Pre-vocational Education in the Curriculum: The Case of Norwegian Lower Secondary Education

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Abstract

This article investigates the composition of the Norwegian lower secondary school curriculum with a special emphasis on pre-vocational education from a contemporary perspective. The data consist of four official national curricula enacted from the 1970s until the present. Despite differences between the curricula, the main structure of school subjects has remained stable over time. Norwegian lower secondary school curricula mainly include academic subjects, even though pre-vocational education is, to varying degrees, present in all curricula, especially amongst elective subjects. This consolidated position of academic subjects results in a consistency in the composition of the curriculum. Curriculum change is most likely to happen amongst electives and is related to changes in policy making and societal changes. Pre-vocational education is mainly included in the first and current curriculum contrary to the second and third curriculum. These findings indicate that the international policy agenda and its emphasis on the relevance of education through stressing the linkage between education and the world of work only has a minor impact on Norwegian curricula. Further, the allocation of teaching hours shows that the status of pre-vocational subjects is low compared to that of academic subjects. International policies emphasising basic skills strengthen the academic subjects even further.

Keywords: curriculum, pre-vocational education, school subjects, comprehensive school, Norway

Introduction

One long-standing question related to schooling concerns its content: What subject matter should be included in the curriculum and taught in schools to prepare coming generations for life in the future society? Along these lines, issues about the relevance of education are a central topic on the international policy agenda. Strengthening the linkages between education and the world of work is seen as an important vehicle for the success of both individuals and the global knowledge economy (Sundberg & Wahlström, 2012; Young, 2008). Furthermore,

there is a strong emphasis on preventing dropouts from upper secondary education; for instance, one of the European Union's (EU) 'Europe 2020' strategy targets is reducing the rate of early school leavers to below 10%, and improving key competences as literacy and numeracy as part of a global educational reform movement (European Commission, 2010; EU, 2017; Sahlberg, 2016). Hence, lower secondary education is a crucial level, both for pupils who need support in strengthening key competences and for the transition to upper secondary education (OECD, 2011). Several studies (e.g., Karseth & Engelsen, 2013; Scholl, 2012; Sivesind, Van Den Akker & Rosenmund, 2012; Sundberg & Wahlström, 2012) have shown that international and transnational policy influences have an impact on national education policy in general and the curriculum in particular.

This article focuses on the composition of the formal national curriculum for lower secondary education in Norway. It presents a longitudinal analysis and traces developments in the curriculum from the 1970s through the present. Norway represents an interesting case for several reasons: The inclusive approach in Norwegian comprehensive schooling emphasises that curricular content should be approximately alike for all pupils, while respecting their diversity by adapting education to their individual abilities and needs. In order to accommodate to all pupils, variety with regard to content is necessary (Imsen & Volckmar, 2014). Moreover, Norwegian lower secondary schooling has recently been subject to policy initiatives intended to make education more practical, motivating and relevant; this has resulted in a greater focus on pre-vocational education (Kunnskapsdepartementet, 2012; Meld. St. 22, 2010–2011). These policy initiatives have, among others, aimed to improve the transition from lower to upper secondary education and to decrease dropout rates.

Taking these developments as a background, we study the composition of subjects in the lower secondary school curriculum with a special emphasis on pre-vocational education. The data analysed consist of four curricula, the *Curriculum Guidelines for Compulsory*

Education in Norway 1974 (M74) (Kirke- og undervisningsdepartementet, 1974), the *Curriculum Guidelines for Compulsory Education in Norway 1987* (M87) (Kirke- og undervisningsdepartementet, 1987), the *Curriculum for the 10-year Compulsory School in Norway 1997* (L97) (Kirke- utdannings- og forskningsdepartementet, (1996) and the *Curriculum Knowledge Promotion 2006* (LK06) (Utdanningsdirektoratet, 2017c).¹ The analysis of these four curricula enables us to study the composition of subjects in the curriculum longitudinally. In doing so, we follow Goodson's (2000) argument that historical studies of school subjects are important for revealing curriculum change over time. Our analysis focuses on the intended content of schooling as represented in the official curricula, not on the enacted curriculum.

By placing special emphasis on pre-vocational education in the curricula, we analyse school subjects that are not often studied. Sarid (2017) argues that studies concerning school subjects mainly focus on dominant academic subjects, such as languages, mathematics or science. This also applies in the Norwegian context (see Engelsen, 2015). To date, there have been no studies on pre-vocational education in Norwegian lower secondary education. Despite a policy emphasis on the world of work and work-related learning, pre-vocational education has received little attention in the curriculum and school subject research literature, even outside the Norwegian context. For instance, this topic is not covered in the recently published two-volume *SAGE Handbook on Curriculum, Pedagogy and Assessment* (Wyse, Hayward & Pandya, 2016). Furthermore, the *International Handbook of Education for the Changing World of Work* (Maclean & Wilson, 2009) shows that literature that emphasises vocational learning and the world of work focuses mainly on upper secondary and post-

¹ LK06 was introduced in 2006; however, due to a subsequent reform, the curriculum changed considerably from 2013 onwards. Contrary to previous curricula that were published in printed versions, LK06 is available on the website of the Norwegian Directorate for Education and Training. Therefore, minor changes can be implemented directly, and LK06 can differ from school year to school year. In our analysis, we focus on the version of LK06 for the school year 2017/2018. There is ongoing curriculum reform in Norway that will result in a new curriculum in 2020.

secondary education. Thus, by focusing on pre-vocational education at the level where it is particularly relevant, namely lower secondary education, we add insight to the curriculum and school subject research literature about pre-vocational education in the Norwegian curriculum.

