

This article was downloaded by: [University of Western Sydney Ward]

On: 17 April 2014, At: 00:29

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



International Journal of Bilingual Education and Bilingualism

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rbeb20>

CLIL in junior vocational secondary education: challenges and opportunities for teaching and learning

Jenny Denman ^a, Rosie Tanner ^b & Rick de Graaff ^c

^a Research Centre for Urban Talent, Rotterdam University of Applied Sciences, Rotterdam, the Netherlands

^b Centre for Teaching and Learning, Utrecht University, Utrecht, the Netherlands

^c Faculty of Humanities, Utrecht University, Utrecht, the Netherlands

Published online: 22 May 2013.

To cite this article: Jenny Denman, Rosie Tanner & Rick de Graaff (2013) CLIL in junior vocational secondary education: challenges and opportunities for teaching and learning, *International Journal of Bilingual Education and Bilingualism*, 16:3, 285-300, DOI: [10.1080/13670050.2013.777386](https://doi.org/10.1080/13670050.2013.777386)

To link to this article: <http://dx.doi.org/10.1080/13670050.2013.777386>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms &

Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

CLIL in junior vocational secondary education: challenges and opportunities for teaching and learning

Jenny Denman^a, Rosie Tanner^b and Rick de Graaff^{c*}

^a*Research Centre for Urban Talent, Rotterdam University of Applied Sciences, Rotterdam, the Netherlands;* ^b*Centre for Teaching and Learning, Utrecht University, Utrecht, the Netherlands;* ^c*Faculty of Humanities, Utrecht University, Utrecht, the Netherlands*

(Received 27 March 2012; final version received 8 January 2013)

In many countries, Content and Language Integrated Learning (CLIL) in secondary education, whether by default or design, focuses primarily on high-achieving students. This paper presents a study of CLIL programs for a different population: junior vocational students in the lower streams of secondary education in the Netherlands. On the basis of a context description of the highly streamed Dutch secondary education system and a literature review related to bilingual education for lower achievers and vocational CLIL, the paper examines the implementation of bilingual education programs at school and task level. More specifically, it describes the perceptions and motivation of junior vocational students and their teachers with respect to the organization and practice of vocational CLIL. As a result, the paper reports the successful linguistic, curricular, and pedagogical characteristics of bilingual education programs for this type of learner and summarizes the challenges and opportunities for CLIL in junior vocational education.

Keywords: Content and Language Integrated Learning (CLIL); bilingual education; vocational education; lower achievers

Introduction

Bilingual education at secondary level in the Netherlands – in Dutch called *TTO*, for *tweetalig onderwijs* – began as a small grass-roots initiative around 1990. Within 20 years there were about 120 secondary schools offering bilingual education (English/Dutch, with the exception of a few schools near the German border that offer German/Dutch). The introduction and implementation of bilingual education began in schools with the highest academic level and the highest entrance requirements, but it is slowly being established in other types of secondary schools as well. At the moment, the largest growth in secondary bilingual education is occurring in the lowest of the three streams of secondary education, in the form of additive bilingualism through partial immersion.

The purpose of the present study was to gain insight into the relevance for our target population of previous research related to bilingual education, and then explore the considerations, implementation, and appreciation of bilingual programs particularly focusing on junior vocational secondary education. This target population is

*Corresponding author. Email: r.degraaff@uu.nl

special for a number of reasons: the programs are relatively new, students are definitely not part of an academic elite, junior vocational secondary streams are rare outside of the Netherlands, and bilingual education programs are growing despite a paucity of research in this specific field. Parallel practices in bilingual programs at this level in the Netherlands are compared and contrasted; the needs of learners and teachers are different, yet the grouping of results enables a broad general picture from several different angles. We will present and discuss studies of the context, participants, and methodology of bilingual or immersion education relevant for lower achievers at the (junior) vocational level. Conclusions will be discussed from related research in other, but still relevant contexts such as at-risk learners, lower academic levels, lower socioeconomic background, English language learners with different home languages, and bilingual education as a motivating factor. Though it is problematic to draw any direct parallels between these different national situations and educational contexts, the conclusions may be relevant for bilingual programs internationally, and particularly for a lower-achieving secondary population.

Bilingual junior secondary vocational education in the Netherlands

An understanding of the highly streamed Dutch educational system is necessary to understand the context of bilingual education at junior vocational level. At the end of primary school, at the age of about 12 years, Dutch students are given a formal recommendation regarding their options for secondary education. This recommendation is based on several types of assessment: their performance on national standardized tests (administered by CITO, the Central Institute for Test Development) and both summative and formative assessments at the primary schools themselves. The recommendation is generally binding. Students are streamed into three types of secondary schools: *vwo* or pre-university education (six years); *havo* or general secondary education (five years); or *vmbo* or junior vocational secondary education (four years). The *vmbo* stream is further sub-divided into four sub-streams, from more demanding to less demanding and from more theoretical to more practical. Approximately 40% of Dutch students attend a *vwo* or *havo* secondary school, and approximately 60% attend one of the four types of *vmbo* junior secondary education.

