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Are future L3-German teachers prepared to increase students' metacognition and crosslinguistic awareness in the multilingual classroom? An analysis of teacher education programs at Danish and Norwegian universities

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Abstract: The multilingual turn in Europe requires an adaption of foreign language teaching approaches. This study provides theoretical and empirical reasons to treat crosslinguistic awareness as a potentially beneficial metacognitive tool for multilingual language learners. Furthermore, it explores whether future foreign language teachers are introduced to crosslinguistic awareness as a teaching tool in university teacher education. A sample of 27 national and local documents concerning parts of German foreign language teacher education in Denmark and Norway were analyzed for concepts such as *multilingualism*, *metacognition*, and *crosslinguistic awareness*. The document analysis showed that the three main concepts appeared comparably across the countries, but the distribution within the countries differed across the levels of teacher education. In Denmark, the university level focused the most on the concepts. In contrast, the findings in Norway show a more significant level of multilingualism in the national subject curriculum for foreign languages that language teachers are expected to base their instruction on. Multilingualism was not referenced in the samples at the Norwegian university level. Regardless of the appearance of the concepts in both countries' documents, the findings are not conclusive as to whether crosslinguistic awareness is applied primarily as a learning tool for prospective teachers or whether it is promoted as a didactical tool for future teachers' teaching.

Keywords: Metacognition, crosslinguistic awareness, foreign language teacher education, German as a foreign language, language curricula.

1. Introduction

Europe is often characterized as a diverse yet united continent. While most people refer to this fact as a European strength, it does not only entail advantages.

> A specific issue is the learning of languages. … Multilingualism represents one of the greatest assets in terms of cultural diversity in Europe and, at the same time, one of the most substantial challenges. … [O]ne [key factor contributing to an improved education] is the quality of teachers and of teaching. Teachers play the central role in the process of imparting skills, competences and knowledge as well as in fostering international perspectives early in a young person's life. The better the teacher, the better the outcome. (European Commission 2017b: 7)

The above quote demonstrates that Europe is struggling with multilingualism. Any proposed approach to this challenge should meet the European demands for utilizing multilingualism as an asset and improving teacher education. One possible means of approaching both challenges at once might be through increased *crosslinguistic awareness*, a metacognitive concept, which refers to the "knowledge of the *relationships* holding between one's … languages" (James 1996: 139 [italics in original]).

The present article consists of two parts. The first section accounts for the multilingual turn in foreign language learning in Europe. It introduces multilingualism and suggests how it can be used as a theoretical resource. Furthermore, metacognition and its subdomain crosslinguistic awareness are proposed as potential approaches and possible beneficial tools for multilingual language learners and teachers. The second section analyzes if and to what extent the concepts multilingualism,

metacognition, and crosslinguistic awareness are promoted in teacher education. The analysis considers a series of national and local official documents governing the theoretical part of the teacher training program in two European countries: Denmark and Norway. The study investigates if the concepts in question are (1) just mentioned, (2) used as part of the teacher's language training, and/or (3) presented to the pre-service teachers as didactical resources for their own future teaching.

2. Multilingualism and foreign language learning and teaching

2.1 Defining multilingualism

As stated in the quote above, multilingualism simultaneously has great potential and is problematic for European countries.

The Council of Europe, as a widely respected authority, has contributed to the acknowledgment of multilingualism in the educational field. According to the Council's definition (2007), multilingualism covers two related concepts, one concerning the societal presence of language (varieties) and one regarding the individual speaker's language repertoire.

The present article uses *multilingualism* to cover both the societal and individual domains and considers anyone who has knowledge of more than one language or language variety a multilingual. The level of required proficiency is not critical in this definition, and, accordingly, any European child from age 10 –at the latest – must be considered a multilingual. [1]

2.2 Applying multilingualism as a theoretical resource

Historically, multilingualism has had a bad reputation, resulting mainly from misunderstandings and prejudices toward bilingual children's supposed cognitive disadvantages (Jessner 2008: 15). Yet, according to a number of newer studies, a diversity of individual and rather complex factors can influence the language learning process (e.g. Dörnyei 2005; Haukås 2012; Haukås et al. 2018). Therefore, a combination of different approaches - including multilingualism - can be beneficial for the language learner (e.g. Norris & Ortega 2000; Ellis et al. 2006; Haukås 2011). However, the possible benefits of "multilingualism … should not be regarded as an automatic asset" (Haukås et al. 2018: 4) in improving multilingual learners' language acquisition.

In an institutional setting, it is primarily the responsibility of teachers to apply theoretically established models for their own and their students actual learning process. To be able to successfully integrate an approach, teachers need to not only know of the approach but also its reasoning. Since an approach might consist of various parts, understanding also entails understanding its elements in isolation and their interrelation.

Given the previous reasoning of this article and Neuner's (2009) analysis of how to successfully change language curricula, teachers need to be made aware of at least three conditions as shown in Figure 1 below to be able to apply multilingual pedagogical approaches:

[1] This consideration is based on data from the European Commission's Eurydice report *Key Data on Teaching Languages at School in Europe* (2017a: 30). The only exception are some areas in the UK and Ireland. In Wales and Northern Ireland, the first foreign language is only a compulsory subject from age 11, and Ireland and Scotland do not have foreign languages as a compulsory subject.

Figure 1: Conditions for teachers to successfully integrate multilingualism (based on Neuner 2009)

(1) Teachers need to understand what the conditions for their teaching responsibilities are, i.e., the multilingual setting.

(2) Teachers need to gain knowledge on what condition (1) has to offer, i.e., students' previous language knowledge and learning experience.

(3) Teachers need to gain insight into how they can facilitate resources (2) and what condition (1) can offer in their teaching (and learning).

While the three conditions might seem like a complex challenge, one possible way to familiarize teachers with all three is by introducing them to metacognition, a concept the next section focuses on.