The article is organised as follows: We start with an elaboration of pre-vocational education and lower secondary school curriculum illuminating our definition of pre-vocational education and pre-vocational subjects. We then position the article in relation to approaches to curriculum change and school subjects. Our analytical framework is based on these perspectives. This is followed by a description of the Norwegian education system and its governance through curricula. Then, our research approach and analysis of the four curricula is presented. Finally, we discuss the composition of subjects and the content of the curriculum in Norwegian lower secondary education. This includes a discussion of consistency in the composition of the curriculum, potential for curriculum change and the impact of societal and policy changes on the curriculum.

Pre-vocational Education and the Lower Secondary School Curriculum

High dropout rates, a lack of motivation to graduate from secondary education and subsequent unemployment are described as major challenges in education policy today (OECD, 2016). The focus of these debates is primarily on upper secondary and tertiary education. However, there are also concerns about disengagement and alienation from school at lower levels (Pöysä et al., 2018). Policies directed at pupils in lower secondary education often include pre-vocational education. For instance, the 2011 report by the Organisation for Economic Co-operation and Development (OECD) ‘Improving Lower Secondary Schools in Norway’ argues for the importance of an attractive, relevant and high quality lower secondary education for successful schooling. The school subjects *choice of education* and *world of work-subject* are mentioned as examples of already-implemented policies in Norwegian lower

secondary education. These subjects aim to improve the transition from lower to upper secondary education by focusing on the world of work.

The concept of ‘pre-vocational education’ is used to characterise policy initiatives that introduce pupils to the world of work and focus on the transition to vocational education and training (VET) and work. The term ‘pre-vocational education’ has been used internationally since the 1970s, both by official state authorities, such as the German Federal Institute for VET (Bundesausschuss für Berufsbildung, 1972); researchers (e.g., Atkins, 1984, 1987); and international organisations, including the OECD (2003) and UNESCO (1997). Pre-vocational education is also present in education systems representing different traditions as Germany, Finland and Spain (Eurydice, 2018; Finnish National Agency for Education, 2018). However, in UNESCO’s revised *International Standard Classification of Education ISCED 2011* (UNESCO, 2011), pre-vocational education was removed because it does not ‘provide labour market-relevant qualifications’ (p. 62). Despite this, the term ‘pre-vocational education’ is still used in multiple recent studies of several different education systems (Berger, 2015; Berger et al., 2012; Boersma, Dam, Volman, & Wardekker, 2010; Li, 2013; Pilz, Berger, & Canning, 2012; Pilz & Krisanthan, 2014; Pilz, Krisanthan, Michalik, Zenner, & Li, 2016; Ross & Leathwood, 2013).

As an example, studies by Li (2013) and Berger (2015) show how pre-vocational education is included in contemporary curricula. Li has reviewed different forms of pre-vocational education in the education systems of several countries and concludes that there are some commonalities concerning the way pre-vocational education is included in curricula. This applies especially to teaching methods, which include ‘vocational orientation/counselling, career guidance, workplace experiences, contacts with the professional world and practical/technical training’ (Li, 2013, p. 45). His work also shows that pre-vocational education can be presented through different school subjects, with the following being the

most common: economics, business, technology and home economics. Berger (2015) has a broader understanding with regard to which school subjects are part of pre-vocational education. She argues that native-language teaching, foreign language teaching, mathematics, technology, career (choice) guidance, economics, religious education/ethics and physical education can be defined as pre-vocational education. Several of the subjects Berger lists are academic disciplines, which results in a blurred line between what counts as general education and pre-vocational education. These different understandings of pre-vocational school subjects, where Li's definition represents the narrow one, show that a clear definition of pre-vocational education in relation to general education is difficult to reach.

Despite the removal of the term pre-vocational education from the *ISCED 2011* and the difficulty of agreeing upon a clear definition of the term itself, we consider this to be a fruitful term for representing the orientation of education towards the world of work and the transition to VET for our case. By using the concept of pre-vocational education, we also acknowledge the different subject matter that comprises schooling. At the same time, we are aware that 'academic' subjects can also include pre-vocational education and vice versa. Nevertheless, our definition of pre-vocational education covers school subjects and topics where the content *mainly* focuses on the world of work and/or the transition to VET and work. A school subject is, according to our definition, part of the curriculum through its school subject curriculum, it has its own name and a certain number of required teaching hours. School subjects that present pre-vocational education through a distinct focus on the world of work and/or the transition to VET or work can, according to our definition, be called pre-vocational subjects.

Curriculum Change and School Subjects

The curriculum and its content, where school subjects represent important components (Hopmann & Künzli, 1994), change periodically due to reforms. Nevertheless, the composition of school subjects in the curriculum is rather static (Goodson, 1995). This conclusion is based on a study in which Goodson compared the composition of subjects in the English curricula of 1904 and 1988. His study shows that the Secondary Regulations in 1904 included almost the same school subjects as the National Curriculum of 1988.² The only difference between the curricula is that the 1904 Secondary Regulations included the subject ‘manual work’. These findings are surprising, as the English education system was comprised of a tripartite system in 1904 where the Secondary Regulations represented the academic curriculum, and the National Curriculum from 1988 applies to a comprehensive school system. One could have expected that the curriculum would be less academic in 1988, due to the move from a stratified to a comprehensive education system; however, the opposite is the case. This shows that there is usually only limited potential for curricular changes, due to the dominant position of academic subjects.

At the same time, curricula are not completely static, and some changes do occur. Goodson (2014), having studied the process of curriculum change for over 50 years, highlights that, in the past three decades, ‘change can be seen as invented and originating within external constituencies’ (p. 771). These external constituencies include, for example think tanks, international organisations and corporate groups. Hence, professional groups within the education system, such as teachers or scholars, have less impact on change.

Based on his studies of the curriculum and the history of different school subjects, Goodson (1987, 1990, 2001, 2014) developed a model of curriculum change in which he states that change is established through mythologisation, that is, the institutionalisation of the

² The list of subjects was published in 1987 (Goodson, 1995; Ross, 2000).

initiated change. This includes the legal establishment of curriculum change that gives both licence and possibilities in terms of teaching activities.

