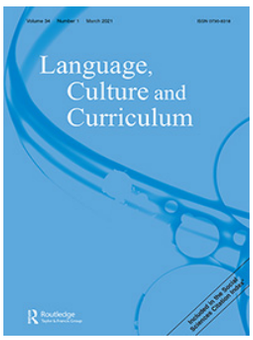
Characterising integrated content-language pedagogies of global perspectives teachers in Dutch bilingual schools

Kampen, E. van; Meirink, J.A.; Admiraal, W.F.; Berry, A.

Citation
Kampen, E. van, Meirink, J. A., Admiraal, W. F., & Berry, A. (2020). Characterising integrated content-language pedagogies of global perspectives teachers in Dutch bilingual schools. *Language, Culture And Curriculum*, *34*(1), 18-34. doi:10.1080/07908318.2020.1732999

Version:	Publisher's Version
License:	Creative Commons CC BY-NC-ND 4.0 license
Downloaded from:	https://hdl.handle.net/1887/3263746

Note: To cite this publication please use the final published version (if applicable).



Routledge
Taylor & Francis Group

Language, Culture and Curriculum

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rlcc20

Characterising integrated content-language pedagogies of global perspectives teachers in Dutch bilingual schools

Evelyn van Kampen, Jacobiene Meirink, Wilfried Admiraal & Amanda Berry

To cite this article: Evelyn van Kampen, Jacobiene Meirink, Wilfried Admiraal & Amanda Berry (2021) Characterising integrated content-language pedagogies of global perspectives teachers in Dutch bilingual schools, Language, Culture and Curriculum, 34:1, 18-34, DOI: 10.1080/07908318.2020.1732999

To link to this article: https://doi.org/10.1080/07908318.2020.1732999

© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

View supplementary material

Published online: 11 Mar 2020.

Submit your article to this journal

Article views: 1246

View related articles

View Crossmark data

Full Terms & Conditions of access and use can be found at
https://www.tandfonline.com/action/journalInformation?journalCode=rlcc20

LANGUAGE, CULTURE AND CURRICULUM
2021, VOL. 34, NO. 1, 18–34
https://doi.org/10.1080/07908318.2020.1732999

Routledge
Taylor & Francis Group

OPEN ACCESS Check for updates

Characterising integrated content-language pedagogies of global perspectives teachers in Dutch bilingual schools

Evelyn van Kampen [a], Jacobiene Meirink[a], Wilfried Admiraal [a] and Amanda Berry[b]

[a]ICLON Graduate School of Teaching, Leiden University, Leiden, Netherlands; [b]Faculty of Education, Monash University, Clayton, Australia

ABSTRACT

This study aims to characterise teachers' *integrated* content-language learning pedagogies teaching the skills-focused subject *Global Perspectives* (GP) in Dutch bilingual upper-secondary-schools. Eleven teachers from seven bilingual schools across the Netherlands participated in the study in the school-year 2016-2017. To obtain insight into teachers' pedagogies, semi-structured interviews and observations of GP lessons were used. Dalton Puffer's Cognitive Discourse Functions (CDF) construct [(2013). A construct of cognitive discourse functions for conceptualizing content-language integration in CLIL and multilingual education. *European Journal of Applied Linguistics*, *1*(2), 216–253. https://doi.org/10.1515/eujal-2013-0011], in combination with a focus on subject-specific Culture, was used as a heuristic to analyse the integrated content-language pedagogies of teachers. Main findings include that the participating schools had three distinct Intended Curriculum foci and, within these, five different types of integrated content-language learning pedagogies were identified. Main implications discussed are that focusing on subject-specific culture and using the CDF Construct is a useful heuristic to allow analysis of teachers' integrated content-language pedagogies, and that it may also provide a useful framework for both pre- and in-service teachers in CLIL contexts to emphasise the *integrated* nature of CLIL teaching.

ARTICLE HISTORY
Received 1 March 2019
Accepted 11 February 2020

KEYWORDS
Content and language integrated learning (CLIL); pedagogies; culture; bilingual education; the Netherlands

1. Introduction

Content and Language Integrated Learning (CLIL) is commonly broadly defined as a 'dual focused educational approach in which an additional language is used for the learning and teaching of both content and language' (Coyle et al., 2010, p. 1). As the 'I' in the acronym suggests, CLIL should go beyond a dual-focused approach, and involve an *integrated* curricular focus, where content and language are 'interconnected as two sides of the same coin' (Llinares, 2015, p. 69). However, in practice, as Morton and Llinares (2017, p. 2) emphasise, 'although the label CLIL stands for language and content integrated learning, the term has mainly been used to describe bilingual education contexts where subject

CONTACT Evelyn van Kampen e.van.kampen@iclon.leidenuniv.nl
Supplemental data for this article can be accessed https://doi.org/10.1080/07908318.2020.1732999
© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

classes are taught through an additional language, but where little integration of content and language actually happens'.