3. A metacognitive approach to language learning and teaching

Various studies have shown that metacognition (hereafter MC) can have a positive effect on language learning among students (e.g. Wenden 1998; Haukås 2014; Haukås et al. 2018). However, while MC, introduced by John Flavell, has been known as a concept since 1976, terminological "inconsistency marks the conceptualization of the construct" (Veenman et al. 2006: 4).

3.1 Defining metacognition

Different domains, subcategories, and terms for MC have been suggested over time (see Tarricone 2011 for a proposed taxonomy), but "it is not always clear how these concepts relate to metacognition" (Haukås 2018: 12). When applying MC to the learning environment, prior knowledge has long been stated as one of the most important components, but emotional awareness is now identified as a central component as well (e.g. Fisher 2018; Hiver & Whitehead 2018). As a broad understanding of MC in all domains, Haukås operates with an integration of several models and defines MC as "an awareness of and reflections about one's knowledge, experiences, emotions and learning" (2018: 13). The present article utilizes Haukås' definition.

3.1 Knowledge in metacognition: challenges and opportunities

One of the essential parts of MC, prior knowledge, is not new to the field of language learning. The impact of previous linguistic knowledge on language acquisition (often called *transfer*) has been a widely discussed factor for many years (e.g. mentioned by Fries 1945 and Lado 1957). One approach to facilitating previous linguistic knowledge is often referred to as *contrastive analysis* (CA). The general idea of early CA research was contrasting a learner's native language with the to-be-learned language to predict any difficulties the learner will face during their acquisition. CA could, however, not live up to its aim of giving a precise prediction of the areas foreign language teachers needed to bear in mind in language learning classes. Studies have shown that "not all L2 errors could be predicted by identifying the differences between the learners' native language and the target language" (R. Ellis 2008: 360). Furthermore, when analyzing learner errors, not all could be explained by using CA descriptions. Some errors, for example, turned out to be intralingual, stemming from the language to be learned rather than from an L1 transfer, or the errors were triggered by other complex or uncertain factors (James 1998: 138, 200). Moreover, not all differences between a learner's L1 and the target language resulted in learning problems or errors (Gilquin 2000: 101).

Nonetheless, as Hasselgård (2018: 99) notes, "knowledge about, and reflection on, relationships

between the languages (presumably similarities and differences) can feed into strategies for learning and using … [the foreign] language". This knowledge and reflection, however, do not come as resources automatically integrated into the foreign language learners. For their native language, the language learners usually rely more on intuition than on deliberately deciding how to use what they have been born into (e.g. Jessner 2006: 54; R. Ellis 2008: 418). A multilingual learner, however, while not necessarily being aware of it either, has already experienced learning (and perhaps even comparing) language(s), be it simultaneously or consecutively. Hence, a multilingual learner has even more elaborate resources than their native language intuition. Inevitably, this leads to a more complex set of prerequisites for choosing a suitable learning strategy amongst multilingual learners. Based on Jessner (2008), Haukås et al. concluded that "the languages in multilinguals' repertoire … belong … to one dynamic psycholinguistic system in which the languages influence each other in sometimes unpredictable ways" (2018: 3).

3.3 Facilitating knowledge and experience for language learning and teaching

It is important to appreciate that realizing how the different parts of earlier language knowledge and previous learning experience influence the learning of a foreign language can be an overwhelming task for a teenage (or, really, any) language learner. If these influences, however, are to be exploited effectively by either the learner or teacher, it is crucial to reach a degree of acknowledgement of those conditions. While this acknowledgement can be achieved in various ways, in the education sector, qualified instruction given by teachers or other educators—like university faculty functioning as teacher educators—is commonly expected (Haukås 2018: 18).

This expectation seems reasonable, yet, it entails a fundamental dilemma. The awareness of teaching and learning conditions requires teacher education that prepares prospective teachers for the task of guiding language learners to develop their multilingual awareness. Arguing that it is the teacher's task to facilitate all sorts of resources and apply various models for learning and teaching would be shortsighted as it disregards that teachers first need to be trained to do so (Haukås 2018: 22). Haukås et al. (2018) state that,

> [a]lthough metacognition is now regarded as an essential tool for lifelong learning and flexibility in ever-changing multilingual and multicultural societies, it can still be claimed that metacognition has not yet been recognized as an integral part of language learning and teaching. (1)

One of the few studies to focus on the benefits of MC in a multilingual setting by Haukås (2016) found that the teachers in her focus group,

> believed that their own multilingualism had been beneficial to their language learning, but they did not come to the same conclusion regarding their students. The teachers believed that this difference could be explained by differences in awareness: the teachers were aware of how to use their previous knowledge in further language learning, whereas their learners may not be equally aware. This belief seems to parallel and support the conclusions of several researchers that awareness is necessary for multilingualism to be an asset. (12)

To assume awareness as a prerequisite for learning complies with the idea that knowledge and experience cannot be separated from new learning (e.g. Bransford et al. 2000; Robinson & N. Ellis 2008). One possible integration of multilingual learners' previous knowledge with a reflection upon this knowledge may be achieved by applying a crosslinguistic awareness approach.

3.4 Crosslinguistic awareness

One of the most dominant European guidelines on language learning, the *Common European Framework of Reference for Languages* (CEFR) (2001), states that as a person's experience of language expands, they do not keep these languages "in strictly separated mental compartments, but rather build … up a communicative competence to which all knowledge and experience of language contributes and in which languages interrelate and interact" (4).

To account for this knowledge and experience stemming from different languages and their interrelation, one needs awareness (De Angelis et al. 2015). When learners combine language awareness with an awareness of how the awareness of two or more languages interact with each other, the learners demonstrate crosslinguistic awareness.

Giving a comprehensive definition of crosslinguistic awareness might prove as complex as accounting for MC. This article treats crosslinguistic awareness similarly to Jessner (2006), as "[t]he language learners' awareness of the links between their language systems expressed tacitly and explicitly" (116). While Jessner's definition continues by restricting crosslinguistic awareness to language production and use, the present article treats any explicit awareness of language relationships without actual productive manifestation as crosslinguistic awareness (hereafter XLA).