The *vmbo* population is thus not only the largest, but also the most diverse. In addition to the largest spread in the CITO test results and the existence of four different substreams to accommodate different cognitive abilities, the junior vocational secondary education in the Netherlands is characterized by a higher percentage of students with a home language other than Dutch or a different ethnic background. Many of these students are second-generation Turkish or Moroccan; there is also a considerable population of asylum seekers. A relatively high percentage of students have learning challenges, ranging from dyslexia and dyscalculia to behavioural disorders such as attention deficit hyperactivity disorder. Junior vocational secondary schools have a higher percentage of students from lower socioeconomic backgrounds than general secondary or pre-university stream schools. There is thus a substantial learner population, compared to other types of secondary education, which could be considered 'at risk'. This is relevant for the subsequent background literature discussion. Regarding the development of bilingual education programs at this level, in 2009 there were six *vmbo* schools offering bilingual education, joined by seven more in 2010 and three more in 2011.

An additional 12 schools have plans to implement a bilingual program in the near future – a four-fold increase in just a few years. It is important to stress that in the Netherlands parents are free to choose a specific school for their children, taking the level of education into account. That is, it is the parents' and students' choice to attend a bilingual or a nonbilingual stream.

Perhaps due to the rapidity of the growth of bilingual junior secondary vocational education, and the research focus on bilingual education in the higher streams, there is a dearth of research into the specific context of bilingual education for less-elite populations despite calls for more attention to this area (Marsh 2003; Baetens Beardsmore 2007; Dalton-Puffer et al. 2009; Coyle, Hood, and Marsh 2010; Bruton 2011).

Content and Language Integrated Learning (CLIL), broadly interpreted, is the fundamental principle underlying bilingual secondary education in the Netherlands. On the one hand, CLIL is a methodological principle, according to which foreign language development is facilitated in subject classes, and subject knowledge development is supported by content-based language learning strategies in language classes. On the other hand, CLIL is an organizational principle for bilingual school in the Netherlands, which is structured and monitored by the network of bilingual schools within the requirements of the Dutch educational system. In cooperation with the European Platform, the national network of bilingual schools drew up a set of standards to which CLIL programs should adhere. This Standard stipulates that CLIL programs at pre-university and general secondary levels should offer 50% of the curriculum in the target language, including at least one subject from each of the main knowledge domains Science, Social Sciences, and Arts & Sports. Further, CLIL programs must not result in a decline in Dutch language or content subject proficiency, but must focus on additive bilingualism. Specifically, the school assessment results for the subjects taught in the target language, and for Dutch as a subject, may not fall under the national average scores for the standardized tests in these subjects (tested in Dutch). In the Standard, target L2 attainment goals for CLIL secondary schools are described in terms of Common European Framework of Reference (CEFR) levels and requirements for a European and International Orientation (EIO) component are laid out. Research at bilingual pre-university secondary level (*TTOvwo*) has shown that students achieve a higher level of English proficiency than their non-TTO peers, while maintaining proficiency in Dutch and content subjects (Huibregtse 2001). More recent research has shown that students not only achieve a higher level of English, but their linguistic repertoire – even in the first few years – is characterized by more frequent use of language 'chunks', indicative of more authentic, idiomatic acquisition (Verspoor et al. 2010; Verspoor, de Bot, and van Rein 2011).

As in the higher streams, the junior vocational secondary level has its own (provisional) Standard¹ for CLIL, quite similar to the Standard for the higher streams, with certain adjustments. CLIL at junior vocational level (*tvmb*) should offer a minimum of 30% of the curriculum in the target language. This percentage is not based upon research results, but on a balance of time for the target language and the main language of education, in order to assure a degree of additive bilingualism for this population. The 30% must be spread over different subjects and domains; within this stipulation each school has a great deal of freedom not only in selecting which subjects are given in the target language, but also in the choice of methodology and didactic activities, and the degree to which cross-curricular collaboration and

projects are included in the CLIL curriculum. As in the higher streams, the EIO component is a vital part of the junior vocational Standard. Additionally, for the junior vocational level, the CEFR target attainments are lower than for the general and pre-university levels, but higher than for the nonbilingual junior vocational streams.

Related research relevant to bilingual junior secondary vocational education

Despite differences in national context, educational level, socioeconomic background, degree of immersion, or first language, there are a number of relevant links with previous research for CLIL in (junior) vocational education in the Netherlands or elsewhere. Within a variety of bilingual and immersion education settings, relevant parallels have been found concerning ‘at risk’ students, lower (or simply average) achievers, socioeconomic or sociocultural status, vocational education, CLIL as the learner’s third language (rather than the second), English language learners (ELLs), motivation, and CLIL teaching skills. In order to obtain a broader and evidence-based perspective on the considerations, implementation, and appreciation of bilingual programs, we will subsequently address studies with respect to the context, participants and methodology relevant for (junior) vocational education. The studies listed here are for illustrative purposes and are by no means exhaustive, but represent a variety of national and program-specific contexts.

