainments. Research that has suggested importance of parental involvement, social class, perception of education and school, reading and dominant discourse are shortly discussed. This section can be seen as an introduction to the qualitative part of this study. Section four explores the general background of the present study. The main structure of the Icelandic educational system is introduced, including the national curriculum guidelines defining the system and the traditional assessment methods used in Icelandic schools. Following are introductions and discussion regarding the two tests used in the quantitative section of this study, The National Standard Tests and The Boehm Test of Basic Concepts. The atmosphere of this study is presented in section five, as well as a short introduction to Vestmannaeyjar (Westman Islands), the place where the boys in this study grew up in, along with a short description of their compulsory schools. Section six presents the reason of which I drew my main inspiration when choosing to study this phenomenon. Methods, both quantitative and qualitative are presented in section seven. Subjects and measurements, processes, data and descriptive statistics and findings are

presented in the quantitative part of this section. The processes, interviews, analysis and findings are presented in the qualitative part of this section. And finally, in section eight, the results of the study are discussed along with my thoughts and reflections on the subject.

## **2. Theoretical framework**

In this section the theoretical framework of this study will be discussed. After a brief introduction to post-structuralism I will move on to discuss the broader theoretical framework of Michel Foucault and Pierre Bourdieu. Then I will discuss how post-structuralism can be applied to education by referring to previous research and Foucault's and Bourdieu's theories on the issue. Lastly I will discuss the strengths and weaknesses of post-structuralism, particularly when applied to education.

### **2.1 Post-structuralism**

Post-structuralism builds on the notion that meanings are derived from relations of difference, mostly subconscious, and that they form a structure. But it emphasizes the gaps and ambiguities in the structure of meanings. Post-structuralists argue how structures of meaning are not universal, and do not reflect ontological truths about humans or society. They focus on those gaps and ambiguities in the system of meaning and find meaning there. Thus, the inquiry is flipped on its head as the idea is not to find regularity, but instead to find what the "discovered regularity" could possibly mean. The central question that post-structuralists pose in their work is how knowledge becomes possible at any particular time under specific historical conditions. In contrast to other forms of critical theory, post-structuralism focuses on the social distribution of power associated with the construction of knowledge (Harcourt, 2007).

#### **2.1.1 Michel Foucault**

An important social theorist within post-structuralism is Michel Foucault (1926-1984) and his variety of theoretical inputs to this approach (see Ritzer & Goodman, 2003). Foucault focused increasingly on the way power and historical change shaped knowledge and this is what led to the label "post-structuralism." There are two core ideas of Foucault's methodology, "archeology of knowledge" (1966) and "genealogy of power" (1969). In short, the former idea is a search for a "general system of the formation and transformation of statements into discursive formations" (Dean, 1994:16). Archeology is able to distance and detach itself from "the norm and criteria of validity of established sciences and disciplines in favor of the

internal intelligibility of the ensembles to locate their conditions of emergence, existence and transformation” (Dean, 1994:36). Second, genealogy of power is a very distinctive type of intellectual history, “a way of linking historical content into organized and ordered trajectories that are neither the simple unfolding of their origins nor necessary realization of their end” (Dean, 1994:35). Genealogy is concerned with the relationship between knowledge ignored and power within the human sciences and their “practices concerned with the regulation of bodies, the government of conduct, and the formation of self” (Dean, 1994:154). In his genealogy of power, Foucault was interested in how people govern themselves and others through the production of knowledge. He saw knowledge generating power by constituting people as subjects and then governing the subject with the knowledge (Ritzer & Goodman, 2003). Foucault was critical of the hierarchization of knowledge, pointing out how the highest-ranking forms of knowledge have the greatest power. However power is not something that is imposed by the state on the individual but involves the actual creation of individualism. He further pointed out that the power of institutional apparatuses can be decreased through the reorganizing and undermining of power through a multitude of tactics that redistribute discursive space (Foucault, 1977). Foucault’s work has provided multiple sites from which to view the impersonal forces that play role in the construction of who we are and how our life alternatives are defined (Sawicki, 1996). Foucault pointed out how most discourse is governed by rules and principles of exclusion that include prohibition, rituals, the privileged right to speak, the appeal to reason and the will to truth. Therefore, discourse reflects and generates power, serving as a mirror of particular ideologies and socially constructed norms (Foucault, 1980; Lather, 1991).

Post-structuralists can argue that the way subjects conduct and relate to themselves is tied to the situational specific constraints they are in and to the historical particularities of the self in which the essentials to relate to one self as a particular kind of person are formed. As Foucault points out in *The Archaeology of Knowledge* (1972), discourse should not be viewed as groups of signs referring to content or representation, but rather as “practices that systematically form the objects of which they speak” (p.49). Thus, discourses can be understood as shaping and constraining perceptions of reality, including understandings of self and others by providing the available positions or “ways to be” (Jones, 1993). Hence, Foucault (1980) argued that it should not be overlooked that discourses can be damaging, as it can be both liberating and oppressive but most of the time a combination of both. Thus, learning full participation in school surroundings is about learning one’s identity and how to enact it. This also indicates embodied identity as the individual learns how to move, how to

speak, how to behave, in short, how to perform that identity. The embodied performance is crucial both to legitimacy and to full participation (Eckert & McConnell-Ginet, 1992; Butler, 1990).

### 2.1.2 Pierre Bourdieu

Post-structuralist and sociologist Pierre Bourdieu (1930-2002), emphasized “symbolic violence” and the “struggle over classification.” He argued that even with one society cultures are used not only to unite but also to dominate. Like Foucault, Bourdieu was interested in language and its connection to power, but for him language was always employed by particular actors for particular ends. Hence, unlike Foucault, Bourdieu has been more consistently engaged with the classical themes of sociological theory, particularly between structure and action (Calhoun, et al., 2007).

Bourdieu was driven by the desire to overcome “absurd opposition between individuals and society” (Bourdieu & Passeron, 1990:31) and it was central to his intellectual project to overcome a chronic fault line in sociological theory. Bourdieu’s vision of social science challenged both objectivist accounts and subjectivist ones. He argued for a new approach, a sociology that uses the intellectual resources of structural analysis, but approaches structures in terms of the ways in which they are produced and reproduced in action. Bourdieu accentuated the cultural and material constraints that shape people’s actions and argued how objective accounts can help us understand structure, and subjective accounts can help us understand action (Calhoun, et al., 2007). For the sake of this argument, some might say that Bourdieu broke down the traditional sociological dualism which is one of the reasons I prefer to classify him as a post-structuralist thinker.

Bourdieu insisted that both structure and action are necessary components of any properly specified theory of social life as they are deeply connected. Bourdieu focused on what he called *practice*; the outcome of the dialectical relationship between structure and agency. Practices are not objectively determined and they are not a product of free will (Bourdieu, 1977:3). Reflecting his interest in the dialectic between structure and the way individuals construct social reality, he named his own orientation “structuralist constructivism”. As other structuralists focused on structures in language and culture, Bourdieu argued that structures also exist in the social world itself, or in his own words, “objective structures [as] independent of the consciousness and will of agents , which are capable of guiding and constraining the practices or their representation” (1989:14). Hence,

he argued for the doings of actors who always have some practical knowledge about their world, even if they cannot articulate that knowledge (Calhoun, et al., 2007).

The heart of Bourdieu's work, and of his effort to bridge subjectivism and objectivism, lies in his concepts of habitus and field (Aldrige, 1998). While habitus exist in the mind of actors, fields exist outside the mind. On the one hand we have *the field*, the setting in which practices take place, "a network, or a configuration, of objective relations between positions" (Bourdieu and Wacquant 1992:97). Fields are spaces in which dominant and subordinate groups struggle for control over resources, where each field is related to one or more types of capital. Hence, capital does not exist or function except in relation to a field (Dumais, 2002:46). On the other hand we have *habitus*, one's disposition which influences the actions that one takes. Habitus can even be manifested in one's physical demeanor, such as the way one carries oneself or walks. It is generated by one's place in the social structure; by internalizing the social structure and one's place in it, one comes to determine what is possible and what is not possible for one's life and develops aspirations and practices accordingly. This internalization takes place during early childhood and is primarily an unconscious process. The consequences of the development of habitus are large. Bourdieu argued that the reproduction of the social structure results from the habitus of individuals. For example, based on the class position they were born into, people develop ideas about their individual potential, e.g. those in the working class tend to believe that they will remain in the working class. These beliefs are then externalized into actions that lead to the reproduction of the class structure (Dumais, 2002:46).

Overall, then, one's practices or actions are the result of one's habitus and capital within a given field.

## **2.2 Applying Post-structuralism to educational attainments**

Post-structuralism offers a range of theories, critiques, new concepts and forms of analysis which are relevant and significant for the study of education, but it also offers a range of writings explicitly devoted to education (Peters, et al., 1999). This way of theorizing considers schools as discursive spaces with their own sets of regulative processes and regimes of truth, which are usually unstated but widely understood among the children (Mellor & Epstein, 2006).

Michel Foucault's work is well-known in the field of education. His detailed studies of madness, punishment, sexuality, and the human sciences have provided educational theorists with various new concepts, analytical techniques (such as archaeology, and genealogy),

arguments of the profound connection between knowledge and power and how human subjects relate ethically to themselves and others (Deacon, 2006). A Foucauldian examination of the workings of power in the educational system would not specifically aim to identify dominant groups within it, but would rather aim to examine the power effects of discourses and the “strategical integration” of these discourses within the educational contexts (Foucault, 1978: 102). Education is fundamental in shaping modern western society and in its effects on subjects. Foucault refers to educational practices frequently in his book *Discipline and Punish* (1977) as he focuses on notions such as: norms, disciplinary power, power/knowledge relationships and the multi-faceted structures of society.

Foucault’s discourse on power and discipline offers fundamental insights into the dynamic nature of power within educational institutions. The educational discourses serve to define and perpetuate ‘normal’ and ‘acceptable’ behavior through a process of discipline that is imposed simultaneously from a variety of sources, including the individual’s self-discipline. Mechanisms of observation, surveillance, and visibility are important in the operation of disciplinary technique. As with the other ‘disciplinary sites’, educational institutions operate a system of hierarchical observation, or surveillance that serves to control the participants’ attitudes and behaviors. The education system monitors students’ progresses, passes judgments on them and moulds their attitudes and behaviors in certain ways to ensure that this exercise of arbitrary power is largely undetectable, yet quietly accepted (Ball, 1990).

The work of Pierre Bourdieu and his concepts of 'habitus' and 'field', offers some highly useful ways of interpreting the interaction between form of schooling and the formation of identity (McLeod, 2000). Bourdieu explained that school success and learning behavior are related to the amount and type of cultural capital inherited from the family milieu. In terms of schooling, Bourdieu and Wacquant (1992) described the school system as a field. Doing one's schoolwork and attempting to get good grades are kinds of practices in this field. Within the educational field, the most valuable form of capital is cultural capital: "academic success is directly dependent upon cultural capital and on the inclination to invest in the academic market" (Bourdieu 1973:96). In Bourdieu's terms, this set of cultural experiences, values, beliefs and so forth represents a form of "Cultural Capital". That is, a set of values, beliefs, norms, attitudes, experiences and exedra that equip people for their life in society (Bourdieu, 1974). Not all classes start with the same kind or level of cultural capital. Bourdieu pointed out that children socialized into the dominant culture will have a big advantage over children not socialized into this culture because schools attempt to reproduce a general set of dominant cultural values and ideas. In cultural/class terms the class that

dominates economically will also dominate all other classes culturally and ideologically. Thus, schools are agencies of cultural and ideological transmission and the dominant economic class dominates culturally through the transmission of its cultural values through the school (Bourdieu, 1974). However, Bourdieu pointed out that cultural capital can take many different forms, e.g. it might involve the status that comes through wealth or the ability to buy the resources that may give their children an educational advantage (books, computers and so forth) (Bourdieu & Passeron, 1990). Further, Bourdieu (1973) argued how the educational system demands the same from everyone and students should already possess what the school does not provide for them. This consists mainly of linguistic and cultural competence and familiarity. To acquire cultural capital students must have the ability to receive and internalize it. This should preferably be passed down by the family, which in turn is largely dependent on social class. Thus, his theory of social reproduction and cultural capital posits that the culture of the dominant class is transmitted and rewarded by the educational system. Differences in cultural capital are reinforced by the educational system that prefer these styles, leaving most members of the lower class with little hope of achieving social mobility (Dumais, 2002).

### **2.3. Strengths and Weaknesses of Post-structuralism**

Many scholars have criticized post-structuralists' concept of the self as constituted by discourse arguing that it does not allow for grasping adequately the complexity that occurs when individuals negotiate and struggle with the conflicting discourses that surrounds them in their everyday lives. Thereby they argue that post-structuralists are unable to account for the process in which individuals chose one option over another at a particular time, thus making a constructive change. So how could post-structuralists explain change and agency? Judith Butler (2004), who builds most of her theorizing on post-structuralism, has responded to these criticisms claiming that the act of being constituted as a subject is a never ending process. The condition for the possibility of agency is found in the very process of re-enacting and repeating the discursive social practices that constitute a human subject. She describes the self as a "site" of complex, often competing, power discourses, and because of this complexity and instability of the site of discourses, agency construed as resistance against hegemonic power is possible. It is possible to re-signify and rework the power discourse and find new convergences among them. Therefore, agency is more likely an "effect" of discursive conditions than the cause of subsequent action. Butler (2004) emphasizes that change and manifestations of agency are not due to critical consciousness or the subject's intentionality

but are somewhat accidental or unintentional variations in discursive repetitions (see Beste, 2006).

Foucault has also been criticized for not exploring further how people resist power. He does however, in his fragmented essays and interviews, frequently comment on the idea that power also involves resistance.

“Where there is power there is resistance, en yet, or rather consequently, this residence is never in a position of exteriority in relation to power... These points of resistance are present everywhere in the power network. Hence there is no single focus of great Refusal, no soul of revolt, source of all rebellions, or pure law of the revolutionary. Instead there is plurality of resistance.” (Foucault, 1980:95-96)

Foucault saw the subject as neither entirely independent nor entirely enslaved, pointing out that individuals are not originators of a discourse nor are they solely constituted or determined by it (Sawicki, 1991). By leaning on Foucault’s framework the formation of subjectivity is not understood in terms which rely on the explanatory category of ideology. Rather, it should be understood that particular cultural techniques, working on and fashioning the gendered self, are made available through existing regimes of practice (Martino, 1997).