The way language teachers teach is based on several factors, including their education. As is expressed in the first quote in the introduction of this article, teachers are expected to lead Europe out of its ambivalent monolingual tradition and into the multilingual area. They should equip their pupils with traditional language skills now but, in doing so, also prepare them to become more aware language learners for the rest of their lives. As future teachers presumably cannot draw on their own experiences, they will need particularly goal-oriented training to be able to cope with this challenge.

This assumption is supported by Haukås' (2016: 12) study on teachers' beliefs, in which teachers could exploit their previous knowledge for their own learning but seemed unable to find an appropriate way to assist their pupils in doing so. In a study on L2 learners of English, Hasselgård concludes that most of the students in her analysis found that "it makes good sense to take advantage of this competence [i.e., the knowledge of more than one language in the same mind] in learners, i.e. to draw on first-language competence when learning or teaching a second language" (2018: 116).

Based on the outlined advantages of a metacognitive approach in a multilingual setting in the above studies, teacher education should offer training for future teachers to experience those advantages themselves and to prepare them to facilitate those advantages in their learners. As Haukås states, "language teacher education should play a key role in training future teachers to reflect on their own knowledge and practices as well as in implementing a metacognitively oriented pedagogy" (2018: 22).

To conclude this first section, in recent years, multilingualism has often been referred to as a resource for mutual understanding and variety (e.g. Hufeisen 1998; Kemp 2001; Jessner 2018). In a language learning context, the advantages are, however, not an automated result and require appropriate knowledge (e.g. MC) and skills (e.g. XLA), both in the language learner and in the teacher (e.g. Hufeisen & Marx 2007; Haukås 2012; Haukås et al. 2018). One of the complex conditions for success is teacher education, which is treated in the following part of this article.

In the following section, a study of a series of documents regarding foreign language teacher education is analyzed in order to find out if and how multilingualism, MC, and XLA are integrated into teacher training.

4. Multilingualism, metacognition and crosslinguistic awareness in teacher education methods

After establishing the feasible value of multilingualism, MC, and XLA, the following section addresses how multilingualism, MC, and XLA are represented in local and national documents guiding foreign language teacher education in Denmark and Norway.

To approach this question, an adaptation of Altheide's *Process of Document Analysis* (1996)

was applied, including the following steps: (1) establishing inclusion conditions for documents, (2) collecting documents, (3) formulating basic areas of analysis, (4) document coding, and (5) analysis. The first four are presented as subsections below. The analysis consisting of results and discussion is to be found in section 5.

4.1 Establishing inclusion conditions for documents: scope and relevance of method

The present study focuses on teacher education in two Northern European countries: Denmark and Norway. As teacher education varies across the two countries,[2] the study only considers the following educational factors to ensure better comparability:

- teacher education at the university level
- teacher education to train upper secondary teachers
- study programs meeting the minimum subject requirements for upper secondary teachers, i.e., 90 ECTS in Denmark and 60 ECTS in Norway
- study programs qualifying German foreign language teachers

For Denmark, the considerations allow for an analysis of three universities, and five universities comply with the requirements in Norway. All eight universities are listed under "study program" in Figure 2 below, but the study only considered six universities in the analysis; three Danish universities and equally three representative Norwegian universities.

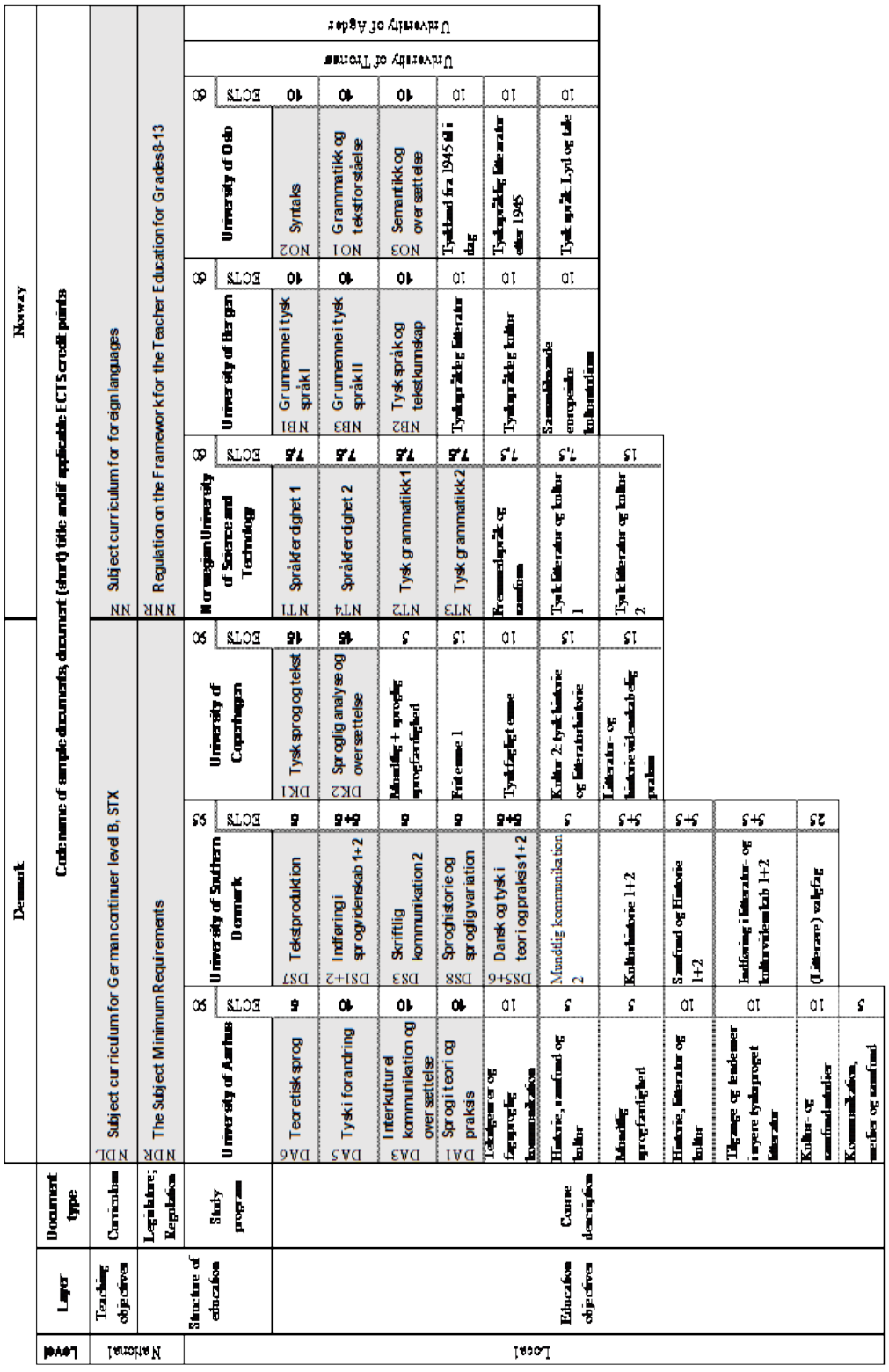
In addition to analyzing the general structure of the teacher training (nationally and locally), the application of the national requirements in courses at the university level were included in the analysis. Moreover, the national target requirements for prospective teachers, that is, the national school curricula, were considered. Since the Danish upper secondary school system consists of four different professional orientations, each with their own individual German curriculum, only the most general orientation, STX (general high school degree without specific professional direction), was included in the study.