Lower ability and ‘at risk’ learners

Genesee’s bilingual immersion study in Canada (2007) showed that below-average students in French immersion programs were apparently not disadvantaged in their development or academic achievement if they participated in immersion. Their first language proficiency and academic development were similar to those of below-average students in nonimmersion schools, while their second language proficiency levels were significantly higher. Neither were the ‘at risk’ students – those with language, literacy, and other academic difficulties – differentially handicapped. In general, ‘students’ first language development and academic achievement are similar to (or better than) those of non-immersion students’ (Lyster 2007, 22). Studies of non-elite student populations in other countries show similar results: in Finland, Merisuo-Storm’s investigation of foreign language reading skills in bilingual education (2006) demonstrated that even students who fell into the ‘lowest level’ group scored better in most reading skills than students in monolingual classes. Another Finnish study showed that there were no major differences in content learning between a CLIL and a non-CLIL group, even for students of different intelligence levels (Seikkula-Leino 2007). This is further confirmed by Dalton-Puffer in an overview of CLIL in German-speaking countries (2007); although students with a high level of linguistic competence tend to perform well regardless of the type of instruction, average students show more foreign language improvement through CLIL than through traditional foreign language instruction. Mewald (2007), in contrast, found that although CLIL students over a broad range of abilities benefited from CLIL, average and higher achievers in Austrian schools benefited more from CLIL classes than lower achievers, as lower achievers were found to lag behind their non-CLIL peers in some aspects of oral fluency. However, according to Mewald, this may be due to certain classroom communicative patterns which are considered

'typical of CLIL lessons' in the context of the study (2007, 160), such as students' L1 responses, code-switching, and very restricted target language responses, rather than due to CLIL as such.

The socioeconomic and sociocultural background of student populations has also been studied in relation to bilingual education, albeit sparsely. This is relevant to the Dutch context and several other national situations because of the generally lower parental occupational status and parental educational levels of (junior) vocational students. Genesee found that students from lower socioeconomic backgrounds in French immersion classes scored just as well as other students on both English language tests and in mathematics. He states that there was 'nothing in the results [...] to suggest that students from lower socioeconomic groups will experience difficulties in English language development in immersion programs or that they cannot benefit from immersion in terms of second language achievement' (2007, 95). Similarly, in the Basque CLIL context, where the CLIL language, English, was the students' third language, Lasagabaster's study (2008) showed that there was no significant difference in language skills performance amongst students with a parent who had finished primary school, secondary school, or university as their highest level of education. It should be noted, however, that in the latter study a majority of the parents had completed university.

Motivation

The ITALIC Research Report by Coyle (2011) examines, among other things, aspects of motivation in foreign language learning at school, including motivation in the learning environment, learner engagement, and learner identities. This study, which included 11 schools offering CLIL in foreign languages other than English and over 650 students, found that students generally considered CLIL motivating in all three of these dimensions of motivation. Additionally, learners reported feelings of achievement through being stimulated by challenging work; they further disagreed with the statement that CLIL is only for the most able learners, which indicates that the students themselves seem to consider CLIL appropriate and accessible to learners of varying abilities. Perhaps the most revealing motivational pronouncement from the learners themselves in this report is the simple declaration that learning through CLIL is 'more fun' (2011, 3, 95). These are all important results for early adolescent CLIL learners in other contexts. In the Andalusian study, Lorenzo, Casal, and Moore (2010) found that CLIL students' motivation and self-concept was higher than that of non-CLIL students. Merisuo-Storm (2006), as well, showed that CLIL students had a more positive attitude towards foreign language study than their non-CLIL peers, and Lasagabaster (2011) indicates increased motivation and learner self-esteem.

Several studies report results that seem to conflict with these. In a Hong Kong study comparing lower secondary level English medium of instruction (EMI) students to Chinese medium of instruction (CMI), Sallili and Tsui (2005, 142) found that, regarding English learning, the lower-ability EMI students' self-efficacy (expectancy of success) scores declined significantly over a period of three years compared to their CMI lower-ability peers. Seikkula-Leino's study (2007) of affective factors in early adolescent CLIL learners indicated that the CLIL students had a low self-concept in regarding their own foreign language learning compared with the non-CLIL students, despite strong motivation. This is striking because the CLIL

selection was made partly on the basis of foreign language proficiency. A possible reason may be the fact that CLIL students become more aware of their own linguistic shortcomings; they 'are forced to face the difficulties involved in learning content in a foreign language' (2007, 337).

Hood (2006, 142) concludes from interviews with CLIL learners that 'in the early stages of a CLIL program, enjoyment, motivation, and self-esteem can be at risk as students come to terms with the initial challenges of adapting to a CLIL methodology'. Another construct, language anxiety, may be a factor in ambivalent motivation. Gardner (2010, 91) considers it likely that language anxiety develops as a function of exposure to learning and attempting to use the language. It seems reasonable to suggest that teachers of lower-achieving students should pay particular attention to a possible motivational dip and language anxiety, especially in the early stages of CLIL.

Different language backgrounds

As stated above, a relatively high percentage of (junior) vocational students in many countries have a different home language than the respective primary language of education. Here both research on second language learners and studies of third-language CLIL students are relevant. Genesee et al.'s research on ELLs in the USA (2009) showed that though the ELLs scored lower at the start of the program, by the end they had reached, and usually surpassed, the educational outcomes of their comparison peers. Granted, ELLs have a greater degree of immersion both in school and outside of school than a CLIL student, but Lasagabaster (2008) notes similar progress in CLIL groups learning content through English as a third language in the Basque Country, despite a very weak presence of English in daily life. Swain et al. (1990, 78) argued that 'bilingual education programs that promote first language literacy have an overall positive effect on the learning of other languages'.

CLIL teaching skills

A number of studies have pointed to the need for CLIL content teachers to be aware of various language-related aspects of teaching, such as the specifically linguistic requirements of their subject (Llinares and Whittaker 2009), including linguistic features in their subject teaching (Mewald 2007), or be able to accurately assess the linguistic level of materials and capably scaffold reading activities (García and Tyler 2010). Teachers must also be wary of pre-empting the problem of L2 comprehension by conceptually simplifying the content in advance, leading to reduced content competence (Hajer 2000).