Most criticism of Bourdieu’s theorizing refers to the little possibility of radical social change, that already everything is always inclined towards conformity to the social order. Further, despite the heavy focus on Bourdieu’s concept of cultural capital, no real consensus has been reached among educational researchers regarding the operationalization of cultural capital. Consequently, it is not clear whether cultural capital actually affects educational outcomes and whether and why the process of converting cultural capital into educational success may differ for male and female students (Dumais, 2002:49). Some scholars have argued that the grounds of dominant interpretations have been too narrow in Bourdieu’s theory of cultural capital. They recommend operating with a wider perspective, keeping in mind that the specific indicators of cultural capital in one context may not be relevant in another context.

### **3. Previous research**

Various national and international research has pointed out the fact that academic performance is not solely based on the educational processes within school, it depends no less on the circumstances in which the pupils live, on the encouragement and support the pupils receive at home, the atmosphere within their peer group and pupils’ lifestyle in different places (Bean et al., 2003; Coleman, 1988; Sheldon & Epstein, 2005; Pong et al., 2005).

In this section I will discuss several researches, national and international, that point out possible influential factors on educational attainment and possible reasons for boys' general reluctant attitude

### 3.1 Parental Involvement

There are many factors that shape the outcome of education. Research has identified 60% of these factors, amongst which are socio-economic factors, quality of schools, resources and so on. However, the remaining 40% can be best described as the hopes and aspirations of the pupil, which is generally formed through parents and child interactions (Deforges, 2003). There is no doubt that parents are important and significant role models for their children (Bandura, 1977) and play a key role in their social support network (O'Byrne, et. al. 2002). Even though parental involvement is played out in complex settings and many have argued that it is only one of many factors which has an impact on a pupil's attainments and adjustments, high quality studies have shown that parental involvement, in the form of 'at-home' interest, discipline, monitoring and support, is a major and positive force in shaping the pupil's educational outcomes (Sacker et al, 2002; Sui-Chu & Willms, 1996; Coleman, 1988; Sheldon and Epstein, 2005).

New studies on parental involvement in academic achievement suggest that emphasis should be laid on parental gender specific effects (e.g Lee et al., 2007; Kristjánsson & Sigfúsdóttir, 2009). In a national survey conducted on 7430 Icelandic adolescents (81% of all students present in class May 20th 2006 in 9th and 10th grade), Kristjánsson and Sigfúsdóttir (2009) examined the relationship between parental support, parental monitoring, and time spent with parents and academic achievement among these adolescents and the indirect role of school effort. Structural equation models showed that parental factors were all associated with academic achievement among both boys and girls. However, for both genders, these associations are mostly indirect, through school effort. The relationship between the parental factors and academic achievement was similar in strength for boys and girls even though the link between the two is weak for both sexes. Boys however received less parental support and were monitored less than girls. Thus they argue that 'a part of the explanation of the underachievement of boys relative to girls might be found in the different ways the genders are brought up' (p.492).

Another Icelandic research shows that boys tend to go to bed later than girls and are less likely to get attentiveness and warmth from their parents<sup>1</sup>. The same research also

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<sup>1</sup> This was particularly evident among boys in Vestmannaeyjar (see Jónsdóttir et al., (2002). p.82)

illustrated that parents are less likely to know with whom their boys usually socialize and where they are during evenings. Parents are also less likely to set up rules regarding curfew when it comes to boys (Jónsdóttir et al., 2002). A possible reason for these different upbringings might be dominant ideology on masculinity within Icelandic culture<sup>2</sup>.

Looking at the education curriculum plan<sup>3</sup> published by the two compulsory schools of Vestmannaeyjar<sup>4</sup> I have to agree with Þorsteinsson et al. (2005), as they point out that there seems to be a general understanding of the importance of parental involvement. However there seems to be no condition for active involvement even though parents are encouraged to take part in school activities and their children's education. In fact, there is a general lack of invitations from school authorities for parents to be involved in activities such as drafting the education schedule or promote ideas regarding curriculum emphasis. Communication seems to consist of information and requests from schools to parents rather than school assistance to stimulate active involvement of parents in order to form better relationships and cooperation between the two.

## 4.2 Social class

Wide ranges of theoretical perspectives establish that social class is a major influence on educational expectations, achievement and outcomes. Mac an Ghail (1996) argues for the need to renew the cultural analysis of class in order to map out some of its more complex and intimate positions as they articulate the shifting boundaries of gender, sexuality, generations and ethnicity. He argues how studies today tend to ignore or downplay the influence of social class and wants to revisit the earlier critical sociologists of education and their understanding of schools as a social, cultural and political process that is far from neutral. This does not mean a simple return to earlier theories of socialization, cultural difference and resistance, which 'tended to emphasize an over-socialized bi-polarization of class differences' (p.172). Instead, Mac an Ghail (1996) gives reason for their being, need to re-engage with central theoretical problems, such as structures/agency, micro/macro, society/individuality and social order/social change divisions but within the context of new political-economic conditions that we are facing today.

Sacker et al. (2002) set out to examine how inequalities in educational achievement

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<sup>2</sup> Further discussions in chapter 4.7

<sup>3</sup> Skólanámskrá Barnaskóla Vestmannaeyja and Skólanámskrá Hamarsskóla.

<sup>4</sup> All Icelandic schools are accuired by law (Compulsory school Act 66/1995) to publish education curriculum each school year.

and adjustment come about. It has been well known for decades that pupils' educational achievement is related to parents' social class, yet the mechanisms that form this relationship are not well understood. Characteristically, family social class was significantly related to pupil achievement and adjustment at all ages. Children from higher social classes had higher levels of attainment and better scores on scales of personal adjustment than children from lower social classes.

Research has shown that the well-being of boys in school is as much about class as it is about gender class position in regards to one's educational attainments, and one's well-being appears to affect boys more than girls. Boys from low class families do worse in school than girls with same class positions and these boys lower the mean scores for all boys (Arnot et al., 1999; Teese et al., 1997). Hence, Mac an Ghail (1994) has argued that lower class students are more likely to be unsatisfied within the school system.

Icelandic researchers discuss several ideas that could affect this development in education and relatively often mention class influences but hardly ever use it as their key concept. No research has been done in Iceland with focus on class differences within education (Björnsson et al., 2004) and as a result, the power of class is often neglected when trying to understand the crisis in education among pupils in Iceland.

### **4.3 Regional affects – Urban vs. Rural**

It has been argued that boys living in rural areas have very little motivation to study hard, as rural areas have much more to offer boys than girls in terms of interesting job opportunities and general interests. Girls, on the other hand, have few options other than to seek further education in college and universities to improve the career opportunities (Halldórsson & Ólafsson, 2009). Research has also suggested that a higher proportion of low-achieving boys can be found in rural areas (e.g. De Lisle et al., 2005). Results from PISA 2003 verify that differences between the urban area and the rural area can be found in Iceland (Björnsson et al., 2004). However, not all scholars agree with these findings. In their research on male disadvantages in academic achievements in Iceland, Ólafsson et al. (2006) found that male academic disadvantages were not consistently associated with particular regions. In fact, the size of the gender difference fluctuated from year to year in individual regions, while remaining relatively constant at the national level (p.44-45).

Pupils living in rural areas are more likely to apply for apprenticeship or vocational training when the opportunity presents itself after compulsory education. However, the rates are a great deal higher among boys (23%) compared with girls (9%). Hence, when it comes to

continued education and regional effects, pupils living in urban areas (79%) are more likely to have plans to continue with their education at university level than pupils living in rural areas (70%) (Guðmundsdóttir, et al., 2009).

#### 4.4 Teachers

Critics claim that there are too many female teachers and too few male teachers in primary and lower secondary schools and that feminism and the strive for gender equality in schools is somehow scaring men away from teaching in primary and lower secondary schools (e.g., Karlsson & Traustadóttir, 2000, Helgason, 2007; for a critique, see Kenway 1995; Kenway & Fitzclarence, 1997). However, the empirical evidence of whether and how teacher gender plays a role in causing gender differences in educational outcomes has been shown to be inconclusive.

Essentialist arguments referring to the need for male role models in schools, which often seems like a solution for all boys' diverse educational and social problems needs to be avoided. Icelandic research suggests that it does not matter to a student if the teacher is a man or woman. For instance, students in the upper grades (8–10) of the primary school said in a questionnaire study that men and women teachers are equally prepared to deal with teenagers. The teenagers claimed that it is the character and performance of the teacher that matters most (Guðmundsdóttir and Guðmundsdóttir, 1993; Jóhannesson, 2005). Several scholars worldwide also confirm this. Gordon et al. (2000) points out that gender did not appear as relevant when young person's talked about teachers. Her interviewees among teenagers argue that good teachers are those who can keep control in a relaxed atmosphere. In a survey of students in Australia, Lingard *et al.* (2002), found that when students talked about their idea of the ideal teacher, they mentioned the importance of being able to talk with teachers about personal problems. Skelton's (2003) study of students' teachers in England showed that although most students wanted mixed-sex teaching faculty, between one third and one half of them said that teachers' gender is irrelevant in the primary school. Furthermore, studies find that males perform no better when taught by male teachers than by female teachers (Sokal et al., 2007). Ashley and Lee (2003) argue that there is little evidence to support the idea that boys growing up in single parent mother households need to have a compensatory male role model in school. Instead, they suggest the contrary. 'A poor male role model at home or school can do a great deal of damage, whereas no male role model at all does not necessarily lead to any kind of problem' (p. 63). The fact is that men taught children for decades, and during those times girls fared better than boys, just as the young girls do now (Magnúsdóttir

& Einarsdóttir, 2005; Þórðardóttir et al., 2005).

#### 4.5 Attitudes toward reading

Reading attitude fulfills a pivotal role in the development and use of lifelong reading skills. Prominent among the affective factors that impact reading achievement is the child's attitude towards reading. An attitude is generally defined as a learned disposition or belief that allows us to predict behavior (Weinberg, 2006). Attitude toward reading has been defined by Smith (1990) as "a state of mind, accompanied by feelings and emotions that make reading more or less probable" (p.215).

Various researches have verified that attitude toward reading affects students' educational attainments (i.e. Knuver & Brandsma, 1993; Kush & Watkins, 1996; McKenna, et al., 1995; McQuillan, 1998; Schooten & Glopper, 2002; Wigfield & Eccles, 1994). Children's academic attitudes have also been shown to be related to home literacy practices occurring before formal school entry (Scarborough & Dobrich, 1994) as well as parental attitudes toward reading (Beech, 1990).

Þorbjörn Broddason, an Icelandic professor in sociology, has since 1968 made regular inquiries on Icelandic adolescents<sup>5</sup> and their use of the media. Broddason's research does in fact demonstrate the social development, i.e. increasing possession of various equipment, e.g. televisions, computers and internet connections. Hence, young people increasingly choose to use the new multi-media for their reading instead of reading books and newspapers. In 1968 89% of adolescents in Iceland read newspapers everyday or nearly every day. In 1985 the percentage was 72% and in the year of 2003 the ratio was down to 40%. Similar findings can be seen in regards to reading books. In 1968 Icelandic adolescents read 3.9 books on average each month. In 1985 the average book read was 4.2 and in 2003 the ratio was 1.8 books on average per month. Broddason (2005) has also revealed that since the beginning of the research the number of adolescents that say they have not read any books within the last month has tripled and is now 1/3 of all participants.

The results from PISA 2000 indicated that the gender gap in reading literacy favoring girls was substantial in Iceland. Hence, the PISA research in 2003 showed that among all 41 participating countries, Iceland was the country where girls had the greatest advantage over boys in reading literacy. (Halldórsson & Ólafsson, 2009).

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<sup>5</sup> Adolescents that are Ten to fifteen year olds

## 4.6 Masculinities

Many boys are among those students who get top grades and achieve greatly in school. However, there are far more boys than girls who achieve poorly and receive low grades (Arnot et al., 1999). How can this be? Why are there so many boys performing insufficiently? Many scholars have begun to look closer at the connection between masculinity and educational achievements, focusing on boys' perspectives of school (Whitelow, et al., 2000; Connell, 2000). Longstanding questions of how traditional gender stereotypes and norms influence students' perceptions of their own abilities and the socialization of girls and boys within their families and institutions such as schools.

Masculinities infuse school regimes and have established that there is diversity not just between settings but also within settings, where different masculinities are produced through performances that draw on the different cultural resources that are available in each setting (Connell 2000; Frosh, et al. 2002; Swain 2001). Schools are located in and shaped by specific cultural, politico-economic, and historical conditions: individual personnel, rules, routines and expectations, and the use of resources and space will all have a profound impact on the way young boys (and girls) experience their lives at school (Swain, 2006). In every setting there will be a hierarchy of masculinities, and each will generally have its own dominant form of masculinity, one that gains ascendancy over and above others. In many ways, the localized, hegemonic mode of masculinity serves as an idealized form of behavior that boys are able to measure themselves against to discover the extent of their "boyness" or manliness (Mills, 2001). The hegemonic form may differ in each school, and depending on the features of the formal culture and the resources available to draw on, it may be either more stable/unstable, more visible/invisible, more passive/violent, and more conformist or resistant to the formal school authority; and while some forms may be created by the school practices, others will be invented by the boys themselves (Gilbert & Gilbert 1998).

Various research show that boys' inadequate educational performance can be traced back to ideology of masculinity. Attitudes towards schoolwork and learning in class are considered feminine and this can affect boys' educational behavior and their tendency to avoid teachers' requirements and instructions. In Iceland there are indications of gender-specific learning cultures, where learning plays a different role for girls than boys in the socialization process in adolescence. Research by Berglind Magnúsdóttir, (2006) suggests that getting high grades is part of the image of a girl's leader, while high grades for a boy's leader are not as important. Boys, also, appear to have high- and unrealistic ideas concerning their educational ability which is also evident in the PISA test in 2003 (Magnúsdóttir, 2006; PISA,

2004). In addition Whitelows et al. (2000) found that pressure from peer groups and resentment towards femininity are also factors that discourage boys from school efforts. Being a man involves cultural images and practices and always implies a contrast to an unidentified femininity, thus images of dominant masculinity preserve particular male bodies and ways of being as different from female and distant from caring (Acker, 2006:85). A boy's position in the peer group is ultimately determined by the array of social, cultural, physical, intellectual, and economic resources that he is able to draw on and accumulate, he uses the resources available to him to gain popularity and status (Swain, 2006).