In the case of the subject of *geography*, which was introduced in the school curriculum before becoming a university discipline, he shows that mythologisation was reached when *geography* became a university discipline, as well as a permanent subject in the curriculum (Goodson, 1987, 1990). Thus, the academic establishment of a scientific discipline can also result from the initiation of a new school subject. Based on these findings, Goodson (1994, 1995) distinguishes between ‘academic’ and ‘non-academic’ subjects and stresses that the degree of a subject’s academisation, and whether it is an academic or a non-academic subject, has an impact on its status. The more theoretical and academic a subject is, the higher its status. This is in line with Francis, Mills and Lupton (2017), who identify a dichotomy between vocational and academic that is based on a hierarchy of knowledge that favours academic over vocational education.

Similarly, Bleazby (2015) argues for a ‘traditional curriculum hierarchy’ (p. 671) in which each school subject is assigned a certain place determined by its status. In this hierarchy, subjects related to pure mathematics and science are more prestigious than those related to applied science and mathematics and the humanities and the arts, which themselves are more prestigious than modern and applied arts and humanities. The least prestigious subjects are ‘[v]ocational education, physical education, outdoor education, health and technology subjects’ (Bleazby, 2015, p. 673). This group includes some of the subjects that we consider to be part of pre-vocational education. Finally, Berger (2015) also argues that vocational and pre-vocational education have a lower status than more theoretical and academic general education. She shows that vocational education is often considered an option for pupils who are less efficient and perform less well (see also Burgess, 1984). These status differences can already be seen, at least in part, at the lower secondary level in relation

to the differentiation between general and pre-vocational electives. The status of pre-vocational education is, according to Berger (2015), also influenced by the place of these subjects in the curriculum, that is, how they are established and structured in the curriculum. This also applies to the Norwegian context, as shown by Lødding and Holen's (2013) study of the pre-vocational subject 'choice of education' in the Norwegian curriculum LK06, which was found to have a lower status compared to academic subjects.

Norwegian Comprehensive Schooling and Governance through Curricula

Norwegian comprehensive schooling was established by the education act passed in 1969, which took effect in 1971. It is characterised by its inclusive approach with no organisational differentiation (Dokka, 1981, 1988).

The current system consists of 13 years of schooling. Primary education starts at the age of six and lasts for seven years. At the age of 13, pupils continue on for three years of lower secondary education (grades 8 to 10)³. Attending primary and lower secondary school (*grunnskolen*) is compulsory. After lower secondary education, at the age of 16, pupils can choose between vocationally oriented or academically oriented upper secondary education. The former is constituted by two years of schooling and two years of an apprenticeship in a workplace. The latter consists of three years of schooling. All pupils who have completed lower secondary education have, by law, the right to attend upper secondary education.

One important driver behind establishing the comprehensive approach to schooling is Norway's social democratic ideology and its emphasis on values such as equality; this way of thinking has been dominant in the country since the 1930s (Telhaug, Mediås, & Aasen, 2004, 2006). By passing on the national and cultural canon to the whole cohort, this approach to education aims to contribute to social integration, equal opportunities and nation building;

³ Until 1997, and while M74 and M87 were enacted, lower secondary education referred to Grades 7 through 9.

therefore, there is no organisational differentiation in Norwegian compulsory education, and the curriculum relies instead on educational differentiation, that is, teaching adjusted to the pupils. However, recent policy documents, such as *Green Paper 14* from 2016 (NOU 2016:14), discuss the advantage of organisational differentiation for pupils with a high learning potential. Nevertheless, there is also an on-going concern on the political level about curriculum differentiation within the Norwegian comprehensive education system.

The establishment of the comprehensive school in 1969 also led to the need for a new national curriculum. In response, curriculum M74 replaced the curriculum *Normalplanen*, which dated from 1939 (Gundem, 1993). M74 was a national curriculum that included subject matter specifications for different school subjects. Despite these specifications, M74 also allowed for adaptation to local conditions (Gundem 1993; Telhaug et al., 2004, 2006). This prompted a movement toward the decentralisation of the curriculum that characterised the next curriculum. In contrast to the former curriculum, M87 mandated local curriculum work both from the point of locally oriented content and include local adaptations of national prescribed school subject curricula (Gundem, 1996).

After a decade, another reform, L97, replaced M87. L97 was characterised by increased national steering, in the sense that there was less space for adjustments at the local level. Thereby, the intention was to ensure ‘a nation-wide education system with a common content of knowledge, traditions and values’ (Karseth & Sivesind, 2010, p. 5) independent of place and the pupils’ background and abilities. One key reason for this change in curriculum policy was due to the increased emphasis on the knowledge economy and human and intellectual capital, which were a part of the impact of globalisation on the Norwegian state (Telhaug et al., 2004, 2006).

The current curriculum, LK06, replaced L97 after a reform in the early 2000s. LK06 includes new subject curricula, competence aims and five basic skills that must be taught in

all school subjects at all levels. Karseth, Møller and Aasen (2013) note that this curriculum reform represents a response to changes in the world of work and the development of the so-called 'knowledge society'. These changes have resulted in the increased importance of knowledge and formal qualifications for both individuals and society. Thus, an accomplished education is often a premise for successful participation in the labour market, as certain formal competences are necessary for most professions, even those that in the past did not require any specific education (Dale, 2008). Based on these changes, the emphasis on basic skills and learning increased in LK06. The results of the Programme for International Student Assessment (PISA) tests published in 2001, and concerns raised in relation to pupils' accomplishment levels, strengthened this focus on basic skills and the labour market's demands regarding competency and efficiency. In addition, LK06 caters to diversity in society and amongst individuals, while L97 was still focused more on nation-building. The arguments for curricular reform that resulted in LK06 show that national curriculum policy and national governance resemble contemporary international educational discourse and the influence of transnational actors, such as the EU and the OECD (Karseth & Engelsen, 2013). These influences challenge traditional national curriculum policy; for example, the competence aims in LK06 constitute a rupture in Norwegian curriculum policy, which was traditionally influenced by *Didaktik* theory (Mølstad & Karseth, 2016).