In order to provide more effective integration of content and language, collaboration between language and subject teachers is recommended (de Graaff et al. 2007; García and Tyler 2010; Lorenzo, Casal, and Moore 2010). This is also true for general learning skills applied across the curriculum (Bentley 2010). One of the key findings of the ITALIC Report by Coyle is that the reconceptualization of language learning to include other curricular subjects, including planning and participation by CLIL and language teachers, 'is urgent and of paramount importance' (2011, 5).

CLIL teachers' own language proficiency in English seems to be universally acknowledged as a crucial factor for successful CLIL programs (Marsh 2003;

Lasagabaster 2008; Maljers and van Wilgenburg 2008; Hillyard 2011). Interestingly, in the investigation of Dalton-Puffer et al. (2009) – though vocational students suggest that a changed student-teacher role resulting from imperfect teacher mastery of the target language may have positive ramifications – the students themselves emphasize the need for teachers' target language proficiency.

Conclusions from the literature review

The literature review has dealt with studies related to the considerations, implementation, and appreciation with respect to context, participants, and methodology of bilingual or immersion education relevant for lower achievers at the (junior) vocational level. The review indicates there are a number of justifications for initiating and implementing CLIL at junior vocational level and for developing students' vocational literacy and vocational second language proficiency (Vollmer 2006). Junior vocational students should be able to successfully learn through a second language if curriculum and teaching requirements are met. CLIL and immersion settings have been reported to be motivating and beneficial for the self-concept and self-esteem of lower-achieving students. The review further indicates that in junior vocational CLIL contexts students should be able to achieve a language level in English that is better than their peers in regular junior vocational classes. There is no evidence that their skills in the main language of education or in the subjects taught in English are negatively affected, if sufficient attention is paid to language learning strategies, benefiting from an additive bilingualism approach. The findings reported on CLIL teaching skills are not specific for bilingual education at the junior secondary vocational level, but rather relate to bilingual education in general.

The present study focuses on the following research questions:

- How has bilingual education/CLIL been implemented in junior vocational secondary education in the Netherlands at school and task level?
- How is bilingual education/CLIL in junior vocational secondary education perceived by teachers and pupils?
- What are the successful characteristics of bilingual education/CLIL, according to teachers' and pupils' perceptions, which are relevant for junior vocational secondary education?

Research method

The present study was carried out in partnership with five schools for junior secondary vocational education (henceforth *tvmbo*) in the Netherlands, which were all starting or had recently started with bilingual education. The schools were contacted through the task group for *tvmbo* schools, which is part of the Dutch network of bilingual schools. Some of these schools already had previous experience with bilingual education at the general or pre-university education level. First, CLIL coordinators of the five schools (one for each school) completed a short factual online survey², which gathered information such as the reasons for starting bilingual education for this target level, the aims of their junior vocational bilingual education departments, and facts about numbers of students, classes, and subjects taught in English.

Second, teachers, students, coordinators, and management at the five participating schools were interviewed about what they considered to be good bilingual education practice in junior secondary vocational education. The interview protocols were created as a result of the literature study and the factual online survey. These protocols were improved and fine-tuned as a result of feedback from nonparticipating staff at one of the partner schools. The interview protocols (both in English and Dutch) consisted of a number of key questions and some prompts, which triggered the interviewees to elaborate on the key questions. One of the researchers visited all schools to carry out the interviews. An e-mail was sent to each school with suggested instructions and a model program for the day. The interviews were all recorded for further reference. A total of 7 CLIL coordinators and managers, 11 English teachers, 14 subject teachers, and 22 students were interviewed. During the interview days, informal classroom observations were carried out at each school. The aim of these observations was to gather examples of activities and good teacher practices, which appear to work with *tvmbo* students as input for a later online survey.

Third, in order to gather a greater amount of data about bilingual education experiences in junior vocational education, the interview results and observations from the five schools were used to create two online surveys: one for teachers working in junior vocational bilingual education and one for students. The surveys were piloted by nonparticipating teachers at one of the schools and improved according to their feedback. The surveys were distributed and administered online through the *tvmbo* network and completed by 66 students from five schools and 19 teachers from nine schools (including the five schools that had been involved throughout the study). Students completed the online questionnaire in school during class hours, which made it logistically impossible for any student to complete the survey more than once. The majority of the students are from the more practical (lower) level of junior vocational education and nearly three-quarters from the first year. The teacher respondents are experienced in both the more theoretical and the more practical type of junior vocational education, and teach English as well as a variety of subjects such as mathematics, art, administration, economics, drama, history, car mechanics, and physical education.

In the Results section, the findings from the interviews and the online survey will be presented together, as they cover the same issues.

Characteristics of the five participating schools for junior vocational secondary education

Two out of five schools had one year of experience with junior vocational bilingual education, one school had two years of experience, one school had three years, and one had five years of experience. That is, in only one school had the first cohort of students already completed four years of junior vocational bilingual education. All five schools offered bilingual education at the more theoretical levels of junior vocational education; only two schools offered bilingual education at the more practical levels. Two of the schools incorporate bilingual education in regular subjects, and three in a combination of subjects and in cross-curricular projects (e.g. English and Sciences, Social Sciences, Technical Studies, Arts, or Drama). All schools were involved in or preparing for international collaboration projects and exchange trips.