#### **4. The Icelandic educational system**

The Icelandic educational system, its guidelines and assessments will be introduced and discussed briefly. Following are introductions and discussions of the two tests used in the quantitative part of this study, The National Standard Tests (NSTs) and The Boehm Test of Basic Concepts. This is considered necessary because background information such as this may be relevant when the results of the study are interpreted.

##### **4.1 The basis of the educational system**

The Icelandic educational system is divided into four levels: pre-school, children up to 6 years of age; compulsory-school (primary and lower secondary in a single structure) 6 – 16 years of age; upper-secondary, 16 – 20 years of age and higher education level from 20 years of age. A fundamental principle of the Icelandic educational system is that everyone should have equal opportunities to acquire an education, irrespective of origin, gender, sexual orientation, residence, social class, religion, health condition, handicap or situation in general (The Compulsory School Act, 2008).

All education is under the jurisdiction of the Ministry of Education, Science and Culture. The educational system has to a large extent been decentralized, with regard to both responsibilities and decision-making. Local Municipalities are responsible for the operation of compulsory schools<sup>6</sup> (Ministry of Education, Science and Culture, 2008). The law concerning compulsory education stipulates that education shall be mandatory for children and adolescents between the ages of six and sixteen and that the education, including textbooks and materials, is free of charge. Hence, the law determines the length of the academic year, the minimum number of lessons to be given and defines which subjects are obligatory (Ministry of education, Science and Culture, 2002). Under the Compulsory School Act (2008)

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<sup>6</sup> As well as Pre-school education

the length of the school year is nine months each school year and shall include at least 180 days of school attendance. In the school year of 2007/08, 43.841 pupils attended compulsory education (Ministry of Education, Science and Culture, 2008).

Compulsory education is organized in a single structure system, i.e. primary and lower secondary education form part of the same school level and usually take place in the same school. There are no entrance requirements at this school level, and all children are accepted at the age of six years. The enrolment rate is 100%. The law makes it the duty of parents to see to it that their children register for and attend school. Compulsory school is divided into ten grades. The size of schools varies tremendously. The largest schools are in the capital and its suburbs and have approximately 800 pupils. In rural areas, outside Reykjavík and its suburbs, there are many small schools, some with fewer than 10 pupils. Almost one-half of all compulsory schools in Iceland have fewer than 100 pupils (Ministry of education, Science and Culture, 2002).

#### **4.2 The National Curriculum Guidelines**

The Ministry of Education, Science and Culture issues the National Curriculum<sup>7</sup> Guidelines for compulsory education. These National Curriculum Guidelines are intended both to provide the detailed objectives necessary to implement the law and offer direction as to how they should be carried out in practice. All teachers in Icelandic compulsory schools are obliged to follow these guidelines, which in details describe the standards students are expected to attain through the schools and the main objectives of instruction of individual subjects in accordance with that role. The guidelines determine the length of the academic year, the minimum number of lessons to be taught each week and define mandatory subjects. The subjects that are currently given the greatest amount of lessons are Icelandic (19%) and mathematics (17%). Other subjects include Natural History, Social- and religious studies, physical education, arts and crafts, English, Danish, home economics, information technology, and life skills. Students are generally expected to cover the same subject material at roughly the same speed. However, students who have difficulties studying are provided with remedial teaching, primarily in Icelandic and mathematics, and remain with their class for most of their lessons (Ministry of Education, Science and Culture, 2006).

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<sup>7</sup> Curriculum (Námsskrá) is a detailed list of material which should be covered by any part of education and training. This may be texts, theoretical or practical exercises and/or hands-on training; Source: Ministry of Education, Science and Culture (2002).

Teachers at primary and lower secondary level are trained as generalist teachers at the University of Iceland or the University of Akureyri. Satisfactory performance in the matriculation examination or its equivalent was required to commence a teacher education program which lasted 3 years (The Compulsory School Act, 1995). Now teacher education is being redesigned in Iceland. In spring 2008 a new legislation was passed on professional education of teachers and trainers in pre-school, compulsory school and upper secondary school.<sup>8</sup> The new legislation generally upgrades teacher education and a Masters Degree will be the minimum requirement for teachers for all school stages instead of a three year Bachelor Degree (European Commission, 2010).

The main objective of compulsory education in Iceland, as stated in the Compulsory School Act, is to encourage pupils' general development and prepare them for active participation in a democratic society. Compulsory school practice and methods shall be characterized by tolerance and affection, Christian heritage of Icelandic culture, equality, democratic cooperation, responsibility, concern, forgiveness and respect for human values. Further, the compulsory school shall encourage broadmindedness in its pupils, strengthen their skills in the Icelandic language and their understanding of Icelandic society, its history and characteristics, of people's living conditions and the individual's duties to the community, the environment and to the world (The Compulsory School Act, 2008). For the past few years, teaching methods have focused increasingly on individualized instruction, as authorized by the National Curriculum Guidelines. Individual instruction or teaching involves adjusting the curriculum to the need of each student. This is evident in the compulsory school act (2008) as it is firmly stated that the compulsory school shall endeavor to organize its activities to correspond fully with the position and needs of their pupils and encourage the overall development, well-being and education of each individual. Pupils shall be provided with the opportunity to develop and use their creativity and to acquire knowledge and skills in their strive towards education and development. School activities shall lay the foundations for pupils' autonomy, initiative and independent thinking and train their cooperation skills. This approach supposedly allows students to work at different pace and on different materials in the same courses as well as it puts greater responsibility on students to take an active role in their own education (Ministry of education, Science and Culture, 2002).

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<sup>8</sup> Including academic education, VET, art education and special education.

### 4.3 Assessments

There is no selection or streaming by ability in compulsory education, and pupils move up from one grade to the next according to age. Compulsory schools are not required by law to assess the performance or the progress of each student. However, there is a strong tradition in the Icelandic educational system to test every student in as many subjects as possible at the end of every semester. The way in which the reports on pupils' progress are written varies greatly. The assessment can be in the form of a number, a letter or a description either oral or written. Reports are given at regular intervals throughout the school year and at the end of each school year. Assessment in the first three grades generally involves reading and writing comprehension tests and short model tests in mathematics. However, as the children grow older, evaluation in most subjects takes the form of a written exam, which students are required to prepare for. These examinations, and other forms of assessments, are internal and carried out by individual teachers and schools. Assessment is therefore not standardized between different schools and teachers (Ministry of education, Science and Culture, 2008). The purpose of assessments is to monitor whether pupils fulfill the objectives laid down in the National Curriculum Guide and to attain their study objectives, to encourage pupils to make progress and determine which pupils may need special support. Further provisions on study assessment shall be laid down in the National Curriculum Guide for Compulsory Schools (The Compulsory School Act, 2008). Upon completion of compulsory school education, the pupils receive a certificate which confirms to the completion of compulsory studies. The certificate shall records the pupil's study assessment report, stating their marks on both the nationally coordinated examinations and all other courses completed in their final year of school.

### 4.4 National Standard Tests

The Ministry of Education, Science and Culture organizes a coherent national assessment in compulsory schools, provides schools with national examinations for that purpose and carries out national assessments (The Compulsory School Act, 2008). Nationally standard tests (NSTs<sup>9</sup>) have been administered, in their present form, in the final year of Icelandic compulsory education since 1929 and introduced into grades four and seven in 1995 (The Compulsory school act, 1995). The NSTs are administered every year in key subjects to 9, 12 and 15 year-olds. The NSTs are taken by all students in the country, at the same time, using

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<sup>9</sup> From now on referred to as NST's

the same methods and under comparable conditions (The Institution of Educational testing, 2004).

NSTs are set twice a year. Students in 4<sup>th</sup> and 7<sup>th</sup> grades sit exams in October and students in 10<sup>th</sup> grade sit exams in May. Students, who are unable to attend the official examination, because of illness or other special situations, are allowed to take a comparable test a week later. All pupils in the 4<sup>th</sup> and 7<sup>th</sup> grades of compulsory school shall undergo national examinations in Icelandic and mathematics. Pupils in the first semester of 10<sup>th</sup> grade shall undergo national examinations in Icelandic, mathematics and English (Compulsory school act, 2008). Students can also choose to undergo examination in natural history, Social science and Danish. Most students today choose to take NSTs in the three obligatory subjects but few students decide to rise to the challenge and undergo examination in the other subjects as well (Úlfisdóttir, Gunnarsson, Skúlason & Björnsson, 2007).

The Independent Institution of Educational Testing, which specializes in general assessment and study evaluation, is funded by the state through the Ministry of Education, Science and Culture. The Institute is responsible for organizing, setting and grading the NSTs and for undertaking comparative analysis of the educational system through participation in international surveys (The Institution of Educational Testing Act, 2004). Marks ranging from one to ten are awarded, based on referenced criteria (10 being the highest). The purpose of these examinations is primarily to indicate the pupil's standing at the completion of his compulsory education and to assist him or her in choosing a course of upper secondary study (The Compulsory School Act, 1995). Until 2007/08 the marks awarded by schools for work done in the final year of compulsory education and the national test results were combined in the certificate qualifying a pupil for upper secondary education in either an academic or vocational institution. However, this streaming function of test results was abolished in 2009. From the autumn of 2009, tests are held at the beginning of the final year of compulsory education and do no longer serve as an admission requirement to a specific branch at the upper secondary level (European Commission, 2009a).

Icelandic education laws designate various roles for the NSTs, both regarding individual performance and school accountability. Test results are expected to give valuable information about student ability in certain subject areas as well as providing a way to rank each student against all peers. Hence, the tests provide information about academic strength and weaknesses and give guidelines for further instructions. The test results can be considered an important tool for schools by which to evaluate their performance and the effectiveness of teaching methods (Ministry of Education, Science and Culture, 2002; Sigþórsson, 2008).

NSTs are not only well known in Iceland but also in Europe and the United States. The tests have been a part of the educational system in Sweden for quite a while and there are plans to soon integrate such tests in Norway and Denmark (Nielsen, Øygarden & Hognestad, 2006; Egelund, Wohlers & Siersbaek, 2006). In the USA, standardized tests are an entrenched feature of educational culture, e.g. the Scholastic Assessment Test (SAT), which in many ways resembles the Icelandic coordinated examination.

The use of NSTs is considerably debated but it is generally acknowledged that they have both advantages and disadvantages for individual students and the educational system. The shortcomings of the NSTs have caused considerable criticism. Detailed goal setting, as provided by National Curriculum Guidelines and NSTs are often considered to be centralization of power that works against the flexibility of teaching methods and hinders the adjustment of the curriculum to individual needs. On the surface the tests seem objective and fair, as all students are treated equally. However, the tests demand the same standard from all students and students with learning difficulties and/or little interest in academic study tend to do poorly on the test which can have negative effects on students' self-confidence. The claim that the tests are meant to provide guiding evaluation has been called into question as, in some opinion, test results are generally treated as terminal evaluations of students' performances (Sigþórsson, 2008). The emphasis on academic study encourages learning methods built on drill-and-practice, which require good memory and comprehension abilities, but offer less opportunities for the use of higher thinking skills such as independent reasoning and problem solving (Sigþórsson, 2008).

In Iceland, NSTs have been harshly criticized and are regularly a debate issue within the Parliament, whether to abolish them altogether or not. The issue of educational assessments does also cause disagreement in other Nordic countries (e.g. Sweden, Norway and Denmark). The debate concerns not only the pros and cons of standardized tests in the educational system, but also the type of examination required (Sigþórsson, 2008). Despite criticism NSTs are considered to be an important mechanism for quality control in compulsory schools and a better method of evaluating national learning has not yet been found. Hence, the NSTs are curriculum based and have advantages over other standard tests (e.g. PISA<sup>10</sup>) because they are administered every year, which makes it possible to follow trends across consecutive years.

Perhaps there is no single right way to measure educational achievement and maybe it

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<sup>10</sup> The Programme for International Students Assessment (PISA) is an international assessment of the reading, science and mathematical literacy of 15-year-old students and takes place in 3 year cycles.

is not so important to evaluate national learning and thus compare schools and students on the basis of such tests. However, without NSTs, research such as I conducted, would not be possible.

### 3.5 The Boehm Test of Basic Concepts

The Boehm test of relational concepts has been tested among first grade students in Vestmannaeyjar, where this study is conducted, for the past 14 years. It is however not a part of the Icelandic educational system, but because it is a part of my educational assessment methodology I consider it necessary to introduce its main basis and purpose.

Boehm Test of Basic Concepts (BTBC<sup>11</sup>) was developed by Ann E. Boehm. The test can be applied to children attending kindergarten to second grade. The test consists of a small booklet including 50 basic concepts arranged in order of increasing difficulty. Its aim is to evaluate the children's ability levels on qualitative, environmental and characteristics of some concepts (Gülden, 2009). The concepts are frequently used in educational and primary curriculum materials, such as the understanding of space, time, and quantity (Boehm, 1971). In the test the children mark a picture which corresponds to verbal directions given by the examiner. Concepts such as middle, alike and separated are included in the test (Beech, 1981). The ability to understand these concepts requires skills and knowledge with both linguistics and cognitive demands. Basic concepts are often used to define peoples' or objects' qualities, positions, time and numbers. They are also necessary for children to understand school activities, which makes them critical to school success. Previous research has shown that many concepts are actually learned before children start school, i.e. in the preschool years. Studies have also shown that children with learning difficulties tend to face more difficulties when learning basic concepts and that insufficient learning experience during the preschool years may lead to differences in conceptual development in later years (Beech, 1981). Basic concepts have evolved in all cultures and probably at all times in history. They originate in language evolution and develop to reflect the influence of the surrounding culture. Basic concepts can be thought of as building blocks for thinking and problem solving as well as the basic units of learning and instruction (Zhou & Boehm, 2001).