Due to the organization of education in Denmark and Norway, the legally binding guidelines for teacher education are publicly available in the form of official documents such as national legislation and local policy documents. The high level of accessibility of the documents, in combination with the documents' broad area of application, allows for the extraction of valuable data in a qualitative analysis of teacher education through document analysis. As in any form of qualitative research, a document analysis "will be colored by [the researcher's] own reality" (O'Leary & Hunt 2017: 272) and needs to thoroughly state any researcher biases or concerns about any single document's credibility. While documents are a stable entity, which makes data gathering easy, the documents do not adapt to researcher's needs and are written with an audience in mind other than researchers. This is to be seen as positive, as a researcher will not inflict on any of the data. However, there is a risk of not finding desired answers and making inappropriate choices about which documents to include in an analysis.

In this study, the issues include, in particular, the researcher's bias due to belonging to some of the documents' target groups. When deciding on a pool of documents to be analyzed, this bias presented itself more than initially anticipated and is discussed further in section 4.2, on the selection of data. Due to the nature of the documents, most of them refer directly to either their nationality or institutional belonging through language use and other witting and unwitting evidence. This fact together with the researcher's bias call for particular attention in the analysis.

[2] For Denmark, see: Undervisningsministeriet [Ministry of Education] 2019: chap. 7, § 56, sec. 4; for Norway, see: Kunnskapsdepartementet [Ministry of Education and Research] 2013: § 3.

Figure 2: Data pool and selected documents (marked with grey background)[3], by author.



[3] A reference list of the analyzed documents is available in Appendix A. Unless stated differently, all document titles in the figure and any quotes in the analysis are originally in either Danish or Norwegian and are translated by the author for the purpose of this article.

4.2 Collecting documents: from initial assessment to dismissal

Figure 2 above provides an overview of the levels, layers, and types of documents complying with the outlined educational factors stated in 4.1. The overview is based on an initial assessment of available documents and excludes some data that may be valuable to investigate further. The data that are under investigation in this study are shaded gray in the figure. The sample comprises 27 documents in total, of which four are nationally rooted—two for each country—and the rest are locally rooted at the six universities. For the convenience of the reader, Figure 2 includes code names that allow for more efficient reference to the documents.

In addition to the stated university courses, prospective teachers are required to receive didactical and pedagogical training (Kunnskapsdepartementet [Ministry of Education and Research] 2013; Undervisningsministeriet [Ministry of Education] 2019). This more professionally oriented part of teacher education more extensively includes teaching approaches and methods than more subject-specific and language-related courses. Regardless, the didactical and pedagogical courses are not considered in this study for several reasons.

These courses are not necessarily directly integrated into teaching education and may—especially in Denmark—be taken later or at another university and are not a critical requirement to start teaching (Undervisningsministeriet [Ministry of Education] 2018: chap. 1, § 3, sec. 3). This tendency is supported by The Danish National Union of Upper Secondary School Teachers' study from 2018, which found that 90% of Danish teachers have more than one year of teaching experience before receiving their pedagogical qualification (Romme-Mølby 2018).

During the initial review of possible data for the study, it became obvious that a prospective teacher's educational input greatly depends on the individual candidate's program design. Since all candidates regardless their educational path qualify to become teachers, only the bare minimum requirements to practice are included in the analysis. In Norway, this means training in a German-relevant pedagogical subject corresponding to 15 ECTS-credits, but if the candidates received their pedagogical training at, for example, the University of Oslo (2019), they have been introduced to much broader general didactical topics than the candidates at, for example, the University of Bergen (2019). The latter pedagogical program has a much more detailed and German-specific focus, with concrete foreign language teaching–related aims.

4.3 Formulating basic areas of analysis

While seeking to analyze a broad sample of documents, not all texts could be considered, for reasons of viability, to ensure a rich understanding of the data. The study programs disclosed a study structure in which approximately half of the courses were related to language and communication, while the other half covers topics like history, literature, and culture. Multilingualism, MC, and XLA might (and should) have been found across all courses, but only the most linguistic and theoretical courses were considered in the present study, partly because these courses constituted a vast amount of the total study program and partly because these courses were expected to be influenced by recent views on multilingualism. The latest version (fall 2020 term) of the descriptions of these language-courses were included in the sample.