With respect to its implementation at school level, bilingual education programs (CLIL) at junior vocational level were organized according to the Dutch Standard for *tvmbo*. Schools offered the target language in at least a total of 30% of the curriculum, in a combination of subject courses and language courses. Where possible, at least one native speaker was employed. EIO was an integral part of the curriculum. The target language was offered in the required domains, and the schools paid explicit attention to the target language level of the nonnative speaker teachers. Within the standard requirements, different implementation modes were reported, varying from single subjects offered in English on the one hand, to projects on the other, in which language, theoretical subjects, and practical skills were integrated thematically.

The CLIL coordinators mentioned the following main reasons for implementing bilingual education in junior vocational education: Firstly, junior vocational students are likely to work in English, at least to some extent, in their future jobs – in hotels, international transport, or ICT, for instance. Secondly, despite the clear need for a certain level of English proficiency for their future vocations, these pupils' level of English is generally quite low, which points to an obvious need to strengthen this area. Third, more and more primary schools are giving content lessons in English. Finally, intermediate vocational schools are increasingly offering course materials and courses solely in English. CLIL at junior vocational level seems therefore to be a logical step between the start in English made at primary school and intermediate vocational studies in English.

Results from the interviews and the online survey

In the classroom

The kinds of lessons that were reported effective in *tvmbo* are practical and hands-on, with lots of variety, communication between students in English, and short activities. According to the teachers, the concentration span of *tvmbo* students is short. The teachers' advice is to get them working, to get them active quickly, and to provide enough variety and short activities. A further important finding is that *tvmbo* students like creative tasks, where they can make things or write and speak in English and put something of their own personalities into the results. Linked to the idea of personalization, students also appreciate an element of choice. The use of popular media such as television and the Internet is also motivating and effective. Surprises also help: students find predictable lessons boring and unhelpful. The link to real life is also important – to their own lives or to events in the news or traditions such as Christmas or Halloween; this also includes the use of authentic materials in English and activities related to the school's EIO curriculum. Furthermore, repeating and recycling material in different ways is important.

In the online survey the students were asked which classroom activities help them to best learn their subjects in English. The activities in the online survey were chosen from activities mentioned in the interviews; respondents were asked to indicate how useful they found each of the different activities. Here we mention the activities, which at least 40% of the students chose as 'extremely useful' (the highest category). The students clearly believe that they learn mostly from doing things (55%) (as opposed to listening, reading, or completing exercises in workbooks), working in groups (48%), and working in pairs (55%). Apparently, they learn from practical,

hands-on activities, and from doing presentations (55%). The next most popular categories are creative speaking activities (48%), finding things out for themselves (46%), taking notes (45%) and projects (47%), listening to music and songs and doing related activities (43%), and watching video clips or DVDs and doing related activities (47%). It is clear from their responses that *tmbo* students believe that they need to *do* something with the language and the subject: only listening or reading about it is apparently less effective.

The teachers were also asked which classroom activities help their students to learn the subject through English; again, respondents were asked to indicate the effectiveness of various activities. Here we mention the activities that at least 40% of the teachers found 'extremely helpful'. Like the students, group work (59%) and pair work (65%) are the most important, followed closely by creating PowerPoint or 'show and tell' presentations (59%). After that come mind maps (53%), projects in English (53%), talking about their own lives and real things (53%), and visuals (pictures or photographs) (53%). Also considered useful by teachers is the course book (47%), which actually contradicts what the smaller number of student interviewees said – that they did not feel they learned from their course book. Games and puzzles in class (e.g. crosswords, word puzzles) (47%) and making things (e.g. a poster, cookery, making a film) (47%) are also considered helpful. Finally, discovery activities (41%) and doing activities related to podcasts or audio recordings (41%) are also popular, together with music, songs, and videos on YouTube or DVDs (41%).

An open question was also on the teachers' survey: What is the most important aspect(s) of classroom activities which best help your *tmbo* students to learn your subject in English and why? In their answers, the teachers often mentioned the importance of speaking: 'talking about the projects', 'discuss in small groups', 'interaction', 'communicating in English', 'activities that compel pupils to speak', 'speaking English a lot', and 'giving presentations'. They also mentioned that *tmbo* students need multimodal input: they need to see, hear, and use input in several ways in order to process it: 'being able to see the words they are going to speak – this enables word recognition and builds confidence; pictures and words'. It was also considered important to allow students to make mistakes and to be creative: 'Learning by doing, so they learn that mistakes are allowed; create an atmosphere where children aren't scared to make mistakes'.

Outside the classroom

Many *tmbo* students believed that they learn a lot of English in their daily lives, outside school, through the use of English in the popular media, especially the computer and Internet. This is not only receptive – listening to songs or reading texts – but also interactive, in terms of writing and speaking to other English-speakers on the Internet. A question in the surveys asked the students about what activities they do in English outside the class and another one about how useful they found these activities in learning English. It turns out that many of them do quite a lot in English outside the classroom, the most popular activities being watching films in English with Dutch subtitles (films and series on Dutch television are not dubbed), closely followed by watching television in English. The other most popular activities are watching music on YouTube or other sites, chatting online in English (for example with other people around the world about computer games), and playing computer

games in English. Around 40% of the students indicated that they believe that they learn English when they do such activities outside class.