BTBC is considered a useful provider of indicators concerning mastery or ignorance of concepts, but does not contain the entire range of concepts that should ideally be known (e.g. Spector, 1979; Glutting et al., 1989). The primary purpose of the BTBC is to screen for

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<sup>11</sup> Here after referred to as BTBC

possible concepts comprehension difficulties among students. Those who attain low score on the test can therefore be further evaluated and provided with a remedial program if necessary (Boehm, 2001). Possible reasons for lack of comprehension of basic concepts on the BTBC can come from various sources, such as lack of knowledge of concept labels or vocabulary deficits, the complexity of directions, inadequate auditory memory of sentences, or a difficult level of abstraction and deficits in spatial perception. Other non-cognitive factors can be the level of nervousness experiences as well as other social factors. However, socioeconomic status has not been found to affect test scores. Children from lower socioeconomic groups have similar performances on the BTBC as children from more advantaged backgrounds. Similarly, some concepts have been found relatively easy or difficult across socioeconomic groups (Boehm, 2004). Boehm (2001) suggests that, whenever possible, test results of children with scores below average should be carefully analyzed for possible error patterns which may indicate specific problems. A child who does poorly on the BTBC test should certainly be monitored. An important part of the test's validity is whether it can be used to make predictions of future achievement in different academic situations. The predictive ability of assessment tests in general has received valid and understandable criticism from different scholars due to the risk of incorrect results and labeling effects (e.g. Cole & Siegel, 2003; Jerling & Jerling, 2003). Nonetheless, early research, correlating the BTBC with different achievement tests, has provided promising results on the predictive validity of the BTBC (e.g. Steinbauer & Heller, 1978; Busch, 1980; Rhyner & Bracken, 1988).

Given the consistency of findings in studies of various sample populations from kindergarten and early grade school level, it is safe to say that the evidence indicates that knowledge of relational concepts has considerable influence on future academic achievement. Although most students seem to have a good understanding of basic concepts when they start school, mastery of the concepts yet to be learned may be substantially related to later school achievement. As students progress through the educational system they encounter more and more complex concepts, including multiple level directions and abstract ideas. Given the importance of relational concepts for educational achievement and the fact that some students have difficulties processing directions and learning materials involving relational concepts, it is logical to expect the difficulties encountered by such students to be compounded as they move up through the school system.

## 5. The atmosphere of present study

### 5.1 Vestmannaeyjar (Westman Islands)

It is safe to say that a unique place has been chosen for the present study. Not only unique for its geographical position but also for its culture. This place is called Westman Islands (Vestmannaeyjar<sup>12</sup>), positioned off the south-west coast of Iceland, an archipelago of fifteen islands and numerous skerries. A home to men, birds and fish. The islands stand isolated in the sea and off beaten track so in order to visit this place you have to travel by air<sup>13</sup> or by ferry. This, perhaps dated and fanciful remoteness, lends the islands an aura of magic and adventure, particularly to those living in a modern, western society. Most people on the main land see the Islands as being far away and somewhat inaccessible but island natives, are on the other hand, self supporting and in equilibrium with their surroundings (Rúriksson, 1995). On July 21<sup>st</sup> 2010 a new harbor was opened and the islanders got a new ferry route between Landeyjahöfn and Vestmannaeyjar<sup>14</sup>. The sailing time is only 35 minutes and the drive from there to the capital, Reykjavík, takes less than 2 hours.

Heimaey, the largest and solely inhabited island of the archipelago, is approximately 13 square kilometers and has a population of about 4,100<sup>15</sup>. The population used to be well over 5000 people but after the volcanic eruption of 1973 the population has never recovered its former strength (Statistics Iceland, 2009).

Due to their position in the open sea Vestmannaeyjar has long been one of the greatest fishing ports in Iceland. And needless to say, most of the inhabitants make their living from fishing or the service companies connected with the industry<sup>16</sup>. A strong cultural life has flourished in Vestmannaeyjar and within this community one can find almost all the cultural and artistic activities of which a much larger city would be proud (Rúriksson, 1995).

For the last twenty years or so, times have been difficult for many of the rural areas in Iceland and the residence's sense of identity has suffered a setback. The main reason behind this is first and foremost changes within the fishing industry. The quota system has made the subsistence insecure because of unstable ownership. Hence, retreat in equipping and running fishing vessels and technological development has moved the production from land based production plants to production vessels, which as a result, decreases the demand for

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<sup>12</sup> In Icelandic the islands are called Vestmannaeyjar and here after referred to as such

<sup>13</sup> A 20 minute flight from the airport in Iceland's capital, Reykjavík.

<sup>14</sup> Before the ferry sailed between the harbor town Þorlákshöfn, located on the south coast of Iceland. The sailing was close to 3 hours and then there was a 45 minute drive to Reykjavík.

<sup>15</sup> See [http://vestmannaeyjar.is/net/skraarsafn/vestmannaeyjar\\_is/1199875447.pdf](http://vestmannaeyjar.is/net/skraarsafn/vestmannaeyjar_is/1199875447.pdf)

<sup>16</sup> See [http://vestmannaeyjar.is/net/skraarsafn/vestmannaeyjar\\_is/1199875447.pdf](http://vestmannaeyjar.is/net/skraarsafn/vestmannaeyjar_is/1199875447.pdf)

uneducated workers. Consequently the unemployment rates among fishermen and workers within the fishing industry grow higher which often results in emigration. Vestmannaeyjar is one of the rural areas that have suffered the most.

## 5.2 Compulsory education in Vestmannaeyjar

There are two compulsory schools in Vestmannaeyjar called Barnaskóli and Hamarskóli. These schools can be considered to be a reasonable representation of the typical Icelandic elementary school with regards to their daily operation. However, they are uniquely positioned given that they are located on a 13.4 km<sup>2</sup> island with around 4100 inhabitants. The two compulsory schools belong to the south region of Iceland, a region which generally attains the lowest average grade scores in the national standard examinations compared with other regions of the country (The Institutional of Educational Testing, 2004).

Barnaskóli is an old institution founded in 1880 and currently has around 450 students. Hamarskóli is quite younger and smaller, founded in 1982 and currently has about 320 students. Before 2007 the location of a student's home determined which school she/he would attend and both schools were single structured, thus providing education from grades one to ten. However, in the fall of 2007 the two schools were united into one<sup>17</sup> institute which today is called Grunnskóli Vestmannaeyja. The schools are still identified with their old names but changes have been made so that today students in 6<sup>th</sup> to 10<sup>th</sup> grade attend classes at Barnaskóli and the younger students, 1<sup>st</sup> to 5<sup>th</sup> grade attend classes at Hamarskóli.

Given the size of the island and its unique geographical position it is safe to say that there was, and is, a similar mix of social classes in each school district and even before the two schools were united there was little difference to be found in the students' educational abilities. Thus, the two schools can be considered to be somewhat homogeneous, given that they are situated within the same community and social context, are similar in size and both run by the municipality. As a result, the differences between the schools' standards and qualities are considered minimum.

Other educational establishments in Vestmannaeyjar include a school of higher education with around 250 to 300 students, as well as a few small research departments affiliated with the University of Iceland.

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<sup>17</sup> Before the schools were run as two institutes under one governance

## 6. The research

In this section I will discuss the main reasons for my enthusiasm and passion to carry out this research.

### 6.1 Reason for the study

The nature of gender inequalities in education has changed greatly over recent decades and, with regard to attainment in particular, has become more complex. Apart from the injustice inherent in all gender stereotyping, gender differences in education can also negatively affect economic growth and social inclusion. For example, women remain a minority in the fields of math, science and technology, but on the other hand research shows that boys are more likely to be among the poorest performers in reading ability. Just these two examples are reasons enough to exemplify that gender differences in education must be taken into account when developing policies and strategies to improve educational outcomes (European commission, 2009b).

There are various reasons to pay closer attention to Icelandic boys when it comes to their academic achievements. Researchers argue that when compared with the girls boys are not only struggling in standardized tests but also in unstandardized tests. Boys are also more likely to drop out of school and struggle to find a purpose of what they are doing (Sigfúsdóttir, 1999). An Icelandic research by Björnsdóttir et al (2008) demonstrates that a significant difference can be found in educational interest between boys and girls when they start school at the age of six, and this gender difference increases in 3<sup>rd</sup> grade. Hence, motivational levels of students in grade 6 and 9 was even lower than in 1<sup>st</sup> and 3<sup>rd</sup> grade. Even though the motivation level for most students in 1<sup>st</sup> and 3<sup>rd</sup> grade was quite high Björnsdóttir et al. (2008) point out that the lack of motivation of 5–10% of these students is of great concern, particularly for boys who make up the majority of this group. Generally, boys' motivational level were lower than those of girls in all the grades and this difference increased with age.

Yet another reason for my study is that research has also indicated that, a higher proportion of low-achieving boys can be found in rural areas (e.g. Björnsson, et al., 2004; De Lisle et al., 2005). These findings are no exception for boys living in Vestmannaeyjar. In fact, in reports by The Icelandic Centre for Social Research and Analysis (ICSRA<sup>18</sup>) in 2001 and

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<sup>18</sup> The Icelandic Centre for Social Research and Analysis, ICSRA, is a youth research centre that has specialized in youth research since 1999. The Centre collects both qualitative and quantitative data on a yearly basis from various fields in the country and is specialised in research amongst adolescents and evaluation of school work.

2003, comparison results for Vestmannaeyjar and other parts of Iceland were discussed. Results from both reports show that students in 10th grade in Vestmannaeyjar were relatively less likely to feel satisfied in school in comparison with other Icelandic districts. However, a considerable gender difference was evident in this report. Girls in Vestmannaeyjar are less likely to feel dissatisfied than girls from other Icelandic districts, but boys in Vestmannaeyjar are far more likely to feel dissatisfied than boys from other Icelandic districts (Daníelsdóttir, et al., 2001; Björnsdóttir, et al., 2003).

## **7. Methods**

When I initially started preparing for this study I only intended to use quantitative methods to research boys' educational attainments and compare test scores with another test they take at the beginning of their compulsory education. I was driven by my curiosity to see if there was a connection between these tests and thus an indicator of students' later academic attainments. Once I started gathering the data, my curiosity was piqued by more questions and I soon came to realize that my questions would not all be answered by my quantitative approach alone. Therefore, as the study progressed I felt compelled to talk to some of these male students personally. However, I did not want to abandon my initial research idea, because I consider it a crucial issue in finding out whether there is a measurement that can indicate which students require further assistance at the beginning of their compulsory education. As a result, I started the research by comparing the results from the BTBC with the NSTs. And so, I was able to find preferable candidates for the qualitative part of this study with the quantitative data. Furthermore, this gave me the opportunity to research if students that had few errors on the BTBC, and could therefore be considered to have cultural capital advantages according to Bourdieu's theorizing, would be on the same path later in their academic career (NSTs).

By mixing qualitative and quantitative styles and methods I assume the research attains different complementary strengths making the study more comprehensive. Different data collection strategies have different strengths and weaknesses and research designs that include multiple research strategies tend to be the strongest ones. Even though qualitative and quantitative research differs in many ways (nature of the data, assumptions and so forth) they can also complement each other (Esterberg, 2002; Neuman, 2003).

Now I will discuss the quantitative and qualitative methodology of the study in detail and present my findings.

## 7.1 Quantitative methodology

Quantitative researchers use a technocratic perspective, apply ‘reconstructed logic’ and follow a linear research path. They emphasize on measuring variables precisely and testing hypothesis that are linked to general causal explanations (Neuman, 2003).

### 7.1.1 Subjects and measurements

The subjects of this study are 38 males born in 1991 and 1992. In order to be in the final sample there were several requirements that had to be fulfilled. First, the individual had to have lived and attained compulsory education in Vestmannaeyjar from the time he began his education at the age of six until he turned sixteen, which would be the time his compulsory education would be completed. The main reason for these requirements was to minimize different social and cultural backgrounds within the sample. Second, the individual had to have participated in the Boehm Test of Basic Concepts in the first grade. This test has been routinely administered to all first graders in both compulsory schools in Vestmannaeyjar from 1995 to the present day. This test has been designed to assess student understanding of the concepts needed to be successful at school. The scores on this test have been found to relate significantly to achievement in the National Standard Tests, which is the third requirement, the individual had to fulfill. That is, the individual had to have taken the National Standard Test in Icelandic and Mathematic in grades 4<sup>th</sup>, 7<sup>th</sup> and 10<sup>th</sup>. These tests are intended to measure a student’s academic performance. Further, this study examines the test scores of the National Standard Tests and uses them as criteria to evaluate the predictive value of the Boehm test of Basic Concepts.

Around 94% of the Icelandic population is of Norse-Celtic descent and 87% of the population belongs to the Lutheran State Church (Statistics Iceland, 2001). Due to this homogeneity, exogenous factors such as race, ethnicity and religion, often used in research in other countries, are not included in this study. The relative homogeneity of the population of Vestmannaeyjar is even greater in this small and isolated rural community.

### 7.1.2 Process

After comparing the list of male students born in 1991 and 1992 that had participated in the Boehm Test of Basic Concepts with the list of male students that had graduated from 10<sup>th</sup> grade in 2007 and 2008 I had a sample of 61 male subjects<sup>19</sup>. I had 21 males from the class of ’91, but the class of ’92 was significantly larger with 40 males. The next necessary procedure

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<sup>19</sup> This was done to enhance the probability that the boys had all lived in Vestmannaeyjar from age 6 till 16.

was to get the males as well as several parents/legal guardians<sup>20</sup> to sign a written statement,<sup>21</sup> allowing access to necessary documents<sup>22</sup>. Few days later, 44 males had been contacted, 40 of which approved to participate in the study, 4 that declined and 17 could not be reached or did not return the written statement they had received. I now had a sample of 40 participants, 16 males born in '91 and 24 males born in '92.

To make sure that everything had been done legitimately, and the study could continue, I decided to report the research to The Icelandic Data Protection Authority, which acts in accordance with the act on the protection and processing of personal data. The purpose of this department is to ensure that data is processed in conformity with the fundamental principles of data protection and the right to privacy. However, because of the signed statements I had collected, special permission from the Data Protection Authority was not required. Hence, the data in this research is not defined as personally traceable and the sample is not considered sensitive, according to the respective regulations (The Data Protection Act, 77/2000).