Since the selection was based on the German study programs for each university, it is essential to bear in mind that these programs were not exclusively for pre-service teachers and included elements and topics only relevant to some of the students.

4.4 Document coding

The exploration of the content was undertaken by means of a qualitative coding mechanism. Each sample document was treated independently first with a deductive and then an inductive approach. In the first reading, any instances of multilingualism, MC, XLA, and related concepts were assessed broadly, allowing for other relevant focus areas to arise. Approximately 1000 segments across the

entire sample were identified through close reading and re-reading. The segments were grouped to be re-examined by applying creative coding of the qualitative data analysis software MAXQDA. New segments were added while others were modified in their belonging to the code-concepts. Questions and concerns occurring during the analysis were noted and evaluated reflectively together with the findings.

5. Analysis: results and discussion

The existence of a national guideline to structure teacher education suggests that teacher education should be based on the needs in school, which are manifested in the national curricula. Therefore, the presentation of the data starts by presenting findings from the national curricula, followed by the national guidelines for teacher education, and finally relating them to the individual theoretical university courses which aim to preparing teachers to maintain the national curricula.

5.1 The national subject curricula

The Danish curriculum is from 2017, while the Norwegian is entirely new and valid from August 2020. The documents are of approximately equal length and consist of similar sections dealing with the subject's relevance and values, main topics, and professional objectives. The Norwegian document is aimed at a much broader audience as it is valid for any foreign language subject (excluding English and Norwegian as a foreign language) and covers lower secondary and upper secondary levels in one document. The Danish document in the sample only treats the subject of German as a foreign language. It only covers the upper secondary level for students with prior knowledge of German from the lower secondary level. As a result, only the higher-level objectives (*nivå II*) in the Norwegian documents were compared to the Danish objectives.

When comparing the curricula's sections, both documents focus on similar areas, namely communication and culture, and objectives of knowledge, competence, and skills. While the Norwegian curriculum highlights "language learning and multilingualism" (NNL: 3) as a core element, the Danish curriculum does not introduce multilingualism as a concept. Furthermore, the Norwegian curriculum treats foreign language learning as part of the individual development process of the learner. By repeatedly using phrases like "will help promote", "can help develop", "should help to gain awareness", and "should help give an understanding" (NNL: 2), the Norwegian curriculum gives many examples of metacognitive strategies. The Danish curriculum focuses on development as well, but does not state foreign language learning as a developmental process but more as a goal thereof. Both multilingualism and MC are more integrated into the Norwegian curriculum; the former is not explicitly mentioned in the Danish curriculum and the latter is only touched upon.

Another difference concerned the level of abstraction in the curricula. The Norwegian curriculum is quite general and bases many decisions on how to reach the professional objectives on the competence of the teacher. The professional objectives are more freely stated as well and are similar to the CEFR's objectives. While the reason for the less concrete objectives might be the broad audience of the Norwegian curricula, it can be seen as a low level of restriction on the teacher. This can be exemplified through the expected receptive reading skills.

Norwegian teachers need to make sure their students manage to "read and understand different types of texts, and authentic ones, about personal and professionally relevant topics and current issues" (NNL: 5). In comparison, Danish teachers need to fulfill the same task in addition to using more specified materials. For example, "German fictional and non-fictional multimodal text types and genres that can give students creative experience and varied and nuanced insight into cultural, historical and societal conditions" (NDL: 2) should be part of the syllabus and "at least one of the topics must include German text from before 1945" (NDL: 2).

Similar tendencies of abstract vs. concrete content can be observed in the arenas of productive and receptive oral skills and productive written skills. A lexical search of both curricula confirmed

this trend. Anything that could point at grammar in the Norwegian curriculum is generalized with the term "linguistic structures" (NNL: 3;4;6). The Danish curriculum uses the term grammar only once: "analyze and describe the German language grammatically using appropriate terminology" (NDL: 1). However, it has multiple instances of mentioning more concrete grammatical elements, like "morphology", "syntax", "chunks", and "awareness of linguistic structure." Hence, while focusing less on broader concepts such as multilingualism and MC, the Danish curriculum has greater focus on more concrete concepts or methods which are relevant for XLA.

Danish teachers were, consequently, not only more restricted than their Norwegian colleagues when designing their courses but also not offered a theoretical rationale for the methodological choices already made for them. The Norwegian teachers were, however, more likely to reflect on multilingualism as an objective but might have struggled to find out how it can be done.

5.2 The national teacher education regulations

The national guidelines for teacher education present a picture similar to the curricula. The Norwegian one is broad and general, while the Danish one has a more restricted focus and is more detailed.

The Norwegian *Regulation on the Framework for Teacher Education for Grades 8–13*, from 2013, covers all teacher education and does not require any subject-specific objectives or content. Instead, the document outlines the framework for teacher education as a whole, the distribution of minor and major subjects, and the requirements for pedagogical training. While the scope of the document is to serve as a baseline for the design of study programs at individual universities, it presents some learning objectives, which can be related to multilingualism, MC, and perhaps even XLA, when treated as a sub-concept of MC. For example, the regulation requires future teachers to have "in-depth knowledge of relevant research literature and the current legislation and curriculum, and they should be able to apply this knowledge in new areas" (NNR: 2). Furthermore, a teacher needs to be able to describe characteristics of competence, assess and document student learning, provide learning-promoting feedback, and help students reflect on their own learning and professional development (NNR: 3).

The comparable Danish version, *The Minimum Subject Requirements*, from 2018, consists of a short general section. This introduction states the document's overall aim of "providing a guideline for universities to offer a program that qualifies teachers in two subjects to teach across Denmark, regardless of where they studied" (NDR: 1). Additionally, the general part specifies that "the requirements apply to all of the previously mentioned 'upper-secondary school directions' " (NDR: 1). This is particularly interesting, considering that all of these directions have individual curricula with partly varying content and objectives. The second part of the requirements consists of a 52-page appendix specifying the subject requirements for more than 50 subjects. German is treated as part of the modern foreign language group, together with Arabic, Chinese, English, French, Italian, Japanese, Russian, Spanish, and Turkish.