EIO was reported to be an important key to the success of *tvmba*, both during the lessons and outside of them. Incorporating EIO into lessons and projects is very motivating for students, since they see the clear link between real life and what they are learning. Hosting native speakers in the classroom also proves a very motivating and realistic activity. Trips abroad or exchanges also give *tvmba* students a concrete, immediate reason to communicate in English. Visiting English-speaking countries and communicating with native speaker teenagers is perhaps the most motivating aspect of EIO. However, most schools mentioned that their EIO curriculum still needs to be further developed, designed, and implemented.

Teacher skills

In the online survey, a list of characteristics of good *tvmba* teachers was included, based on the findings from the literature and the interviews. Students as well as teachers indicated the following characteristics of good *tvmba*: good *tvmba* teachers know how to activate students and use variety of tasks to stimulate participation. They are able to design and carry out a variety of activities in English and know how to design lessons around different learning styles in order to deal with diversity. They are good at checking understanding effectively. Good *tvmba* teachers are enthusiastic and positive: they include humour and lots of compliments for good work in their lessons. They create an atmosphere where students are allowed to make mistakes, so that students experiment with the language they are learning. They are particularly sensitive to the pupil's comprehension levels in English and are able to simplify language and scaffold content.

We particularly asked the students which teacher behavior they find useful to help them learn subjects in English. The most important teacher behaviour – scoring far above all the others – is that the teacher speaks English (nearly) all of the time. The second teaching strategy which is considered useful is that the teacher encourages the students to use English themselves. Further, their English is good and they correct the students' English.

According to the teachers, good *tvmba* teachers provide lots of structure by talking slowly, asking questions, and giving good explanations. They can also adjust their own level of English to their students' level. Good *tvmba* teachers can assess the ability of the students, both in terms of language as well as in terms of content. Good *tvmba* teachers want to develop themselves further in terms of English and CLIL methodology.

In the survey, teachers were asked which teaching strategies they use and which work in *tvmba*. The list for the survey was compiled from what students and teachers had mentioned during the interviews. The strategies are summarized in order from considered *most* useful to considered useful by at least 50% of the teachers, in Table 1.

The results in the table show that the strategies that teachers consider useful largely correspond with the students' and teachers' perception of good *tvmba* teachers. They encourage their students to use English; they provide lots of input and structure by talking slowly, asking questions, and giving good explanations; they can adjust their own level of English to their students' level; they use a variety of activating tasks, including group and pair work.

Table 1. Teaching strategies that teachers consider useful in *tvmbo*.

Useful teaching strategies	I do it and it works well (<i>n</i> = 15)
If students make a mistake I encourage them to carry on.	15
If students find it too difficult in English, I use some Dutch.	14
I praise students for using English.	14
I don't let students laugh at one other.	14
I use simple words.	13
I repeat and recycle information and language.	13
I ignore students' mistakes some of the time.	13
I translate (words) into Dutch.	13
I write things on the board.	12
I talk slowly.	12
I give students a time limit for activities.	12
I let students know when I am proud of them.	11
I keep classroom activities short: 5 to 10 minutes per activity.	10
I give tips to my students to help them learn words.	10
I use variety – lots of different assignments in one lesson.	10
I encourage my students to be creative with language.	9
I talk in English, then in Dutch afterwards.	9
I use a lot of group work.	8
I use a lot of pair work.	7

Discussion

This study has focused on the following research questions:

- How has bilingual education/CLIL been implemented in junior vocational secondary education in the Netherlands at school and task level?
- How is bilingual education/CLIL in junior vocational secondary education perceived by teachers and pupils?
- What are the successful characteristics of bilingual education/CLIL, according to teachers' and pupils' perceptions, which are relevant for junior vocational secondary education?

With respect to its implementation at school level, bilingual education programs (CLIL) at the participating junior vocational secondary schools have, in general, been organized according to the Dutch Standard for *tvmbo*. Schools offer the target language in at least a total of 30% of the curriculum, in a combination of subject course and language course. EIO is an integral part of the curriculum. Within the standard requirements, we have seen different implementation modes, varying between single subjects offered in English on the one hand and content and language integrated projects on the other.

Compared to bilingual programs in the pre-university *vwo* and the general secondary *havo* streams, bilingual junior secondary vocational programs in the Netherlands are inclusive, not streamed. Students whose scores and primary school assessments qualify them for a particular junior vocational level automatically qualify for the bilingual program. Anecdotal evidence from one of the (bilingual-only) schools in the present study indicates that some students enroll at the school without even realizing that they will be joining a bilingual program. There is a clear lack of socioeconomic status distinctions or parental pressure to participate. This

contrasts with Bruton's assessment (2011) of the Andalusian context, in which he points to a selection influenced by status, class, or parental preference, despite the programs' claims to egalitarianism.

At task level, teachers are clearly aware of the need to vary activities and keep the activities short. They aim at offering tasks that involve the use of language, knowledge, and skills and which stimulate the use of multiple intelligences. Focus on meaning and focus on fluency and adequacy are considered more important than focus on form and accuracy. Target language learning clearly takes place outside as well as within the classroom setting. In general, activities that involve speaking and those which involve real-life international contact are considered highly motivating.

Related to the second research question, both junior vocational students and their teachers perceive bilingual education (CLIL) as being very motivating; the former because of the combination of challenges and the latter because of the type of student and their response to the challenges of CLIL. Students perceive it as important and relevant to their future educational opportunities and/or careers, and teachers perceive it as meaningful for their students' vocational education. EIO activities are perceived as particularly meaningful and motivating, as these provide real-world contacts between peers in an international context and make the usefulness and authenticity of communication in the target language tangible.