Furthermore, researchers have pointed to globalisation and the rise of neo-liberal policies, that see the marketplace as the best regulator of economies and societies (Blossing, Imsen & Moos, 2014). Sahlberg (2016) argues that this has resulted in a global educational reform movement characterised by certain features of educational policies as a means of improvement. These include competition among schools; the standardisation of teaching and learning; an emphasis on skills such as reading, literacy, mathematics and science; and test-based accountability. Despite these general trends, the Nordic countries are often regarded

from the outside as homogenous. However, Sahlberg stresses that education policies in Sweden have been influenced by this global reform movement, while Finland has not adopted any of its features. Similarly, when analysing the influence of neoliberal policy in Norway, Wiborg stresses that ‘Norway is conspicuously the most reluctant country in pursuing a market-oriented policy, and is an eager defender of the traditional welfare state and the comprehensive organisation of education’ (2013, p. 411). At the same time, even Norway shows some signs of influence, including, for example, the introduction of school choice and a new public management-inspired school governance system. Moreover, one can argue that there is an increased expectation that education be closely aligned to the needs of the economy and the labour market. This is visible, for example, in VET. One concern regarding upper secondary education is the need to ensure that more pupils choose VET, and that those who start also complete the programme and work in the vocation for which they have been educated, instead of dropping out. Recently, the Ministry of Education has announced the need to further strengthen pre-vocational education in lower secondary education; it has been decided that a new elective subject, *praktisk håndverk* (practical craft), will be part of the upcoming curriculum reform of 2020 (Aftenposten, 2018). Thus, while it remains an on-going issue in debates on education policy, our study will show that the need for pre-vocational education in lower secondary education is not a new idea. It has been on the policy agenda throughout the history of comprehensive schooling. However, proposed initiatives in policy papers, such as white papers, have not been fully manifested in the formal curriculum.

Research Approach

For this article, we analysed official curriculum documents to obtain detailed information about the composition of subjects and the content of curricula for Norwegian lower secondary education. We focused on four curricula: M74 (Kirke- og undervisningsdepartementet, 1974),

M87 (Kirke- og undervisningsdepartementet, 1987), L97 (Kirke- utdannings- og forskningsdepartementet, 1996) and LK06 (Utdanningsdirektoratet, 2017c).

The official curriculum is an instrument for governing schools by distributing power within the education system with the intention of controlling schools (Lundgren, 1972). We acknowledge that the formal curriculum may not necessarily be in accordance with its enactment in educational practice. This is in line with Ball (1993), who defines policies as ‘textual interventions into practice’ (p. 12) that specify certain parameters. Nevertheless, we argue for the importance of studying the formal curriculum as such studies generate knowledge about public discourse on education and dominant assumptions and preferences for the making of the formal curriculum (Goodson, 1995). Likewise, Mølstad and Karseth (2016) emphasise that research on school subjects is important for curriculum policy research, as it moves the focus toward the manifestations of expectations formulated in the curriculum. Subjects play a major role in any curriculum, because they structure its content and give information concerning the intended content of schooling.

The four curricula consist of several sections, in addition to the subject curricula and the allocation of teaching hours. Moreover, the entire curriculum includes a general part addressing the overall aims and purposes of education and specifications of educators’ responsibilities. In this article, we focus on the subject curricula of lower secondary school subjects and the allocation of teaching hours for those subjects. The allocation of hours provides concrete information related to the status of pre-vocational subjects. In this, we follow Berger (2015), who argues that the status of pre-vocational education is influenced by the way these subjects are established and structured in the curriculum.

The curricula are published in Norwegian and have been partly translated into English. For our analysis, we have used the Norwegian versions of the curricula, due to the importance of the semantic structure of the curricula for their analysis. However, quotes from the

curricula in this article are taken from the English versions, to the extent that this was possible. We had access to the English translations of M87 (Ministry of Education and Research, 1990 [1987]), L97 (Royal Ministry of Education Research and Church Affairs, 1999 [1996]) and parts of LK06 (Utdanningsdirektoratet, 2017a). Quotes from M74 and the Norwegian parts of LK06 are our own translations and are marked with an asterisk.

We began our analysis with a thorough reading of the documents inspired by a hermeneutic approach (Ricoeur, 1981) and read and reread all four curricula, moving back and forth between the whole text and parts of it, namely the subject curricula and the allocation of teaching hours. Our approach, then, consisted of three subsequent steps. First, we made an overview of all subjects included in the curricula M74, M87, L97 and LK06 that distinguished between mandatory and elective subjects. This highlighted the composition of the school subjects of each of the four curricula and showed the development of the composition of the curriculum over time. The subject curricula in M74 also include mandatory and non-compulsory topics, which have also been identified in the overview. Second, we identified the subjects and topics that we defined as pre-vocational. These are briefly presented in the following section. Third, we analysed the teaching hours allocated to all subjects in the four curricula and compared them by converting these numbers into percentages of total teaching time. This allowed us to use a longitudinal approach to trace changes in the amount of time allocated to each subject.

The Composition of Norwegian Lower Secondary School Curriculum with an Emphasis on Pre-vocational Education: An Analysis of M74, M87, L97 and LK06

In this section, we present the results of our analysis. The first part focuses on the position of compulsory subjects in the curriculum. The second part presents how career guidance is

included in all four curricula. The third part outlines elective subjects, with a special emphasis on pre-vocational education.