The requirements for German are divided into three sections, namely Language and Communication; Culture, Media and Literature; and History and Society. The first section is of the most relevance to the present study and involves several objectives that can be related to MC and partially to XLA. For MC, the most prominent idea seems to be the ability to reflect upon one's or other's language use. The reflection is either based on the level of correctness (i.e., quality judgement and fluent communication with an appropriate degree of correctness) or adjustment to external needs (i.e., varied communication and knowledge of language variation: regional, social, functional, and historical; see NDR: 14–15). The main focus seems to be placed on the ability to improve the learner's communicative skills. Linguistic knowledge and skills are listed as tools to "provide linguistic guidance in a systematic way (phonetics, orthography, morphology, syntax, semantics, and pragmatics)" (NDR: 14). While most of the objectives do not indicate the level of knowledge, competence, or skill, the last bullet point requires a "basic knowledge of foreign language acquisition"

(NDR: 14). Multilingualism or related topics are not mentioned in the language section, but the idea of a regional and global context can be found in the section on history and society.

Assuming that the teacher training program is based on the teacher education guidelines and prepares prospective teachers to be able to work within the curricula framework, the above tendencies should appear in the course programs for teacher education.

5.3 The local course descriptions

As mentioned in section 4.3, the 21 course descriptions stemming from six universities are coded independently, focusing mainly on concepts related to multilingualism, MC, and XLA, in addition to establishing new concept categories. The following nine categories were the most prominent and are here applied as ground for comparison. The abbreviation of the category name, as it appears in Figures 3 and 4, is given in parentheses:

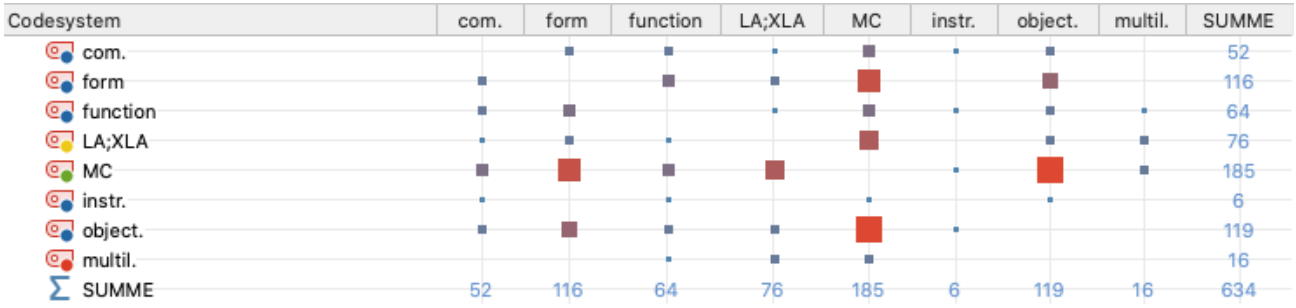
1) communication and proficiency (com.)
2) form
3) function
4) language awareness and crosslinguistic awareness (LA;XLA)
5) metacognition (MC)
6) instruction form (instr.)
7) entry level + requirements (entry l.)
8) objective level (object.)
9) multilingualism (multil.)

There are two main disadvantages of the categories: First, some categories are too broad and include a high number of segments, which are not necessarily related to any parameters other than the overall category. This means that the broad categories further need to be qualitatively treated before any generalizations can be proposed. Second, due to certain overlaps, segments can fit into various categories and need to be double- or multi-coded. This is not an issue per se; however, it requires additional reflection when considering the relationship and dependency of the categories.

Document NB1, for example, includes the following objective for knowledge: "Upon completing the course, the student is expected to … possess satisfactory knowledge about German grammar" (2). This segment needs to be coded first in the broad category *MC* due to the phrase *knowledge about*. The segment should also be coded for *form* since it concerns grammar. The segment can, however, not without further discussion, offer a conclusion on whether grammar is an additional focus here or if it appears as an integrated part of MC.

Although an in-depth review of the almost 600 coded segments in the course descriptions could be enlightening, the presentation here will instead focus on some general tendencies in the distribution of the categories and their interrelationship (see Figure 3). The size of the shapes indicates the extent of overlap between the categories. The presentation must not be mistaken for a quantitative representation of the data and exclusively aims at providing an inclination of interrelations of concepts in the course descriptions.

Figure 3: Code interrelations in the course description segments, by author[4]



Considering the broad character of the *MC* category, it is not surprising that almost one-third of the coded segments are found in that group. Neither is it unexpected to find a considerable overlap of *MC* and *object*. (49 segments),[5] as the objective levels merely consist of different levels of knowledge, skills, and competencies. It is still questionable if these segments truly are concerned with MC or if they only appear as structural or textual elements in the course description.

The second most prominent category, *form*, is unexpected considering the main focus of the training teachers' target profession. As has been established, there should be a match in what the teachers will need in schools—that is, what the curriculum requires—and what they are taught in their university teacher courses. The above analysis of the school curriculum includes only a few *form* segments and has a tremendous focus on *function* and *com*. The course descriptions, however, include 52 segments on *com.*, 64 on *function* (of which 15 are overlapping), and 116 segments on *form*. This indicates a mismatch between the university courses, which apparently have a great focus on form, and the school curricula, which focus on function and communication instead.

While the overlap of *LA;XLA* and *MC* seems obvious, it is striking how rarely (14 instances) *LA;XLA* appears together with *form* (i.e., grammar). This might indicate a focus on acknowledging the existence of the crosslinguistic phenomena without specifying the resources (i.e., form) or purpose (i.e., function and ultimately communication) needed to apply that knowledge. The majority of the documents include phrases like "[t]he candidate is conscious of differences between the Norwegian and German languages" (NT4: 1). But only a few examples of an application of this consciousness can be found. Interestingly, the segment from NT4 stems from a course on proficiency and does not include any requirements on the use of that ability. In contrast, a grammar course at the same university required the students to "reflect on differences between Norwegian and German and make use of this in both written and oral German" (NT3: 1).