Related to the third question, the study reveals the following successful characteristics for bilingual junior vocational education. It is clear from the research results that both students and teachers consider it important to speak in the target language as much as possible. This perception is also borne out by the results from the literature survey. The teachers' ideas about what works in the classroom are very similar to those of their students: *tmbo* teachers realize that their students learn best when actively doing things and when they can be creative. They also believe that the structure of a book, or of making notes, is helpful; the students partly agree. Teachers find it important to adapt their own language level and register to the students' level, both linguistically and conceptually. This is probably a key factor in any teaching at the (junior) vocational education level, but it becomes even more essential in a bilingual education setting. This implies that junior vocational secondary teachers should be proficient in the target language, just as their colleagues in pre-university bilingual education. Particularly with lower-achieving students, teachers need the flexibility to use the target language in a variety of ways, in order to feel comfortable and confident. Especially at this level, CLIL teachers need to have an affinity with the type of student and to be able to express this affinity by means of the target language to students who learn by doing, who need to see the relevance and the purpose of the language and the task.

The study reported here involved a rather small number of participants from a small number of schools. As students and teachers were not selected randomly but participated voluntarily, generalization of the findings to junior secondary vocational education for the Netherlands and elsewhere can only be made with great caution. Future research should include a larger number of teachers and students from a larger number of schools. Future research may also compare more specifically the perceptions of bilingual junior vocational students and teachers to the perceptions of their regular nonbilingual junior vocational peers, or to the perceptions of bilingual pre-university students and teachers. In a follow-up study, we will focus on the effect of bilingual education on the junior vocational students' proficiency in English and

Dutch; on their subject matter knowledge; and on their motivation, self-confidence, and willingness to communicate.

Conclusion

Participants in this study have reported many advantages for bilingual junior secondary vocational education, such as the preparation of students for their future careers and cross-cultural communication with other English language users. This has been shown both in the literature study (see also Coyle, Hood, and Marsh 2010) as well as in the interviews and the responses to the online surveys. *Tvmbo* gives opportunities for students to work on their vocational literacy and vocational language proficiency. It also appears that motivation increases in junior secondary vocational students who enjoy a challenge.

Teachers and students are quite optimistic – and certainly enthusiastic – about the challenge of further developing a junior vocational bilingual stream. Many teachers point out that they enjoy teaching *tvmbo* students and are optimistic about future developments. Particularly important seems to be that bilingual *tvmbo* gives *vmbo* students a chance and a challenge, and that students' self-esteem and motivation may be increased through being in a *tvmbo* stream. Teachers realize that creating an effective *tvmbo* takes time, especially setting up a dynamic EIO curriculum and program. Creating a strong *tvmbo* team and working together on content and language integrated cross-curricular projects may have a substantial impact on the success of teaching and learning. To conclude, the study indicates that over 70% of the students would recommend *tvmbo* to a friend or family member, because they feel it is fun and motivating, and it helps them develop their skills in English. The challenges for *tvmbo* are being met with optimism, teamwork, and professional development, which in turn expand the opportunities for teachers and students alike.

Notes

1. This provisional Standard for *tvmbo* schools is at present only published in Dutch <<http://www.europeesplatform.nl/sf.mcgi?2626>>, though it may appear in English in the near future.
2. See <<http://www.surveymonkey.com/s/tvmboresearch>> for access to the survey.

References

- Baetens Beardsmore, H. 2007. "The Working Life Perspective." In *Diverse Contexts – Converging Goals: CLIL in Europe*, edited by D. Marsh and D. Wolff, 27–31. Frankfurt: Peter Lang.
- Bentley, K. 2010. *The TKT Course CLIL Module*. Cambridge: Cambridge University Press.
- Bruton, A. 2011. "Are the Differences between CLIL and Non-CLIL Groups in Andalusia Due to CLIL? A Response to Lorenzo, Casal and Moore (2010)." *Applied Linguistics* 32 (2): 236–241. doi:10.1093/applin/amr007.
- Coyle, D. 2011. *ITALIC Research Report. Investigating Student Gains: Content and Language Integrated Learning*. University of Aberdeen. <http://www.abdn.ac.uk/italic>.
- Coyle, D., P. Hood, and D. Marsh. 2010. *CLIL: Content and Language Integrated Learning*. Cambridge: Cambridge University Press.
- Dalton-Puffer, C., J. Hüttner, V. Schindelegger, and U. Smit. 2009. "Technology-geeks Speak Out: What Students Think about Vocational CLIL." *International CLIL Research Journal* 1 (2): 18–25. <http://www.icrj.eu/12-741>.