The Position of Compulsory Subjects

Our analysis of the compulsory school subjects and topics included in the curricula shows that the subjects included in M74, M87, L97 and LK06 have remained, more or less, unchanged over time. The subjects *religious education, Norwegian, mathematics, English, social science, natural science, music, arts and crafts, physical education and home economics/food and health* are included in all four curricula. These compulsory subjects are, with few exceptions, characterised as mainly academic. The following table shows the percentage of the total number of teaching hours that are allocated to compulsory subjects.

Table 1

Allocation of Teaching Hours of Compulsory Subjects in M74, M87, L97 and LK06

	M74 ⁴	M87	L97	LK06 ⁵
Share of teaching hours for compulsory subjects (%)	Grade 8: 83% (82% ⁶)	88%	91%	85%

(Kirke- og undervisningsdepartementet, 1974, 1987; Kirke- utdannings- og forskningsdepartementet, 1996; Utdanningsdirektoratet, 2017b)

Table 1 clearly shows that compulsory subjects have a dominant position in the curricula, as they make up the vast majority of teaching hours, ranging from 82% to 91%.

⁴ The number of hours and the percentage of total teaching time are based on the allocation of hours in M74. This allocation is the binding *minimum* number of teaching hours allocated for a subject. Municipalities could add hours to strengthen certain subjects (Kirke- og undervisningsdepartementet, 1974).

⁵ According to the allocation of hours in LK06, schools can rearrange a maximum of 5% of the allocated time from one subject to other subjects. Moreover, schools can offer additional teaching hours in all subjects.

⁶ 82% if the subject *music* is not taught in Grade 9.

Career Guidance as Part of Compulsory Subjects and Topics

The topic career guidance appears in different ways as part of the four curricula, and there are different compulsory subjects and topics that can be defined as pre-vocational education, or which have the potential to be pre-vocational education. Table 2 gives an overview of this for the four curricula.

Table 2

Career Guidance as Part of Compulsory Subjects and Topics in M74, M87, L97 and LK06

	M74	M87	L97	LK06
Subject or topic	Topic: <i>career guidance</i> (theory); <i>practical career guidance</i> (workplace placement)	Subject: <i>practical, social and cultural work</i> ; Topic: <i>working life and vocational guidance</i>	Subject: <i>school's and pupils' options</i>	Subject: <i>choice of education</i>
Allocation of teaching hours in lower secondary education	50 hours in total (theory); 1–2 weeks (workplace placement)	150 hours in total (<i>practical, social and cultural work</i>)	152 hours in total	110 hours (4%) ⁷

(Kirke- og undervisningsdepartementet, 1974, 1987; Kirke- utdannings- og forskningsdepartementet, 1996; Utdanningsdirektoratet, 2015b, 2017b)

In M74, *career guidance* is one of 11 compulsory topics that have been integrated into the teaching of compulsory subjects. According to the curriculum, ‘education and career guidance shall provide knowledge about education, professions and the world of work’ (Kirke- og undervisningsdepartementet, 1974, p. 279*). Pupils’ abilities to ‘self-assessment and subsequent planning their further education and vocational preparation’ (Kirke- og undervisningsdepartementet, 1974, p. 279*) are also emphasised as an important basis for

⁷ Pupils who attend upper secondary level subject(s) while in lower secondary school can schedule up to 60% of the number of hours allocated to *choice of education* for the upper secondary subject(s), if hours of the equivalent subject(s) at the lower secondary level cannot be disposed (Utdanningsdirektoratet, 2015b).

pupils' choice of future education and profession. The topic *career guidance* also includes *practical career guidance*, wherein pupils gain practical experience through a workplace placement. *Career guidance* is the only compulsory topic, with the exception of *class and pupil council activities*, that has a pre-defined number of teaching hours. A total of 50 hours is allocated to it during lower secondary education. This corresponds to almost two weeks of teaching, as pupils are taught 30 hours per week. In addition to these hours, the workplace placement is supposed to last between one and two weeks. Altogether, career guidance in M74 covers almost three to four weeks of schooling.

In M87, career guidance is represented through a subject and a topic. The subject *practical, social and cultural work* focuses on career guidance, as one of its purposes is to 'increase the pupils' knowledge and understanding of working life and the tasks to be carried out in their own district' (Ministry of Education and Research, 1990 [1987], p. 101). One of several examples of activities given in the curriculum is 'experience of the working life' (Ministry of Education and Research, 1990 [1987], p. 104), where pupils, amongst others, can visit different workplaces. *Practical, social and cultural work* is to be integrated into the teaching of other compulsory subjects, and 150 hours in total are allocated to the subject. Thus, *practical, social and cultural work* is intended to be taught for a total of five weeks during lower secondary education. Further, 'working life and vocational guidance' (Ministry of Education and Research, 1990 [1987], p. 112) is mentioned as a topic that shall be taught inter-disciplinarily by being included in the teaching of four different subjects: civics (only taught in primary education), social science, Norwegian and mathematics.

L97 includes the subject *school's and pupils' options*, which has a focus on career guidance (Kirke- utdannings- og forskningsdepartementet, 1996). The purpose of the subject is to give both the school and pupils the option to choose focus areas and activities. At the lower secondary level, pupils can choose areas and activities in line with their abilities and

interests. These include 'activities which increase pupils' insight into upper secondary education and knowledge about different occupations' (Royal Ministry of Education Research and Church Affairs, 1999 [1996], p. 351). The curriculum includes examples that relate to different activities in these areas, such as 'measures in collaboration with local industry where pupils can gain experience of working life' (Royal Ministry of Education Research and Church Affairs, 1999 [1996], p. 353). *School's and pupils' options* is to be integrated into the teaching of other compulsory subjects and has been allocated a total of 152 hours, which have to be taken from other compulsory subjects. This amounts to a total of five weeks and two hours over the course of lower secondary education.