Signed statements were at this point handed over to the Department of Family- and Education affairs in Vestmannaeyjar to retrieve scores from the BTBC's. Assessments were also made in accordance with the strict instructions given by the test manual. The purpose of the use of this test in Vestmannaeyjar has been to screen students for possible learning disabilities. However, due to a lack of Icelandic standardization and research, these results are not as useful as one would expect. Each student with results from the BTBC was given a number, which was then transferred to a database.

The next step was to hand over the same signed statements to The Independent Institution of Educational Testing in order to get the results from the NSTs. The results were ready and delivered to me in an Excel document a few days later. The results were then added to the database. After going through the retrieved documents, two more participants had to be eliminated from study because they had not taken all three NSTs in Icelandic and Mathematics. Thus, my final sample was 38 male participants (62,3%), 16 born in 1991 and 22 males born in 1992.<sup>23</sup> In this study, these male students are considered to be representative of all males born in '91 and '92 that attended compulsory education in Vestmannaeyjar. However, it should be kept in mind that the data in this research only reaches out to a small

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<sup>20</sup> 41 males (67,2%) had not turned 18 and thus a signature was required from parent/legal guardian as well.

<sup>21</sup> See Document 2 in appendix

<sup>22</sup> Results from Boehm Test of Basic Concepts and the National Standard Tests

<sup>23</sup> See table 1. in appendix

group of male students brought up on a small island with similar background and cultural environments. Therefore, generalization is not possible based on the results.

### **7.1.3 Data**

The data was mostly gathered at the end of 2009 and the beginning of 2010. I collected two types of data collections, even though both data collections were secondary data. Secondary analysis is a special case of existing statistics; it is the reanalysis of previously conducted surveys or other data originally gathered by others. Secondary analysis is used progressively more by researchers. It is relatively inexpensive, it permits comparisons across groups, nations, or time; it facilitates replication; and it permits asking about issues not thought of by the original researchers (Neuman, 2003). The BTBC data contained a sum of errors the boys had attained on the test and varied from 0 errors to 24 errors (50 possible errors). The NST data contained standardized results which, with instructions from The Independent Institution of Educational Testing, were recalculated into grades that the boys had received after taking each test. By doing so, comparing results from the NSTs with the BTBC was less complex than it would have been otherwise.

### **7.1.4 Statistic Descriptives**

The results from the quantitative measures in this study will now be presented and discussed. First the descriptive statistics from the Boehm Test of Basic Concepts (BTBC) are in focus. Later the descriptive results from the National Standard Tests (NST) will be presented. Then the results from the BTBC and the NST are compared and the correlation between them will be discussed in some detail.

Results from the BTBC test were available for all 38 boys in this study. Out of the 50 questions on the test (25 in part 1 and 25 in part 2), the mean number of errors was 8.61 with the standard deviation of 5.11 errors. For detailed information see picture 1.1 in the appendix. The variance of errors was 26.14. Only one student had no errors and the highest number of errors made was 24. The majority of students had 12 errors or less (86%). Furthermore, a significant difference could be seen between part 1 and part 2 of the test. The mean number of errors for the first 25 questions (part 1) was 2.79 with a standard deviation of 1.82 whereas the mean number of errors for the latter 25 questions (part 2) was 5.82 errors with a standard deviation of 3.87. Results can be seen in more detail in table 2.

Table 2. Descriptive statistics for the Boehm Test of Basic Concepts

	<i>Total test results</i>	<i>Part 1</i>	<i>Part 2</i>
<b>Number of subjects</b>	38	38	38
<b>Mean number of errors</b>	8,61	2,79	5,87
<b>Median</b>	7	3	5
<b>Minimum</b>	0	0	0
<b>Maximum</b>	24	8	18
<b>Standard deviation</b>	5,11	1,82	3,87

When examining the number of errors in BTBC between boys born in 1991 and 1992 to see if there were differences to be found between years of birth it became apparent that boys born in 1991 had more errors on the BTBC. This was the case in both parts of the test. The difference can be seen in table 3.

Table 3. Difference between year of birth and mean number of errors in BTBC

<i>Year of birth</i>	<i>Total number of errors in BTBC</i>	<i>Number of errors in part 1</i>	<i>Number of errors in part 2</i>
<b>1991</b>	10,1	3,6	6,5
<b>1992</b>	7,5	2,1	5,3
<b>Total sample</b>	8,6	2,8	5,8

Results from the National Standard Tests (NST) in Icelandic and Mathematics were available for all 38 boys in 4<sup>th</sup> grade and 37 boys in 7<sup>th</sup> and 10<sup>th</sup> grade. Test results were computed from normal distributed grades; where 0 is the lowest score possible and 60 the highest, into regular compulsory school grades where 0 is the lowest possible grade and 10 is the highest possible grade. Descriptive statistics for each test in each class can be seen below in table 5 here below and in pictures 2.1-2.6 in the appendix.

Table 5. Descriptive statistics for the National Standard Tests

	<i>4<sup>th</sup></i> <i>Mathematics</i>	<i>4<sup>th</sup></i> <i>Icelandic</i>	<i>7<sup>th</sup></i> <i>Mathematics</i>	<i>7<sup>th</sup></i> <i>Icelandic</i>	<i>10<sup>th</sup></i> <i>Mathematics</i>	<i>10<sup>th</sup></i> <i>Icelandic</i>
<b>Number of subjects</b>	38	38	37	37	37	37
<b>Mean test score</b>	4,2	4,1	4,6	4,3	4,2	4,1
<b>Median</b>	4,3	4,1	4,5	4,3	4,7	4,2
<b>Minimum</b>	1,5	1,5	1,8	2	0,3	0,8
<b>Maximum</b>	7,5	7,7	8,3	6,8	7	6,2
<b>Standard deviation</b>	1,4	1,4	1,5	1,4	1,5	1,3

The mean score for boys who took the NTS tests in the fourth, seventh and tenth grade vary from 4,1 to 4,7 with slightly higher mean score in mathematics.

When looking closer at the difference between boys born in 1991 and boys born in 1992 it becomes apparent that the mean test scores in mathematics and Icelandic are lower in all NSTs for boys born in 1991. For more detailed information see tables 6 and 7 in the appendix.

When considering the relationship between scores on the BTBC and the NSTs using the person test of significance (2-tailed) a rather high, negative correlation was found between all the variables. The total number of errors on the BTBC correlated significantly with all the NSTs, ranging from  $r=-.45$  ( $p<.01$ ) to  $r=-.65$  ( $p<.01$ ). When part 1 and part 2 of the test were considered separately, part 2 had the correlation [ $r=-.39$  to  $r=-.64$  ( $p<.01$ )] and part 1 [ $r=-.46$  to  $r=-.68$  ( $p<.01$ )] which is a somewhat similar outcome. Both parts correlated significantly with all the tests except one which was between part 2 in BTBC and 10<sup>th</sup> grade NST in mathematics. These results can be seen in table 8.

Table 8. Correlation between BTBC and NST's

	<i>4<sup>th</sup></i> <i>Mathematic</i>	<i>4<sup>th</sup></i> <i>Icelandic</i>	<i>7<sup>th</sup></i> <i>Mathematic</i>	<i>7<sup>th</sup></i> <i>Icelandic</i>	<i>10<sup>th</sup></i> <i>Mathematic</i>	<i>10<sup>th</sup></i> <i>Icelandic</i>
<b>BTBC - total errors</b>	-,593**	-,631**	-,487**	-,651**	-,450**	-,528**
<b>BTBC part 1</b>	-,595**	-,493**	-,565**	-,461**	-,679**	-,542**
<b>BTBC part 2</b>	-,504**	-,602**	-,389*	-,643**	-,0,294	-,452**
<b>4th Mathematics</b>	1,0	,751**	,805**	,752**	,637**	,648**
<b>4th Icelandic</b>	,751**	1,0	,701**	,735**	,496**	,698**
<b>7th Mathematics</b>	,805**	,701**	1,0	,703**	,768**	,748**
<b>7th Icelandic</b>	,752**	,735**	,703**	1,0	,540**	,776**
<b>10th Mathematics</b>	,637**	,496**	,768**	,540**	1,0	,782**
<b>10th Icelandic</b>	,648**	,698**	,748**	,776**	,782**	1,0

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

### 7.1.5 Findings

The results from the quantitative part of the present study demonstrate that most students (around 61%) do fairly well on the BTBC, having 9 or fewer errors on the 50 items on the test. About 40% of participants had 5 to 9 errors, about 21% had 4 or fewer errors and 39% had 10 or more errors<sup>24</sup>. A difference was found when comparing students' birth years, where

<sup>24</sup> For further details see Table 4 in appendix.

boys born in 1992 were more likely to have fewer errors on the BTBC test than boys born in 1991. This was also evident when part1 and part2 of the BTBC were compared. This demonstrates that, when starting their compulsory education, boys born in 1992 can be considered to have better knowledge of basic concepts than boys born in 1991.

The results from the NSTs demonstrate that the low standard deviation in all test results indicate that boys tend to score close to the mean on their NSTs. However if minimum and maximum test scores are compared it becomes clear that the majority of students score below average and the few students that score above average distort the results. Hence, differences were found between year of birth and mean scores on all NSTs in favor of boys born in 1992.

I began this quantitative research to see if the BTBC predicts later academic achievement for a given sample of students. The methodology used was the analysis of the relationship between the number of errors made on the BTBC and the later academic performance in NST's. When comparing BTBC scores with the results from the NSTs I found that the total number of errors on the BTBC correlated significantly with all the NSTs, which demonstrates that the fewer errors students made on the BTBC, the higher their grades tend to be on the NSTs. This indicates that students' conceptual understanding at the start of their schooling relates to their later performance on academic tests.

What was particularly interesting was the fact that students were more likely to make errors on the second part of the BTBC than they were to make errors on the first part. Although both parts of the test are meant to be equally difficult and both correlated significantly with later academic results<sup>25</sup>, the second part tends to explain considerably more of the relationship between BTBC and grade scores on the NSTs. The mean number of errors on the second part is nearly twice as high as the first part (2.79 vs. 5.87). This fact raises many questions. It could be argued that after a certain amount of time, students, even when they are only six years old, get tired and start losing concentration which results in more errors on the second part. But is the grade score relationship influenced by something other than conceptual skills, such as endurance and/or attention span? In other words, are both parts of the BTBC, along with their conceptual academic aspects, measuring the students' ability to stay focused and concentrate for a long period of time? The ability to be able to stay focused and concentrate for a long period of time could also be a factor in student's attainments in tests such as the NSTs. Further, it has been suggested that socioeconomic status does not affect test scores, or at least that socioeconomic status has not been found to affect the test scores. I find

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<sup>25</sup> Except the correlation between part 2. and mathematics in 10th grade.

these findings problematic because, as has been discussed here above, wide ranges of theoretical perspectives establish that social class is a major influence on educational expectations, achievement and outcomes. This further supports my skepticism on the BTBC's measurements.

To summarize, students' knowledge of relational concepts when entering compulsory education was found to be significantly related to later academic attainments. This relationship was found to be apparent throughout compulsory education. However, questions were raised whether the BTBC measures students' ability to focus and concentrate for a long period of time or whether it measures students' true conceptual knowledge. It is my suggestion that this needs to be further investigated before the validity of the BTBC can be considered and used as an indicator of later academic attainments

## **7.2 Qualitative methodology**

Qualitative researchers often rely on interpretive or critical social science. They use a transcendent perspective, apply 'logic in practice' and follow a nonlinear research path. Hence, qualitative researchers emphasize on conducting detailed examinations of cases that arise in the natural flow of social life (Neuman, 2003). Qualitative methods take the researcher's communication as an explicit part of knowledge instead of deeming it an intervening variable (Flick, 2006:16) and try to understand the meaning of social events for those who are involved in them (Esterberg, 2002). When preparing to collect the qualitative data, various things must be considered and accounted for. These complex processes will now be discussed.

### **7.2.1 Selecting and contacting the interviewees**

When I prepared for the interviews I was primarily inspired by Pierre Bourdieu's theory on cultural capital and the effect it might have on academic achievements, as well as Michel Foucault's theory on power and knowledge. In addition, I was also inspired by various research that had been done in order to find possible influential factors on educational attainments and possible reasons for boys' general reluctant attitude towards education and school. With the interviews I set out to gather more information and comprehension of boys' view on education while at the same time give them the opportunity to talk about how they experience their own education, and what comes along with it.

The majority of the participants in the quantitative study fulfilled the criteria for the interviews. However I wanted the interviewees to be somewhat different, that is I wanted

variety in educational outcomes. Thus, when choosing interviewees this was taken into a consideration. When signing the consent forms, participants were asked to put a mark in ‘yes’ or ‘no’ boxes stating whether or not they would be willing to participate in an interview later on. Nearly all participants, 33 of them, marked yes, 5 marked no and 2 boys did not mark either box. Therefore, I had a good group of boys I could select from for my interviews. After going through the quantitative data I selected six boys were selected as suitable candidates for interview. This decision was mainly based on their results in the NSTs and the BTBC tests. So now I had two boys who could be considered strong students (group A), two boys that could be considered average students (group B) and two boys who could be considered low skilled students (group C). One of the problems in qualitative research is selecting the cases, trying to focus on the quality of the material, not quantity, asking not how many interviewees but rather why are the selective ones suitable for the research (Flick, 2006:41). I was now ready to make contact with the eligible interviewees. On Tuesday the 5<sup>th</sup> of October I approached two eligible interviewees and both of them agreed right away to participate in an interview the next morning. They were both born in 1992, one interviewee was considered to be in group A and the other in group C. Later that day I made a phone call to an eligible interviewee born in 1991 and asked him if he would grant me an interview. He immediately agreed and the interview was set up for October 7<sup>th</sup>. This interviewee was considered to be a part of group B. On October 8<sup>th</sup> I approached two more eligible interviewees. One was able to take part in an interview later that day, but the other was going out to sea later that day and could therefore not be interviewed. Thus, now that I had four eligible interviewees I decided to relinquish for now and start off by conducting these four interviews and later review my status to see if further interviews would need to be conducted.