- García, S. B., and B.-J. Tyler. 2010. "Meeting the Needs of English Language Learners with Learning Disabilities in the General Curriculum." *Theory into Practice* 49 (2): 113–120. doi:10.1080/00405841003626585.
- Gardner, R. C. 2010. *Motivation and Second Language Acquisition: The Socio-Educational Model*. New York: Peter Lang.
- Genesee, F. 2007. "French Immersion and At-Risk Students: A Review of Research Evidence." *The Canadian Modern Language Review* 63 (5): 655–687. doi:10.3138/cmlr.63.5.655.
- Genesee, F., K. Lindholm-Leary, W. Saunders, and D. Christian. 2009. "English Language Learners in U.S. Schools: An Overview of Research findings." *Journal of Education for Students Placed at Risk (JESPAR)* 10 (4): 363–385. doi:10.1207/s15327671espr1004_2.
- Graaff, R. de, G. J. Koopman, Y. Anikina, and G. Westhoff. 2007. "An Observation Tool for Effective L2 Pedagogy in CLIL." *International Journal of Bilingual Education and Bilingualism* 10 (5): 603–624. doi:10.2167/beb462.0.
- Hajer, M. 2000. "Creating A Language-Promoting Classroom: Content-Area Teachers At Work." In *Second and Foreign Language Learning Through Classroom Interaction*, edited by J. K. Hall and L. Stoops Verplaetse, 265–285. Mahwah, NJ: Erlbaum.
- Hillyard, S. 2011. "First Steps in CLIL: Training the Teachers." *Latin American Journal of Content & Language Integrated Learning* 4 (2): 1–12. <http://laclil.unisabana.edu.co/index.php/LACLIL/article/view/2631>
- Hood, P. 2006. "Unpublished Data from CLIL Research Interviews with Students at Tile Hill Wood Language College, Coventry, UK." In *CLIL: Content and Language Integrated Learning*, edited by D. Coyle, P. Hood, and D. Marsh, 142. 2010. Cambridge: Cambridge University Press.
- Huibregtse, I. 2001. "Effecten en didactiek van tweetalig voortgezet onderwijs in Nederland [Effects and pedagogy of bilingual secondary education in the Netherlands]." PhD diss., Utrecht University, the Netherlands.
- Lasagabaster, D. 2008. "Foreign Language Competence in Content and Language Integrated Courses." *The Open Applied Linguistics Journal* 1: 30–41. doi:10.2174/1874913500801010030.
- Lasagabaster, D. 2011. "English Achievement and Student Motivation in CLIL and EFL Settings." *Innovation in Language Teaching and Learning* 5: 3–18. doi:10.1080/17501229.2010.519030.
- Llinares, A., and R. Whittaker. 2009. "Teaching and Learning History in Secondary CLIL Classrooms: From Speaking to Writing." In *CLIL Across Educational Levels: Experiences from Primary, Secondary and Tertiary Contexts*, edited by E. Dafouz and M. Guerrini, 73–88. Madrid: Richmond.
- Lorenzo, F., S. Casal, and P. Moore. 2010. "The Effects of Content and Language Integrated Learning in European Education: Key Findings from the Andalusian Bilingual Sections Evaluation Project." *Applied Linguistics* 31: 418–442. doi:10.1093/applin/amp041.
- Lyster, R. 2007. *Learning and Teaching Languages Through Content; A Counterbalanced Approach*. Amsterdam/Philadelphia: John Benjamins.
- Maljers, A., and O. van Wilgenburg. 2008. "CLIL – Bilingual Education – TTO: Here to Stay!" *The XPat Journal*. http://www.xpat.nl/xpat_journal/back_issues_xpat_journal/xpat_journal_issue_spring2008_Education.
- Marsh, D. 2003. The Relevance and Potential of Content and Language Integrated Learning (CLIL) for Achieving MT+2 in Europe. *ELC Information Bulletin* (no. 9, April). <http://userpage.fu-berlin.de/elc/bulletin/9/en/marsh.html>.
- Merisuo-Storm, T. 2006. "Pupils' Attitudes Towards Foreign-Language Learning and the Development of Literacy Skills in Bilingual Education." *Teaching and Teacher Education* 23: 226–235. doi:10.1016/j.tate.2006.04.024.
- Mewald, C. 2007. "A Comparison of Oral Language Performance of Learners in CLIL and Mainstream Classes at Lower Secondary Level in Lower Austria." In *Empirical Perspectives on CLIL Classroom Discourse*, edited by C. Dalton-Puffer and U. Smit, 139–178. Frankfurt: Peter Lang.
- Sallili, F., and A. B. M. Tsui. 2005. "The Effects of Medium of Instruction on Students' Motivation and Learning." In *Language in Multicultural Education*, edited by R. Hoosain and F. Salili, 135–156. Research in Multicultural Education and International Perspectives, Vol. 4. Greenwich, CT: Information Age Publishing (IAP).

- Seikkula-Leino, J. 2007. "CLIL Learning: Achievement Levels and Affective Factors." *Language and Education* 21 (4): 328–341. doi:10.2167/le635.0.
- Swain, M., S. Lapkin, N. Rowen, and D. Hart. 1990. "The Role of Mother Tongue Literacy in Third Language Learning." *Language, Culture and Curriculum* 3 (1): 65–81. doi:10.1080/07908319009525073.
- Verspoor, M. H., K. de Bot, and E. M. J. van Rein. 2011. "English As A Foreign Language; the Role of Out-of-school Language Input." In *English in Europe Today; Sociocultural and Educational Perspectives*, edited by A. de Houwer and A. Wilton, 147–166. Amsterdam: John Benjamins.
- Verspoor, M. H., J. Schuitemaker-King, E. M. J. van Rein, K. de Bot, and P. Edelenbos. 2010. *Tweetalig onderwijs: vormgeving en prestaties (OTTO)*. [Bilingual education: design and achievements]. Research report, University of Groningen, the Netherlands.
- Vollmer, H. 2006. *Language Across the Curriculum – A Way towards Plurilingualism. Expertise for the Council of Europe, Language policy division*. Strasbourg: Council of Europe. http://www.coe.int/t/dg4/linguistic/Source/Vollmer_LAC_EN.doc.