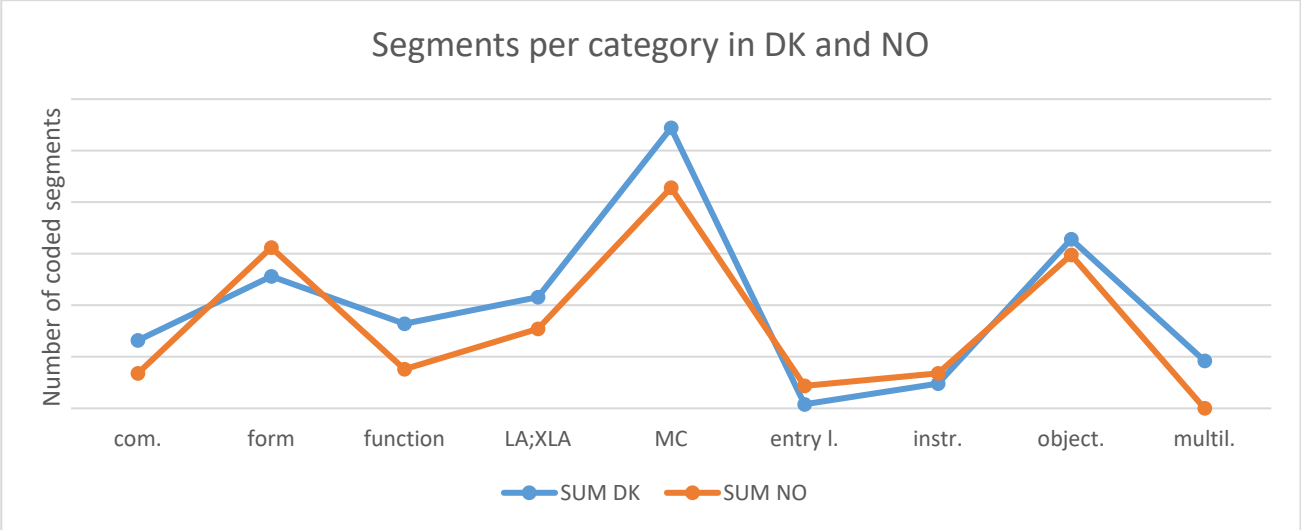
The third area of interest for this study, multilingualism, rarely presents itself in the course descriptions. A total of only 16 segments across the 23 documents were coded as belonging to this concept. What is more striking than the low number of instances, however, is the type of documents in which these segments appear. All 16 were retrieved from the Danish documents, even though neither the Danish curriculum nor the Danish teacher education guidelines include this concept. Conversely, in Norway, multilingualism is stated as a core element in the curriculum. However, according to the course descriptions in this sample, it cannot be found in the teacher training for those who will have to work based on that curriculum.

Even though the data indicate some deviations across the layers under observation and across countries, it is essential to emphasize that the general tendencies across all three document types are comparable. Figure 4 compares the number of coded segments for the nine categories in Denmark

[4] The *entry level + requirements (entry l.)* category is excluded from Figure 3 as no interrelations occurred.
[5] For a table on the numbers referred to, see Appendix B.

and Norway. The graph can probably serve best to illustrate the insufficiency of the established categories, as far too many segments appear in the *MC* category without further distinction; but, nonetheless, it shows how the key elements to be expected in curricula and program plans are distributed similarly across the countries.

Figure 4: Sum of segments per code category in Denmark and Norway, by author



It is important to remember that the majority of segments stem from only one document type—the course descriptions. Hence, the graph must not be mistaken for an indication of a focus on the different categories across the entire educational system, which is obvious by reviewing the *multilingualism* category in the graph. Denmark appears to have greater focus on this area, but this focus only results from segments in the university course descriptions, as multilingualism is not represented in the school curriculum. The opposite is the case for the Norwegian documents, which according to the graph have almost no focus on multilingualism, but actually have an entire focus area in the school curriculum.

6. Concluding remarks

Even though the sample of this study only considers a selection of the minimum subject requirements and entirely disregards any pedagogical or didactical courses for future L3 German teachers, the analysis indicates that multilingualism, MC, and XLA are to some degree part of the teacher training curriculum in Denmark and Norway. The distribution of the concepts appears, however, not to be equal across the receiving side (the upper secondary schools) and the providing side (the teacher education programs).

In Norway, the introduction of new concepts seemingly happens bottom-up, that is, new demands are put forward on teachers first. Only then are the universities expected to prepare future teachers accordingly. While this direction of implementation can be seen as more pupil-focused as it is starting the improvement among the many, practicing teachers might feel insecure about the new framework. They might not be able to appreciate the proposed improvements due to a lack of training and guidance. An inclusion of different university courses or including the pedagogical part of the teacher training program would be necessary to verify this tendency.

According to the analysis, the situation presents itself differently in Denmark. Here, the universities seem to adjust faster to societal requirements than schools do. In practice, change takes longer to be established on the ground in the schools' classrooms, and the more recently trained teachers may feel the need to defend their practices as more valid or current. As soon as the entire

education system has adapted, however, the needs and requirements might have changed again and the long transitional phase starts all over. The Danish results exemplify how difficult adaption can be and that a change alone in one of the levels or layers may be insufficient.

Therefore, the political or administrative order of change might not be as relevant if a better integration between practicing and researching takes place. Haukås et al. (2018: ix) state in their introduction to *Metacognition in Language Learning and Teaching* that "connections between theory, research and class room practice" are urgently needed.