LK06 includes the subject *choice of education*, which has the purpose 'that pupils obtain the competency to make career choices based on their desires and conditions [...] [and] to give pupils an understanding of the significance of education, workforce participation and lifelong learning' (Utdanningsdirektoratet, 2015b, p. 2*). Moreover, *choice of education* is meant to provide an overview over the different tracks in upper secondary education and the career opportunities these might open up. Additionally, knowledge about the world of work that is characterised by constant change is also highlighted in the subject. Teaching in this subject can happen both in the classroom and outside of school, such as in cooperation with upper secondary schools or the world of work. *Choice of education* has been allocated 110 teaching hours (4%) of the total amount of teaching hours (Utdanningsdirektoratet, 2017b).

Elective Subjects

The analysis of the curricula shows that there are major differences among the elective subjects in M74, M87, L97 and LK06, both in relation to the number of elective subjects and their content.

Table 3

Elective Subjects in M74, M87, L97 and LK06

	M74	M87	L97	LK06
Elective subjects	Foreign language	Foreign language	Foreign language	Foreign language
	Subjects similar to the compulsory subjects (e.g., mathematics and applied calculation Grade 9)	Subject(s) each school could define	Supplementary language studies	Supplementary studies in different academic subjects
	Subjects related to arts and humanities or specific skills (e.g., typewriting or traffic knowledge)		Practical project work	World of work-subject
	Subjects mainly related to primary industry (e.g., reindeer husbandry)			Interdisciplinary elective subjects
	Subject that allowed pupils to study topics based on their own interests			

(Kirke- og undervisningsdepartementet, 1974, 1987; Kirke- utdannings- og forskningsdepartementet, 1996; Utdanningsdirektoratet, 2015a, 2017b)

As shown in Table 3, all four curricula include academic subjects, such as foreign language, as electives. However, there are also subjects that are pre-vocational, or have the potential to be pre-vocational, in all four curricula.

Several elective subjects included in M74 can be defined as pre-vocational because they focus on specific professions that are mainly related to a primary industry; for instance, the elective subject *reindeer husbandry* aims at providing ‘a theoretical and practical introduction to topics concerning reindeer husbandry, which gives pupils a foundation for further education and practical work in the profession’ (Kirke- og undervisningsdepartementet, 1974, p. 353*). M74 also includes an elective subject that allowed pupils to study topics based on their own interests. This subject has the potential to be pre-vocational, and amongst the

many examples of topics provided in the curriculum, some are related to different workplaces, such as ‘agriculture, forestry, gardening, factory work, offshore work, working in shops and offices’ (Kirke- og undervisningsdepartementet, 1974, p. 367*).

In addition to foreign language, M87 includes one other elective subject curriculum that each school can define and which has the potential to offer pre-vocational education, depending on the local curricula that schools develop and the resources they are allocated (Kirke- og undervisningsdepartementet, 1987). The curriculum for this subject is unspecified and underlines that the subject ‘can be organised to suit local wishes and needs’ and that ‘pupils should have an opportunity to choose subjects and topics to suit their own wishes and needs’ (Ministry of Education and Research, 1990 [1987], p. 317). In practice, this subject curriculum has most likely resulted in several elective subjects offered. The purpose of this elective subject is to ‘promote the pupils’ development and well-being and stimulate self-expression’ and ‘develop general and vocationally useful knowledge and skills’ (Ministry of Education and Research, 1990 [1987], p. 317).

L97 includes the elective *practical project work*, which has the potential to be pre-vocational education. Rather than focussing on specific content, *practical project work* relays a generic working method, where ‘[p]lanning, implementation and evaluation are the principal components’ (Royal Ministry of Education Research and Church Affairs, 1999 [1996], p. 327). This method is also suggested as one possible working method for teaching in all subjects in L97. The purpose of the subject is to give pupils ‘insight into different work processes’ (Royal Ministry of Education Research and Church Affairs, 1999 [1996], p. 327) through *practical project work* and training for working life. According to the curriculum, pupils shall be involved in planning the activities that are conducted in this subject, and the relevant context suggested for the subject is the school itself or cooperation between the school and local bodies or workplaces.

In LK06, the *world of work-subject* focuses on pre-vocational education:

tasks from VET adjusted to the lower secondary level [...] that shall contribute to pupils at lower secondary school gaining knowledge about VET through experiences with work tasks from different occupations that produce services and products.

(Utdanningsdirektoratet, 2015a, p. 2*)

Together with the foreign language and supplementary studies in different academic subjects, this constitutes the first group of electives in LK06.

Additionally, LK06 includes a second group of elective subjects with the potential to be pre-vocational from which schools must offer at least two per school year

(Utdanningsdirektoratet, 2017b). These subjects are all interdisciplinary and represent different fields that relate content-wise to tracks in either academically oriented upper secondary education or VET, that is these subjects are either academic or non-academic and include topics from the humanities, social sciences, science, technology and VET

(Utdanningsdirektoratet, 2017d).

In accordance with the numbers presented in Table 1, the elective subjects are allocated only a minor amount of teaching hours, as Table 4 highlights.

Table 4

Allocation of Teaching Hours of Elective Subjects in M74, M87, L97 and LK06

	M74	M87	L97	LK06
Teaching hours (%) of elective subjects in lower secondary school	17% (18% ⁸) (Grade 8: 17%; Grade 9: 33% (37% ⁹))	12%	9%	15% (8% foreign language/supplementary studies/ <i>world of work</i> -subject; 7% second group of elective subjects)

(Kirke- og undervisningsdepartementet, 1974, 1987; Kirke- utdannings- og forskningsdepartementet, 1996; Utdanningsdirektoratet, 2015a, 2017b).