### 7.2.2 Interview guide

In the making of a semi –structured interview guide<sup>26</sup> open- ended questions were made up, questions that would help spark discussions and encourage the respondents to speak out from own experiences and opinions. It was also considered important that the questions would give enough textual material for the analyzing in terms of contextual consideration (Flick, 2006:319). Hence, when formulating ideal questions, it is important that they are explicit enough to help the interviewee in relating his responses to determinate aspects of the research and yet general enough to avoid the possibility that the interviewer would structure it (Flick,

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<sup>26</sup> See appendix Document 1

2006:151). It was also taken into consideration that the questions should be formulated in order to make sense to the interviewee, and phrased in language that is appropriate to them and avoid dichotomous questions which can easily be answered by a simple 'yes' or 'no'. With all this in mind, possible topics and questions were formulated (see interview guide in the appendix).

Before the interviews were conducted two "practice interviews" were carried out in order to assess the semi-structured interview guide and the location<sup>27</sup> where the main interviews would take place. The "practice interview" resulted in few minor changes in the interview guide, such as phrasing and order of questions and other minor technical issues.

### **7.2.3 The interviews**

Four semi-structured interviews were conducted during the beginning of October 2010. Arrangements regarding dates and time were decided when I approached the boys at school, at work or got in touch with them by phone. When I contacted the boys regarding the interviews, all four immediately agreed to participate. I had already arranged a place where the interviews could be conducted which was a small classroom at the Upper Secondary School of Vestmannaeyjar. The majority of the boys in this study have continued their education in this school so this was considered a practical and neutral place for me to meet the interviewees. The room is located on the top floor of the school building, a quiet and small room far enough from noises and interruption. When the boys arrived we sat down and chatted for a few minutes before commencing with the interviews. I told them about the main idea behind the study and shortly explained their part in it. Then the boys were asked to turn off their phones, take their time to think about their answers and feel free to express their own feelings and opinions. All the interviews were in Icelandic, which is my mother tongue as well as all theirs. All interviews were recorded and notes were taken during the interviews to help me remember details about non-verbal gestures and questions of emphasis. The interviews varied in time, the shortest spanning was 32 minutes and the longest one lasting 57 minutes.

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<sup>27</sup> The location for the interviews was a small classroom in Vestmannaeyjar upper secondary school where disturbance could be avoided and in an surrounding that both the interviewer and the interviewees were familiar with.

#### 7.2.4 Transcribing

Documentation of data is a technical step in the research process and it also has an influence on the quality of the data that is used for interpretation (Flick, 2006:293). Immediately after the interviews I sat down and wrote down detailed field notes. I did this because, even the smallest details of the interview can be an important factor in the analyzing process. I therefore wrote down details from the setting, the appearance of the interviewee, memorable interactions and other impressions of the interview. After conducting all four interviews I transcribed them from the digital tape-recorder into my computer and with the field notes by my side I made sure they were transcribed with as much details as possible. I gave each interviewee false names, S1, S2, S3 and S4 which was depended on the order of interviews. Thus, the first interviewee was given the name S1, the second interviewee was given the name S2 and so forth. All interviews were accurately transcribed in Icelandic and the parts that I considered useful and interesting for this study were translated to English so they could be used in the thesis. The interviewees were given the option of changing the interviews after they had been transcribed but all interviewees gave it a pass without giving it a second look.

#### 7.2.5 Participants

One of the main requirements in this research was that the boys had taken all their compulsory education in Vestmannaeyjar. By doing this, the differences in their social and cultural backgrounds were minimized right from the start. All four boys were caucasian, born and raised in Vestmannayjar and both parents were Icelandic. Two boys were born in 1991 and two in 1992.

S1 was born in 1992. He has always lived with both his parents, his mother (uneducated) is a supervisor at the post office in Vestmannaeyjar and his father is a fisherman (has taken courses at MSSTC<sup>28</sup>). S1 has one younger sibling, a sister. S1 is currently studying at FÍV (the upper secondary school of the island). His main recreation is sport, preferably handball or football. S1 is also a part of the island's theatre club and his preferable future occupation is acting. He plays the bass guitar but has never taken music lessons. According to educational attainments (BTBC and NSTs) he is categorized as a below average student (group C).

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<sup>28</sup> Maritime Safety and Survival Training Centre; Most of the students come from the Icelandic fishing fleet. No international requirements are for safety training for fishermen but national law require all fishermen to participate in safety course before they go out to sea for the first time (<http://www.landsbjorg.is/category.aspx?catID=256>)

S2 was born in 1991. He has, like S1, always lived with both his parents. His mother is a medical technician and his father is a compulsory school teacher. S2 has two siblings, one older brother and one younger sister. S2 is currently studying at the upper secondary school in Vestmannaeyjar. He has not yet decided what his future occupation will be, but preferably it will be something within the sociological sphere. S2 has various recreations; football and handball, computers and social life. He listens to all sorts of music but does not play an instrument and has never taken music lessons. According to educational attainments (BTBC and NSTs) S2 is categorized as an average student (group B).

S3 was born in 1992. He has, like S1 and S2, always lived with both his parents. His mother (uneducated) has worked at a pre-school for 20 years and his father has learned how to produce fishing nets and used to work within that industry in the past, but has worked as a fisherman for the past 7 years. S3 has one sibling, an older sister. He is currently studying at Vestmannaeyjar's upper secondary school and he would like to be a gymnastics teacher in the future. S3's recreations are mostly sports related, he plays handball and golf. He is not particularly interested in music, has never taken music lessons and does not play any instruments. According to educational attainments (BTBC and NSTs) he is categorized as an average student (group B).

S4 is born in 1991. His parents got divorced when he was 5 years old and he has lived with his mother ever since. His mother never got remarried and therefore raised him on her own. His father remarried and moved abroad. S4 stays in touch with his father but rarely has the chance to see him. He has two siblings, an older brother and a younger sister. S4 also has two younger half-siblings, a sister and a brother who live with his father abroad. His mother is a hairdresser in her own salon and his father is a carpenter. S4 is currently taking a year off from school and is working as a fisherman. After a year he plans to finish his education at the upper secondary school in Vestmannaeyjar and later get a university degree in law. S4's recreations are somewhat different from the other participants. He participates in fitness and spends hours in the gym whenever he has the chance. He also plays chess with the Vestmannaeyjar chess squad. According to educational attainments (BTBC and NSTs) S4 is categorized as an above average student (group A).

### 7.2.6 Analyzing

Analyzing qualitative data generally involves several steps. Firstly, after transcribing the interviews with details from my field notes, I read the transcripts several times and immersed myself in the data to make sure I was familiar with what I had gathered. Secondly, I started

coding the data by organizing it into conceptual categories guided by my research questions. Coding the interviews was surprisingly time consuming and difficult. After going through several books<sup>29</sup> and self deliberations I finally felt ready to analytically categorize the data into themes, which I consider to be the third step in my analyzing process. Five major themes could be found in the data and will now be presented.

### *Recreation and Education*

During the interviews the interviewees were asked several questions regarding their recreations and their possible effects on their education. Sports were a particularly important part of these discussions, as all the interviewees stated sports as one of their main recreations. All the interviewees started participating in sports at quite a young age and all of them agreed to the importance of sports and how they had influenced their education in one way or another. In connection to Halldórsson's et al. (2009) research, which suggests that boys place more importance on sports and recognition for physical competence than they do on the importance of school performance, all interviewees discussed the importance of sports while they were in compulsory school. However, only one interviewee (S4) discussed the importance of education above sport while in compulsory school:

S4: ...it was my favourite, playing football with my friends. We used to play football all the time, not just while training. But... I wouldn't say it was more important to me than my educational attainments. I mean... I was not this typical nerd, studying all the time (smiles and giggles a little). I mean... I always wanted to be a good player but it was more important to me to get good grades. I was never going to be a professional football player; I knew that ... I just didn't have the technical skills like some of my friends. But I was better than most of them at school, so... I really liked being one of the best at something, even though I had to work hard for it.

All the interviewees said that their recreations had influenced their future education and their future occupation in some way. For example S2 discussed how important his social life and general socializing was to him, and that was the main reason for him choosing social studies when starting his upper secondary education. Later, he would like to continue studying something within the social sciences. Similarly, S1, who has been acting in Vestmannaeyjar's theatre group since he was eleven years old, discussed the importance of finishing the upper secondary education because that was one of the conditions he had to fulfil in order to be accepted into The Drama Academy of Iceland.

S3 also connects his recreations with future occupation. He has been practicing football and handball since he was six years old and golf since he was twelve years old. Sports have always been a big part of his life. He is determined to get his upper secondary diploma so he

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<sup>29</sup> E.g. *Social Research Methods* (2003) by Neuman, W.L.; *Qualitative Methods in Social Research* (2002) by Esterberg K.G.; *An Introduction to qualitative research* (2007) by Flick, U. & *Introduction to Research in Education* (2006) by Ary, d., Jacobs, L.C., Razavieh, A., and Sorensen, C.

can move on to study sports and health sciences at University of Iceland. It is somewhat more difficult to connect S4's recreations, then and now, to his future occupation. Currently taking a year off school to work as a fisherman, S4, who seems to have practiced football mainly because his friends did, and later became a chess player with a fitness mania, is planning on becoming a lawyer. S4 has a vague idea of how his recreations have influenced his future education:

S4: sports and chess are similar things in a way... you always have to have some idea what your next move is going to be. Knowing what to do next is also important in your education. Being one step ahead is the key in being a good lawyer... I can't really explain it, I just know it.

When asked about other recreations, such as music, three of the interviewees confess to being interested in music, but none of them had taken music lessons of any sort except from music lessons at school. However, three interviewees (S1, S2 and S4) had been a part of "a music band" while in compulsory school. But it was mainly considered entertainment, or as S1 puts it: *"just playing and having fun... little lads playing whatever we thought of."* None of the interviewees considered reading as part of their recreations. In fact, there seemed to be a total lack of interest to read, this is in coherence with former research (Broddason, 2005).

### **Importance of Education**

When the discussions about the importance of their compulsory education came up in the interviews, one interviewee (S4) considered that part of his education to be important. The other interviewees did however not consider their compulsory education to be particularly important to themselves. On the other hand, all three agreed that, while in compulsory school, the homework they did, the studying for tests and other things related to their education were mostly done to please their parents. For example, S3 said:

S3: I didn't really think about it, I was just there. ...It was not all that important; I just did what had to be done and nothing more. You could say I was just doing it for my parents, or at least to begin with. ...When in compulsory school, grades and teachers remarks were not that important, at least not to begin with. It was simply not something I thought about, it didn't really matter. I mean you didn't fail or nothing. It is more important to me now, it's not like I want to fail and have to take the course all over again.

S2 gave a very similar answer when asked the same question, but recollected that good grades and remarks did at least work as a positive factor to his self-esteem:

S2: I always handed in assignments and stuff... but I didn't always study at home like I was supposed to do. But I always handed in the assignments that had to be handed in, in order to get grades for them and stuff. I always did that. And I still do. But mostly it was done for my parents... I mean if it wasn't for them I wouldn't have worked so hard... that's just the way it was. I can't say that grades were all that important.. I mean it made me smile if I did good... it pumped up the ego to get good grades and remarks from teachers. It helped a little (smiles).

Similar answer came from S1 and he also identified his parents as his main reason for studying:

S1: Yes (he says laughing)...I was such a prankster when I was younger, in compulsory school. I was, for some reason, just not thinking about it (educational attainments). I really should have. I wish I had thought more of it. But now... when in upper secondary school, I have begun to do this for myself on not for somebody else. And now I think more of my studies and I do what I have to do. I'm not studying for my parents anymore.

Today all interviewees recognize education as an important part of their future. They discuss education as something they now take part in for themselves and most of them say it has something to do with their increased maturity. However, parents' involvement was an important factor to these boys' education when in compulsory school, and that brings me to the next theme identified in the data.

### *Parental Involvement*

Previous research has frequently argued the importance of parental involvement as a major and positive force in shaping their children's educational outcomes. My prior contention was, in connection to Bourdieu's theorizing of habitus, that boys raised in a household where both parents are present and educated would have educational advantages over boys raised in a single-parent household or a household where the father is absent most of the time because of his occupation.

Having a fisherman for a father and an uneducated mother who works at a preschool, S3 discusses how his older sister was often in charge of helping him with his schoolwork:

S3: They (referring to his parents) do not know that much. My sister was the one that usually helped me. She's only four years older than me and knows this stuff, you know. She helped me a lot. My mom and dad were not much into this stuff... This was too complicated for them. My dad, of course, was often away from home out at sea and my mom didn't have the knowledge, so she often asked my sister to help me.

Nonetheless, S3 talks about getting some support, motivation and discipline from his parents regarding his compulsory education. They would sometimes monitor his schoolwork and express happiness when he got good grades.

S1 also has a father who is a fisherman and an uneducated mother working as a supervisor at the island's post office. Parental monitoring, guidance and discipline regarding his education was mostly in the hands of his mother:

S1: I have gotten a lot of help at home, you see... when in compulsory education. My mom used to sit with me and study all the time and my dad was always away because of his work, but when he was at home he helped me too. ... My mom sat with me until I had finished studying and she encouraged me and often pressured me to finish my schoolwork. "You cannot go out and play if you have not finished studying", she used to say... It was

made clear how important it was to finish schoolwork and then have the rest of the day off and not go to school with unfinished work.

Like S3, S1 had another person within his family that helped him with his studies and motivated when he was struggling with his schoolwork. In his case it wasn't a sister, but a cousin, seven years older than him. He could always ask her for help whenever he was struggling with his schoolwork.

S4 was brought up in a single parent household with two younger siblings. He remembers how his mother used to monitor his schoolwork, not always to his enjoyment, and how she used to reward him for good achievements:

S4: Yes... (laughs). My mother was always asking me if I had finished my studies and how I was doing in school. She used to go through my backpack and everything. ...she made it very clear that my education was important. I sometimes wished that she could be like the other moms and stop nagging about schoolwork all the time. But... it was maybe not all that bad, we used to do something fun together whenever I did well on tests or schoolwork, baked cakes or watched a movie with popcorn and everything. I used to love that. She could be really cool even though she could be really strict.