While this study has shown that the educational sector seems to accommodate the current needs of teachers who are navigating in a multilingual setting, the documents do not tell anything about the concrete teaching situation. In particular, only very little can be concluded on how or to what extent multilingualism, MC, and XLA are actively discussed and enhanced in teacher education. Observational studies in teacher education are necessary to support the theoretically established findings of this study. In future research, it can also be fruitful to consider the perspectives of language teacher educators. What are the requirements for these first-level initiators of the next generation of teachers, and how is their approach concerning, for example, multilingualism, MC, and XLA?

The demands for foreign language teachers keep changing as a result of—among other things—the multilingual turn. However, the subject-specific, language-related university courses in teacher education for German foreign language teachers and the national school curricula in Denmark and Norway seem to adapt rather slowly to those changes and show only little integration of promising concepts such as MC and XLA.

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Appendix A

References of the sample documents, cf. Figure 2

Level	Layer	Document type	Denmark						Norway					
			Code name of sample documents, document source											
National	Teaching objectives	Curriculum	NDL	Undervisningsministeriet [Ministry of Education] (2019). 'Bekendtgørelse af lov om de gymnasiale uddannelser. '. [Consolidation Act of Upper Secondary School Act]. LBK nr 611 af 28/05/2019. https://www.retsinformation.dk/eli/lta/2019/611; Attachment 132 'subject curriculum German B, stx https://www.uvm.dk/gymnasiale-uddannelser/fag-og-laereplaner/laereplaner-2017/stx-laereplaner-2017 Retrieved May 4, 2020					NNL	Kunnskapsdepartementet & Utdanningsdirektoratet [Ministry of Education and Research & The Norwegian Directorate for Education and Training] (2019). 'Læreplan i fremmedspråk'. [Subject curriculum for foreign languages]. Læreplankode: FSP01-02. https://www.udir.no/lk20/fsp01-02. Retrieved May 11, 2020				
	Structure of education	Legislature; Regulation	NDR	Uddannelses- og Forskningsministeriet & Styrelsen for Forskning og Uddannelse [Ministry of Higher Education and Science & Agency for Science and Higher Education] (2019). 'Retningslinjer for universitetsuddannelser rettet mod undervisning i de gymnasiale uddannelser samt undervisning i gymnasiale fag i eux-forløb (Faglige mindstekrav)'. [Subject Minimum Requirements]. VEJ nr 9698 af 28/08/2018. https://www.retsinformation.dk/eli/retsinfo/2018/9698. Retrieved May 11, 2020					NNR	Kunnskapsdepartementet [Ministry of Education and Research] (2013). 'Forskrift om rammeplan for lektorutdanning for trinn 8-13'. [Regulation on the Framework for the Teacher Education for Grades 8-13]. FOR-2013-03-18-288. https://lovdata.no/forskrift/2013-03-18-288. Retrieved May 11, 2020				
Local		Study program	**University of Aarhus (2020). 'Study Program German as minor subject and course descriptions'. https://bachelor.au.dk/tilvalg/tysk/ Retrieved May 17, 2020**		**University of Southern Denmark (2020). 'Study Program German as minor subject and course descriptions'. BA https://odin.sdu.dk/sitecore/index.php?a=sto&id=25582&listid=2027&lang=da; MA https://odin.sdu.dk/sitecore/index.php?a=sto&id=25688&listid=2027&lang=da Retrieved May 17, 2020**		**University of Copenhagen (2020). 'Study Program German as minor subject and course descriptions'. https://hum.ku.dk/uddannelser/tilvalg/oversigt/tysk/ Retrieved May 17, 2020**		**Norwegian University of Science and Technology (2020). 'Study Program German as minor subject and course descriptions'. https://www.ntnu.no/studier/natysk/oppbygging#year=2020 Retrieved May 17, 2020**		**University of Bergen (2020). 'Study Program German as minor subject and course descriptions'. https://www.uib.no/studier/ÅRHF-TYS Retrieved May 17, 2020**		**University of Oslo (2020). 'Study Program German as minor subject and course descriptions'. https://www.uio.no/studier/program/tysk-aarsenhet/oppbygging/ Retrieved May 17, 2020**	
	Education objectives	Course description	DA6	Teoretisk sprog - see study program	DS7	Tekstproduktion- see study program	DK1	Tysk sprog og tekst - see study program	NT1	Språkferdighet 1 - see study program	NB1	Grunnemne i tysk språk I- see study program	NO2	Syntaks - see study program
			DA5	Tysk i forandring - see study program	DS 1+2	Indføring i sprogvidenskab 1+2- see study program	DK2	Sproglig analyse og oversættelse - see study program	NT4	Språkferdighet 2- see study program	NB3	Grunnemne i tysk språk II - see study program	NO1	Grammatikk og tekstforståelse- see study program
			DA3	Interkulturel kommunikation og oversættelse- see study program	DS3	Skriftlig kommunikation 2 - see study program			NT2	Tysk grammatikk 1- see study program	NB2	Tysk språk og tekstkunnskap - see study program	NO3	Semantikk og oversættelse- see study program
			DA1	Sprog i teori og praksis - see study program	DS8	Sproghistorie og sproglig variation- see study program			NT3	Tysk grammatikk 2 - see study program				
					DS 5+6	Dansk og tysk i teori og praksis 1+2- see study program								

Kunnskapsdepartementet [Ministry of Education and Research] (2013). 'Forskrift om rammeplan for lektorutdanning for trinn 8-13'. [Regulation on the Framework for the Teacher Education for Grades 8-13]. FOR-2013-03-18-288. https://lovdata.no/forskrift/2013-03-18-288. Retrieved May 11, 2020.

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Appendix B

Quantified code interrelations in the course description segments, by author

Codesystem	com.	form	func...	LA;...	MC	instr.	obje...	multil.	SU...
com.		11	6	3	21	2	9		52
form	11		16	14	46		29		116
function	6	16		5	21	1	13	2	64
LA;XLA	3	14	5		34		13	7	76
MC	21	46	21	34		2	54	7	185
instr.	2		1		2		1		6
object.	9	29	13	13	54	1			119
multil.			2	7	7				16
SUMME	52	116	64	76	185	6	119	16	634

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