Elective subjects are allocated the most hours in M74, with 17% in Grade 8 and as much as 33% (37%) in Grade 9. The elective subjects, of which pupils can choose more than one, are those that are allocated the most hours at the lower secondary level in M74. While a fixed number of hours are allocated to academic subjects, the number of hours allocated to the other subjects is more flexible. In M87 and L97, the number of hours decreases to 12% (M87) and 9% (L97). In M87, several elective subjects are offered to pupils, who can choose more than one subject. By contrast, in L97, pupils can choose only one of the different electives offered. In LK06, elective subjects comprise 15% of total teaching time, with 8% of teaching hours allocated to foreign language/supplementary studies/*world of work*-subject and 7% devoted to the second group of elective subjects (Utdanningsdirektoratet, 2017b).

Discussion

Our analysis shows that the composition of the formal curriculum is characterised by continuity in compulsory school subjects. These subjects are mainly academic. Pre-vocational education is represented through the topic *career guidance*, which is included in different ways in the four curricula. While career guidance is mandatory in M74 and LK06, and clearly

⁸ 18% if the subject *music* was not taught in Grade 9.

⁹ 37% if the subject *music* was not taught in Grade 9.

defined in these curricula, in M87 and L97 the topic is less defined and included in broader subjects. In M87, pre-vocational education is offered through practical vocational education and guidance. The subject *choice of education*, in LK06, has the most distinct focus on preparation for the world of work and the transition to further education and work.

Concerning elective subjects, the number of subjects offered and the hours allocated to them vary among M74, M87, L97 and LK06. Academic subjects, in particular foreign language subjects, are also represented amongst the elective subjects in all four curricula. The analysis shows that pre-vocational education is explicitly included in M74 and LK06, whereas M87 and L97 are more open and, amongst the others, have the greatest potential to offer pre-vocational education. Therefore, the variability amongst the elective subjects is, similar to the compulsory subjects, characterised by an inclusion of pre-vocational subjects in M74 and LK06, while M87 and L97 have less focus on pre-vocational education.

The analysis of the allocation of hours to the different subjects shows that compulsory subjects are assigned between 82% and 91% of the total number of teaching hours in the four curricula. This illustrates the central position of academic school subjects. The number of hours elective subjects are allocated is high in M74, in comparison to the other three curricula, with 17% of total teaching hours in Grade 8 and 33% (37% if the subject *music* is not taught) in Grade 9. The number of teaching hours devoted to elective subjects decreases in M87 (12%) and L97 (9%). This strengthens compulsory subjects even further. However, the amount of hours devoted to elective subjects increases again in the latest curriculum reform (LK06), making up 15% of the total teaching hours. These are shared between two different elective subjects. Unsurprisingly, the number of hours devoted to these subjects shows, independent of the differences between the four curricula, that academic subjects play a dominant role compared to pre-vocational subjects, as the largest share of teaching hours has been devoted to them. The fact that most pre-vocational subjects are elective is another factor that reflects

the status of these subjects in the curricula. This conclusion aligns with Berger's (2015) findings that pre-vocational education in general has a lower status than academic subjects. This also shows that the curriculum hierarchy elaborated above (Bleazby, 2015; Francis et al., 2017) is valid for the Norwegian curricula M74, M87, L97 and LK06.

Consistency in the Composition of the Curriculum

The analysis of the four curricula shows that their composition is rather stable, as the compulsory school subjects included in M74, M87, L97 and LK06 have not changed substantially. This is also the case in other national contexts, as studies on, for example, the consistency of the English curriculum show (Goodson, 1995). Furthermore, the composition of the Norwegian lower secondary curriculum is characterised by a strong position of academic subjects. Compulsory subjects are mainly academic, and even the elective subjects in the four curricula include academic subjects. The strong position of academic subjects can be understood in light of Goodson's (1987, 1990, 2001, 2014) model of school subject change, as these academic subjects are mythologised through the institutionalisation of these subjects as university disciplines. This mythologisation is also one reason for the stable composition of the curriculum. Thus, the strong position of subjects in the curriculum is uncontested. In fact, the recent emphasis on basic skills is argued to strengthen the position of academic subjects even further (see Karseth & Engelsen, 2013; Sahlberg, 2016).

Potential for Curriculum Change

Despite continuity in the composition of the curriculum, especially regarding compulsory subjects, the offered elective subjects differ between the four curricula, both with regard to the number of subjects included and the teaching hours allocated to them. M74 includes different elective subjects, which have been allocated a relatively high number of hours. Contrary to

that, M87 gives schools the freedom to decide which elective subjects to offer, but fewer teaching hours have been allocated to them. L97 defines elective subjects more clearly than M87, even though the number of teaching hours that have been allocated to them decreases even further. LK06 includes several elective subjects that are placed in two groups, which individually are allocated a relatively small number of hours.

These findings show that the potential for curriculum change is related to elective subjects, as compulsory subjects are stable over time. This results in an unsteady curricular composition in relation to elective subjects, where single subjects are continuously introduced and abolished. This instability of elective subjects can be explained with Goodson's (1987, 1990, 2001, 2014) model of school subject change, which shows that mythologisation and institutionalisation are necessary for changes to become permanent. The instability of the elective subjects demonstrates that they are not institutionalised in the same way as academic subjects that are anchored in university disciplines. Nevertheless, because elective subjects are included in all four curricula, they play a minor, but significant, role in Norwegian lower secondary education. We argue that these elective subjects contribute to the composition of the curriculum by adding a broader scope that balances the dominant role of academic subjects and can help to meet pupils' interests and needs (see also Imsen & Volckmar, 2014). This is in line with *White Paper 22* (2010-2011), which states that elective subjects and the *world of work-subject* can help to create increased variety in the subjects offered and less theoretical education. However, considering the relatively small number of hours that these subjects have been allocated in the last reform of LK06, these expectations seem unrealistic. This shows the stability of the composition of the curriculum that can hamper the realisation of certain policies.