S4 also had someone in his extended family to help him when his mother could not, his grandmother. Living in a single-parent household, he discussed how his mother was often tired after a long day at work and dealing with his active, younger siblings. Because he was the oldest of the siblings, he could walk to his grandparents' place, who lived close by. He would do this whenever he felt he needed 'time off', and he mentioned how he had a special bond with his grandmother, who often helped him with his schoolwork.

S2's parents are both educated. His mother is a medical technician and his father a compulsory school teacher. According to S2, his mother and father were both active participants in his compulsory school education and when discussing these matters he often uses the words 'them' and 'they':

S2: Of course they always offered to help with my studies and had enormous interest... questions about school activities and stuff like that. So they just... yes, very much involved. And they gave a damn... I always got great motivation from them to do well in school. ...During my first years in compulsory school they used to monitor everything, but when I started 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> and 10<sup>th</sup> grade this monitoring was not as frequent and I was allowed to be more in charge of how to study and when. But they never stopped monitoring my homework and my grades. Or yes... yes I guess I could say that. And they still do, maybe not my schoolwork but they want to know how my tests are going and stuff.

Unlike other interviewees, S2 does not connect another person to his education.

When asked about parental influence or pressure regarding a future occupation, all interviewees replied that they had full control over their choices and for those that had made their decision in regards to future occupation, all replied that they had full parental support. In connection with these discussions, S2 mentions that he has enormous school fatigue and that

has been troubling him for some time. Hence, he admitted that without his parental involvement, pressure and support he might have dropped out of school:

S2: I feel their pressure when it comes getting my upper secondary diploma. It is something I would also like but I often have enormous school fatigue. Maybe it is because I have so many obligations, my socializing or sports and stuff like that... and because of long school days and all that. But yes, I can admit that I feel the pressure from my parents to finish school, they never leave me in peace. But they also show me support in regards to all this. They show me support because I'm still learning and want to finish this... because I have often thought of just quitting and doing something else, work or something. But I know that in the future I will not regret tormenting myself through this.

All interviewees agreed that parental involvement was greater while they were in compulsory school but as they got older this involvement changed with less monitoring and control. However, they all concur that their involvement, even though it was sometimes through the help of other family members, made a positive difference in their education.

### *Peer group*

Turning to Bourdieu's (1986) *economy of practice*, which contends that all human activity or practice involves exchange between individuals and groups, I asked the interviewees several questions about their peer networking. Scholars often discuss how, within peer groups, lie the foundations where boys get their information on how they are supposed to be and how they are supposed to act as boys/men, and the constant pressures on individuals to perform and behave to expected group norms (i.e. Connell 2000; Frosh et al., 2002). Thus, being a part of 'the group' often came up in the interviews and all interviewees agreed that having friends was very important to them. However, the interviewees only had vague ideas about specific norms within their peer group and struggled to remember any specific behaviours or appearances that were considered abnormal within the group. At some point during the interviews, all interviewees nevertheless referred to themselves as 'normal' or 'not different' and all talked about how they could be themselves within the peer group:

S1: It was never an issue, I was never different... no, I was somewhat always myself...

S2: No I never felt any pressure. I could always be myself... I have always dressed in normal, boy-coloured clothes, blue and black and something like that... always... just always.

S3: When I was with peers I could always be myself somehow. There was never an issue how you behaved; you could just be yourself... I'm just this normal guy and don't have to think about this.

S4: It was never an issue for me, I was always normal and never tried to be someone I wasn't.

Furthermore, the interviews revealed that there was a recollection among the interviewees that being accepted by the peer group was often more complex and more important during their time in compulsory school. Foucault argued that the norm is a measurement and a means of producing a common standard, and to become an instance of the norm is not to fully exhaust it, but rather to become subjected to an abstraction to communality (Butler, 2004). Children

start taking their first step as individuals within the society when they start school. It often consists of struggles to find ones 'place' within these new surroundings. With time, most children find their communality, and being a part of the norm becomes vague and common and the emphasis on being a part of a peer group becomes somewhat normal.

What's more, the interviewees all agree that their peer networks influenced and still influences their education and their everyday life. For S1, being accepted by peers was particularly important in compulsory school. S1 was a victim of harassment from 1<sup>st</sup> till 5<sup>th</sup> grade, but after befriending a boy who was accepted within the peer group the other boys started accepting S1, and soon he became a part of the group and was allowed to take part in their activities. When I asked him if he believed this affected his studies in any way, he replied:

S1: Uuhh... well my studies, before I met him, were a mess. I wanted to drop out of school because I was harassed in the halls and during recess and other times. But then I met him and then I became more confident, you see?...Then I started thinking more about it (the studies), you know?

What was also evident in the interviews was the importance of peer networking outside of school hours. All interviewees talked about spending most of their spare time with their peers. All of them mainly had male friends, but girls were sometimes allowed to take part in outside activities. Most of the time was spent playing sports in bigger groups or playing 'action men' or other games in smaller groups of two or three boys. However, according to the interviewees, time spent with parents was mostly during mealtimes and holidays.

### *Comprehension of gender identities*

Various research shows that boys' inadequate educational performance can be traced back to the ideology of masculinity.

The interviewees were asked about how they would define masculinity and femininity. I was interested in knowing how much knowledge and comprehension the boys had about these concepts. I was surprised to find out that all interviewees seemed to have very little knowledge and comprehension of these concepts. When the subject was brought up, all the interviewees became somewhat uncomfortable and insecure. They became restless, giggled and often began to blush. None of the interviewees seemed to have any more than a vague idea of what it means to be considered masculine or feminine. The ones that tried to come up with an answer, after thinking about the matter for a while, said:

S1: Yes, girls have long hair. Girls wear tight jeans... boys would never wear tight jeans. They (girls) wear bras. UUhhh.. they use perfumes, boys don't. Girls can never leave the house without putting on make-up, or it seems that way, most of them at least (smiles and blushes).

S4: Wow (blushes) I don't know... let's just say that masculine boys shave, they have a deeper voice and... are probably strong. Feminine girls... uuhh... this is a really difficult question. I just never think about these things (giggles).

S3: (becomes really restless and uncomfortable) Uuhh... masculinity... I don't know. Femininity... uuhh... nothing specific ... Just long hair, make-up and shoes with high heels and something like that. No I... (laughs)... I just don't know anything about this.

None of the boys considered themselves as being masculine or feminine and stated that being considered masculine was not important to them. When asked about gender specific appearances and activities S2 said that the only reason that a boy would wear something pink was because he was in “*desperate need of attention*”. Hence, S1, S2 and S4 discussed how gymnastics was a sport that they would never had tried when in compulsory school because it was only considered for girls but S2 added that he wished he would have at least tried it and S4 said he would consider practicing gymnastics if the clothes where “*not so gay and tight*”. In connection with the gender specific questions, I asked the interviewees about their teachers and if they considered their gender to have been a factor in their educational attainments. The interviewees were not concerned whether their teacher was a man or a woman. Only one interviewee recalled having better time in school while he had a male teacher supervising the class, but was not able to elaborate on it any further. Instead, the interviewees discussed how the individual differences in teaching methods and approach to education where more important than gender differences. This is in direct correlation with an Icelandic research, which reported that students generally think that men and women teachers are equally prepared to deal with teenagers and that it is the character and performance of the teacher that matters most (Guðmundsdóttir & Guðmundsdóttir, 1993; Jóhannesson, 2005).

However, interviewees discussed how the individual differences in teaching methods and approach to education were more important than gender differences. They all referred interactive teaching methods as much more effective on their educational interest in comparison to teaching methods in form of lectures, which they did not consider productive.

### **7.2.8 Findings**

Since my qualitative research only consists of four interviews it should not be used to generalize from. The research only gives insight to how these particular boys experienced their compulsory education and what it means to be a boy in compulsory school in Vestmannaeyjar. With that said, I will now introduce my findings from the interviews.

With the interviews I have found that parental interaction was one of the most influential factors on the boys' learning behavior while in compulsory school. This is in connection with Foucault's concept of power and surveillance. In this sense the boys assume that the focus of

monitoring is not on the performance of elements of their learning development but more on the 'conduct of conduct' (Foucault, 1977) between them and their parents. In this sense the parents are in charge of their learning behavior through their surveillance and involvement. However, general lack of cooperation between the Vestmannaeyjar schools and parents/guardians is evident when their curriculum (based on The National Curriculum Guidelines) is studied. There seems to be no condition for active involvement even though parents are encouraged to take part in the schools activities and their children's education. In a small fishing community such as Vestmannaeyjar, fathers are often away from their families for a long period of time, leaving the mothers running the household by themselves. This was evident in the interviews, given that two interviewees have fathers that are fisherman. In three cases out of four, the mothers played a key role in the interviewees' education, in forms of monitoring, support and control. Only one interviewee referred to both his mother and father when discussing parental involvement in his education. Another factor that became evident in the interviews was the educational help that interviewees received from their extended family if the father was often away from home, or not present at all. This illustrates that often the mothers, either busy or unable to assist, reach out to extended family or older children for assistance with their children's education. In a sense, extended family can thus be considered as part of the boys' cultural capital, since it seems to affect their learning behaviors in a positive way.

The boys all agreed that most of their time, when in compulsory education, was spent with peers. This was both during and after school hours. All the boys recognized their peer network as something that influenced and still influences their education in a positive way. For example, after S1 became a part of a peer group he was able to place more emphasis on his studies. None of the boys recognized negative influences from peers on their learning behavior. Hence, the boys had no recollection of pressure from peers to act or appear anything but themselves. In fact, the importance of being oneself was something that often came up in the interviews. This importance might spring from the idea that "the individual" is a very strong theme in the Icelandic educational discourse. In the National Curricula Guidelines for compulsory schools is a very strong rhetoric about character and needs of the students and emphasis on how schools should function in accordance with students' individual development.

In beforehand, based on general discussions in Icelandic media, I thought that the interviewees would agree lack of male teacher, while in compulsory school, influenced their educational attainments. This turned out to be wrong; the majority of boys disagreed and

pointed out that teaching method and approaches in education, as well as the type of person the teacher is, are more important than the teachers' sex. All the boys talked about the importance of interactive teaching methods. Teaching methods within Icelandic compulsory schools have increasingly focused on individualized instruction, as authorized by the National Curriculum Guide. Individual instruction or teaching involves adjusting the curriculum to the need of each student. This is evident in the compulsory school act (2008) where school personnel are encouraged to place emphasis on pupils' individual skills, creativity, needs and development. This approach should enhance pupils' initiatives and independent thinking as well as give them greater responsibility to take an active role in their own education (Ministry of education, Science and Culture, 2002). However I found that these school policies, based on the National Curriculum Guide, are in a way contradictory. As discussed in section three in this thesis, there is a strong tradition in the Icelandic educational system to assess students based on tests taken in as many subjects as possible at the end of every semester. One of the main purposes of these assessments is supposedly to monitor whether pupils fulfill the objectives laid down in the National Curriculum Guide and it encourages learning methods built on drill-and-practice, which require good memory and comprehension abilities. However, there are few opportunities for the use of higher thinking skills such as independent reasoning, creativity and problem solving. If school authorities have begun to recognize that the demand and need for teaching methods, which encourage more initiatives, independence and responsibility from students, why are the assessments based primarily on test scores? Perhaps boys' (and girls) academic performances would enhance if less emphasis would be placed on test score and more emphasis would be placed on their interaction, initiatives and creativity.

Both Foucault and Bourdieu have argued how the conditions operating within schools can enable students to enter into a particular normalizing relation with themselves and others and this then becomes their interpretative focus. One of the most surprising findings of the study was that in spite of continuously asking about gender specifics and gender related topics the boys struggled to connect their social and cultural experiences with the concept. In fact there seemed to be a total lack of knowledge about the definition of the concept and other connected concepts such as masculinity and femininity. I considered this lack of knowledge to be troubling and something that needs to be addressed within the educational arena.

## 8. Concluding Discussions

This small study of mine only exposes the tip of this iceberg, but as with all icebergs – although we cannot see what is under the tip – we know it's there and we know that it can wreak havoc if not heeded.

To summarize briefly, I conclude that pupils' knowledge of relational concepts when entering compulsory education is significantly related to later academic attainments. This relationship is apparent throughout compulsory education. However, I called into question whether the BTBC measures students' ability to focus and concentrate for a long period of time or whether it measures students' true conceptual knowledge. Therefore, I suggest that further research must be conducted before the validity if the BTBC can be considered and used as an indicator of later academic attainments. Hence, by leaning on Post-structuralist theorizing and former research I analyzed the interviews and found that parental interaction, peer networking and recreations can all be considered as influential factors on the boys' learning behavior and their academic attainments while in compulsory school. I also found a reason to criticize the ambiguity in the National Curriculum Guidelines, which structure schools culture and teaching strategies and can therefore be considered as one of the main factor on students' academic performances. I suggest that when students' school performances are valued, less emphasis shall be on test score and more emphasis shall be placed on students' ability to show higher thinking skills, such as independence, initiatives and creativity in assignments. If we want to improve boys' educational attainments it is important to discover what is affecting their educational development and what isn't. Implement teaching methods that motivate their learning behaviour and educational enthusiasm could be a good place to start.

Further, in connection to my findings on the general incomprehension of gender issues, I suggest that gender courses should be implemented into the Icelandic compulsory- as well as upper secondary schools. It is important to teach our youngsters to view the society, and its culture, with critical perspectives in regards of gender identities and gender roles. It is not enough to implement gender equality in schools if students do not have an understanding of basic gender related concepts such as masculinities and femininities.

Last, it is important that we understand that the fundamental life phase is in childhood, and the crucial issue lies in the inter-play between parental and societal investment in children's development.