The Impact of Societal Changes and Changes in Policy Making on the Curriculum

The differences concerning elective subjects in the four curricula reflect changes in both society and policy making, as presented in the section about Norwegian comprehensive schooling and governance through curricula. When it comes to societal changes, it has been common since M87 for all pupils in a cohort to attend upper secondary school. Earlier, pupils were more likely to transfer directly from lower secondary education to the world of work, as it was possible to enter some professions without a specific education (Dale, 2008). The elective subjects in M74 represent, to a certain degree, different opportunities in the world of work and can therefore be regarded as preparation for some vocations. Additionally, in comparison with the other curricula, M74 includes both the highest number and the broadest range of elective subjects, which can also be seen as a means of preparing pupils for a broad range of professions that do not require specific qualifications. Still, from M87 onwards, elective subjects have been allocated fewer hours, and their focus has been less pre-vocational. This development can be understood as education being functionally related to the following educational level (Gonon, 2002), that is, as attending upper secondary education has become common, lower secondary school prepares for upper secondary school and is therefore more generally oriented.

A development toward a greater focus on decentralisation, including subordinate goals with room for local adaptation through the free choice of topics and methods, can explain the shift that happened from M74 to M87 (Gundem, 1993; Telhaug et al., 2004, 2006). In this, the former includes pre-defined electives, while the later offers the most open set of elective subjects, as the content and number of electives were completely defined by individual schools.

Decentralisation was replaced by stronger national governance and less local adaptation through more explicit regulations in both the curriculum's goals and content,

including a focus on nation building in L97 (Telhaug et al., 2004, 2006). Therefore, L97 includes defined electives that mostly focus on academic subjects, with only one alternative elective subject with the potential for pre-vocational education as part of the curriculum. Curriculum policies resulting in LK06 have been influenced by topics that are also prominent in international debates on education policy. This includes, for example, the emphasis on basic skills and changes in the world of work, the development toward a knowledge society and the increased importance of knowledge and formal qualifications (Karseth & Engelsen, 2013; Karseth et al., 2013, Sahlberg, 2016). To address the problem of a high dropout rate in upper secondary school, different policies were initiated in lower secondary education to decrease dropouts by making education more practical, diverse and motivating for pupils (Dale, 2008; Kunnskapsdepartementet, 2012; Meld.St. 22, 2010–2011). These policies align with policies and targets promoted by transnational actors such as the EU and OECD (European Commission, 2010; OECD, 2011). In this context, it is especially the elective subjects that can be defined as pre-vocational in LK06 and which can be understood as part of these mentioned policy reforms.

As our study shows, the policy initiatives of pre-vocational education in LK06 are seen as a response to the reform proposals concerning more relevant, motivating and practical lower secondary education, and a part of the effort to prevent dropouts from upper secondary education. However, challenges, such as a lack of motivation and dropping out, are difficult to solve through pre-vocational education in a comprehensive system without differentiation. Therefore, the question concerning how pre-vocational education can be established in the comprehensive school curriculum becomes relevant. On the one hand, we may argue that organisational differentiation, as in a stratified education system, has greater potential for pre-vocational education through the tracking of pupils. On the other hand, a stratified approach

to education breaks with the traditional Nordic school model that emphasises equity and equal opportunities.

Our study shows the emphasis on pre-vocational education and the connection between education and the world of work in international policy documents (OECD, 2011). However, this is not one of the features Sahlberg (2016) highlights as a part of the global education reform movement. Rather, the importance of basic skills that Sahlberg and international policy documents emphasise leads to a strengthening of academic subjects, which is in contrast to pre-vocational education in lower secondary school.

Conclusion

The analysis presented in this article gives detailed insight into the composition of Norwegian lower secondary school curricula with regard to the position of pre-vocational education. The curricula from M74 through the present include mainly academic subjects. Pre-vocational education is primarily represented through different elective subjects. This curricular development shows that pre-vocational education was more distinctly presented in the composition of subjects in M74 and became less prominent in M87 and L97. However, with LK06, pre-vocational education regained more space in the curriculum and has become more noticeable again. Despite these changes, the overall picture is one of stability, as the main structure of school subjects remains the same over time. Curriculum change has mainly resulted from societal and policy changes, and the potential for curriculum change is mostly seen amongst the elective subjects. The dominance of academic subjects and the low status of pre-vocational education, even in the current curriculum, indicate that pre-vocational education has a less important role in the curriculum than is indicated in policy texts such as white papers (e.g., St.Meld. 22, 2010–2011). This raises the question of how far Norwegian policy discussions on the role of pre-vocational education in school are detached from the

actual making of the curriculum. Further, this observation begs the question of whether a change toward a broader content of schooling, including pre-vocational education, is actually possible as long as academic school subjects retain such a high status and dominant position in the curriculum. This question is not only relevant for the Norwegian context, but is also something that can be expected to affect most types of comprehensive school systems.

In this sense, allowing variety in the curriculum to accommodate the needs of all pupils might be easier to accomplish in a stratified education system using organisational differentiation that includes different curricula for different school types. However, stratification does not correspond with the Nordic comprehensive school and its focus on equity and equality. Nevertheless, subjects such as the *world of work-subject* do exist in a comprehensive system like the Norwegian one, despite the focus on basic skills that further strengthens the academic subjects. The question of how such a pre-vocational subject can be best realised in a curriculum characterised by the consistent dominance of academic subjects remains highly relevant.

Based on our results, we suggest that this question be investigated further in future research. It might also be necessary to consider other solutions and policies, at least as long as the composition of subjects only gives very limited space to pre-vocational education, as in the case of Norway.

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