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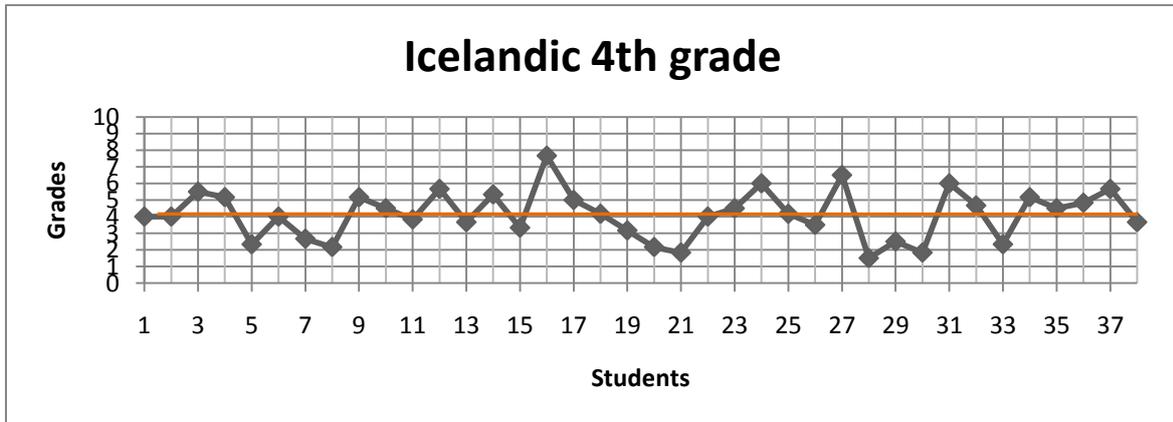
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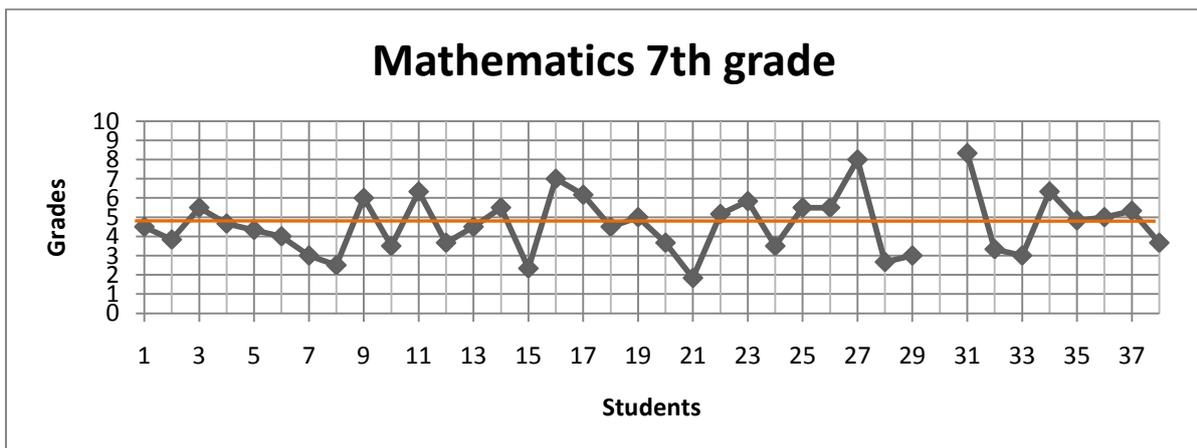


Picture 2.2



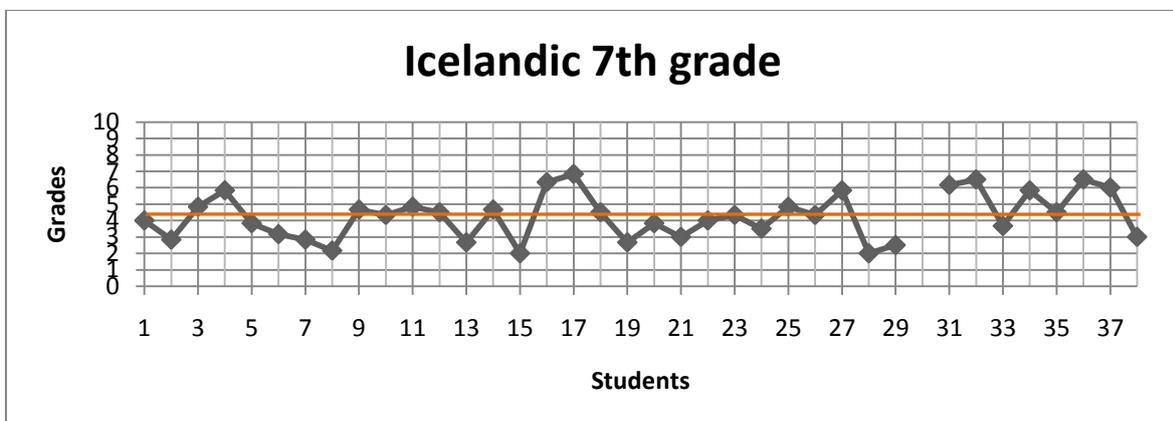
Mean grade 4,1

Picture 2.3



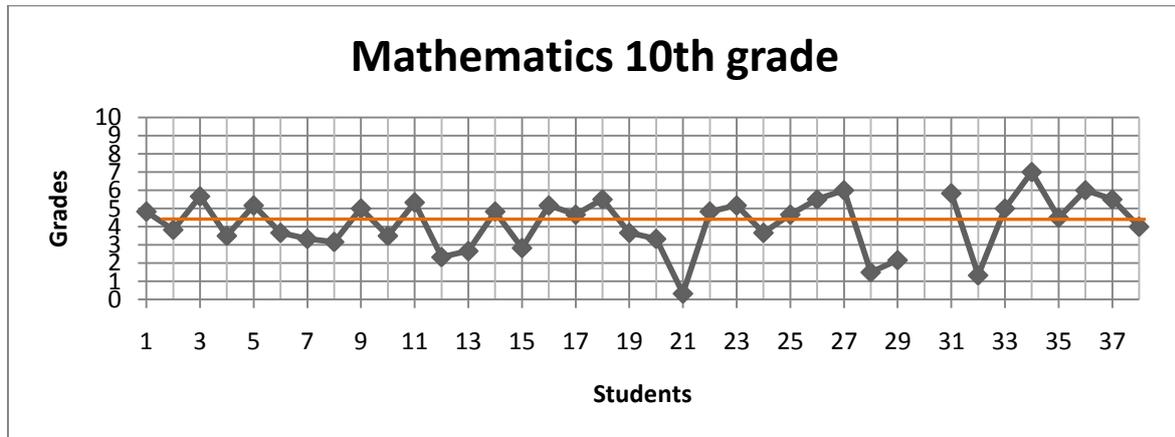
Mean grade 4,6

Picture 2.4



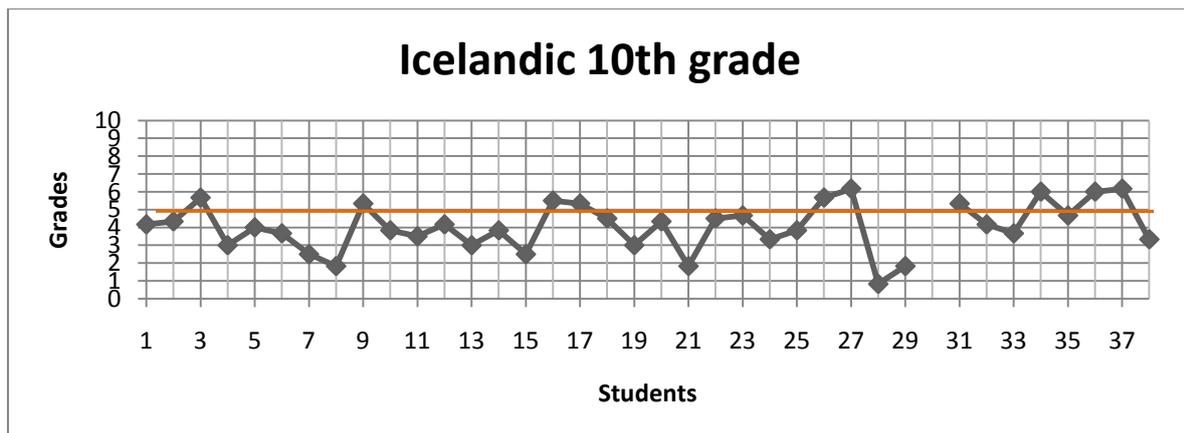
Mean grade 4,3

Picture 2.5



Mean grade 4,2

Picture 2.6



Mean grade 4,1

## Tables

**Table 1. Year of birth**

	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
1991	16	42,1	42,1	42,1
1992	22	57,9	57,9	100,0
Total	38	100,0	100,0	

**Table 3. Bohem Test of Basic Concepts considering different number of errors**

<i>Number of errors</i>	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
0-4 errors	8	21,1	21,1	21,1
5-9 errors	15	39,5	39,5	60,5
10-14 errors	10	26,3	26,3	86,8
15-19 errors	5	13,2	13,2	100
Total	38	100	100	

**Table 7. Difference between year of birth and mean test scores in mathematics in NST's**

<i>Year of birth</i>	<i>Mean test score in 4<sup>th</sup> mathematic</i>	<i>Mean test score in 7<sup>th</sup> mathematic</i>	<i>Mean test score in 10<sup>th</sup> mathematic</i>
1991	3,5	4,3	3,4
1992	4,7	4,9	4,7
Total	4,2	4,6	4,2

**Table 8. Difference between year of birth and mean test scores in Icelandic in NST's**

<i>Year of birth</i>	<i>Mean test score in 4<sup>th</sup> Icelandic</i>	<i>Mean test score in 7<sup>th</sup> Icelandic</i>	<i>Mean test score in 10<sup>th</sup> Icelandic</i>
1991	4,0	3,9	3,8
1992	4,3	4,5	4,2
Total	4,1	4,3	4,1

# Documents

## Document 1

### Interview guide

#### A. Background

- Age
- Family structure (Changes in family structure through childhood)
- Siblings (age range)
- Parents occupation and education

#### B. Receptions

- General
- Sports
- Computers
- Music
- Literature
- Television
- Favorite school subjects
- Future occupation

#### C. School

Perception of school:

- While going to compulsory school, how important were the studies? Was there homework? (Studies in school and at home)?
- How important was achievements/test- and assignments results?
- Opinion= School prosperity/success?
- Current education?
- Higher education - (Plans to study at University or other high educational degree)
- Effect of teachers' gender? (Meaning - Do you think your grades and other educational outcomes would have been any different if the teacher would have been A man or A woman?)
- Describe a good teacher
- Important of education today?

#### D. Family

- Parental involvement while in compulsory education:
  - 'at-home' interest
  - motivation
  - discipline
  - monitoring
  - time spent with parents
  - support
  - choice of education
  - exc.
- Do you feel any pressure from your parents regarding possible future occupation?

#### **E. Peers**

- Friends (girls/boys): Would you say you had many friends during your childhood? Age; gender?
- Communication with peers: Socializing with peers/friends?
  - Activities
  - Groups or few together?
  - How often?
- Importance of friends?
- Personal activities/recreations without friends? How often?
- Pressure from peers to act or behave in a certain way?
- If there was something troubling you or you had something on your mind would you say you rather went to friends or parents for help and advice? Who would you turn to today?

#### **F. Reading**

- Comprehension of reading
  - books
  - comics
  - newspapers
  - exc.
- Preferable literature?
- How often do you read for your entertainment? For school?
- Did someone read to you when you were younger? Parents, siblings, grandparents exc.

#### **G. Masculinity and school**

- Describe a boy
- Describe masculinity, femininity.
- Describe a masculine boy?
- Describe a feminine boy?
- Would you say there are *unwritten rules* within school surroundings in order for students to *fit in*.
- Would you say there were certain behaviors which were not considered appropriate for boys back when you were in compulsory school?
- How about
  - Appearances - clothes? Hairstyles?
  - Activities
- Any particular behaviors or appearances you remember that would give the other boys a reason to compare you with the girls in the class?
- Do you think the definition of masculinity has changed/broadened since you were in compulsory school?

#### **H. Do you think you will continue to live in Vestmannaeyjar? If no... - Where would you prefer to live?**

## Document 2

### Samþykkisyfirlýsing/ Statement of Consent

Kæri viðtakandi

Ég, Thelma Björk Gísladóttir, er sem stendur að vinna að Mastersverkefni mínu í Félags- og kynjafræðum sem fjallar um gengi drengja í skóla. Mér fannst bæði spennandi og áhugavert að taka fyrir tvo árganga ('91 og '92) frá Vestmannaeyjum þar sem bæði staðsetning og aðgengi er góður kostur fyrir slíka rannsókn. Ástæðan fyrir því að þessir árgangar urðu fyrir valinu er fyrst og fremst hversu nýlega þeir nemendur luku skólagöngu sinni við grunnskólann. Í rannsókninni mun ég fjalla almennt um gengi drengja í skóla á Íslandi og bera niðurstöður fyrri rannsókna saman við þau gögn sem ég fer hér með fram á að fá aðgang að. Einnig mun ég sækjast eftir að taka stutt viðtal (ca.30 mín) við einstaka þátttakendur til að sjónarhorn þátttakenda fái einnig að njóta sín í rannsókninni.

Fullur trúnaður og þagnarskylda gilda varðandi þau gögn sem þú gefur aðgang að. Engin persónueinkenni munu koma fram sem rekja megi til þátttakanda auk þess sem algjör nafnleynd gildir. Gögnum verður eytt að rannsókn lokinni. Sé eitthvað við þessa rannsókn, í þessum upplýsingum eða sem varðar þátttöku þína, sem þú getur ekki sætt þig við er þér heimilt að hafna eða hætta við þátttöku í rannsókninni hvenær sem er og án nokkurra skilyrða.

Með því að undirrita þessa samþykktaryfirlýsingu ert þú að gefa rannsakanda aðgang að niðurstöðum samræmdra prófa sem þú tókst í fjórða, sjöunda og tíunda bekk. Auk þess ertu að gefa rannsakanda aðgang að hugtakaprófi (Boehm próf) sem þú tókst við upphaf skólagöngu þinnar.

Framlag þitt er forsenda þess að hægt sé að framkvæma þessa rannsókn.

Ég er tilbúinn til að gefa kost á mér í stutt viðtal ef rannsakandi leitast eftir því?

Já

Nei

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Undirskrift þátttakanda

dags.

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Undirskrift forráðamanns ef þátttakandi hefur ekki náð 18.ára aldri

dags.

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Undirskrift rannsakanda

dags.