Although in the past two decades CLIL has seen a surge in uptake, most often in European schools offering a form of bilingual education (Pérez-Cañado, 2012), and research on CLIL has, accordingly, expanded substantially in the last decade, research interests have predominantly focused on language learning outcomes. Only recently have studies emphasised the need for researchers and practitioners to focus more on the actual concept of *integration*, specifically what it entails and how it can be materialised in the classroom (Llinares, 2015, p. 59). For example, in reflecting on what the future agenda of CLIL research ought to entail, Ruiz de Zarobe and Cenoz (2015) emphasised the need to move towards integration in a number of domains that include pedagogical, geographical and even terminological considerations.

As a result of the only relatively novel research focus on integration, a deeper understanding of how the integration of content and language can be conceptualised has also only recently emerged (Meyer et al., 2015, p. 45; Nikula et al., 2016). Moreover, as Dalton-Puffer et al. (2018, p. 6) notes, despite significant recent progress in this respect, developing an understanding of 'integration' that is sufficiently fine-grained to be meaningful on the level of classroom pedagogy, and linked to both insights from language education and subject education, continues to be a challenge. Such an understanding though, is argued to be essential as approaches to CLIL subject teaching that are exclusively anchored in language education are in danger of being experienced as meaningless by subject teachers.

In this study we focus on the pedagogies of CLIL teachers, that is, 'conscious activity by [CLIL teachers] designed to enhance learning [of students in their CLIL classrooms]' (Watkins & Mortimore, 1999). Hence, it captures the notion of the range of teaching and learning approaches used by teachers. This includes not only what happens in the classroom, but also the preparation for teaching and ideas about how teachers teach and why (i.e. what teachers want to achieve with their students). Given the limited research into specific pedagogies employed by CLIL teachers to-date (Dalton-Puffer & Smit, 2013; Pérez-Cañado, 2012) and the relatively recent conceptualizations of 'integration' that are meaningful at the level of classroom pedagogy, there has been limited empirical research focusing on integrated content-language pedagogies of CLIL subject teachers. For example, a recent review study by Van Kampen et al. (2018) about pedagogies of CLIL subject teachers, found few insights into the specific ways in which teachers attend to *integrating* content and language in their subject teaching. In the current study, we seek to address this deficit. We do so by focusing specifically on characterising integrated content-language pedagogies of CLIL teachers. We investigate this in the context of Dutch bilingual education for the subject *Global Perspectives* (henceforth GP), a skills-focused subject offered in upper secondary school.

2. Context of study

The Netherlands is one of the few countries where CLIL provisions are highly institutionalised at the national level (De Graaff & Van Wilgenburg, 2015). CLIL is the expected pedagogical approach to be used by teachers in bilingual schools. The aim of bilingual education in the Netherlands is not just to improve students' target language proficiency (in almost all

cases English), but also to generate student learning and developmental outcomes related to global citizenship and personal development (Van Wilgenburg & Van Rooijen, 2018).

GP is a relatively new subject, offered by a few Dutch bilingual secondary schools. Schools can choose the Cambridge International version of this subject ('Global Perspectives & Research'), which aims to prepare students for 'positive engagement with a rapidly changing world, broadening their outlook through analysis of and reflection on issues of global significance' (CIE, 2016)[1], or develop their own version. GP is one of only a few subjects offered through English in the upper secondary school. In most cases, GP is taught by teachers from diverse subject backgrounds. All bilingual schools offering GP emphasise that it focuses on teaching academic skills, which are relevant for the independent research project that all Dutch students must complete at the end of secondary school. In most cases, GP is the only skills-focused subject on offer at secondary school. Moreover, GP is considered to be a way in which the global citizenship goals of Dutch bilingual education can be enacted through students learning academic skills whilst engaging with real-world global themes.

Given the above and the ongoing debate in the literature between those who advocate for teaching academic skills in a subject- or domain-specific context (e.g. Pellegrino & Hilton, 2012), and, those who emphasise the teaching of general academic skills to complement subject- or domain-specific skills (e.g. Perkins & Salomon, 1988), we believe that GP provides an interesting focus for our research.

3. Conceptual framework

In the following section, we begin by presenting a synthesis of key literature about CLIL as a pedagogical approach, including our conceptualisation of the notion of integration in CLIL classroom pedagogies. We then describe the Cognitive Discourse Functions (henceforth CDF) Construct (Dalton-Puffer, 2013), used in this study as a heuristic to capture the *integration* in content and language subject learning and teaching.

3.1. Conceptualising integration in CLIL classroom pedagogies

One of the most widely known conceptualizations of CLIL is the *4Cs Framework* (e.g. see Coyle et al., 2010), in which the 4Cs refer to the components of: 'Content' (subject or theme being learned), 'Cognition' (cognitive processing required by students to complete learning activities) and 'Communication' (learning and using language) that are interlinked and embedded within a 'Cultural' context. *Culture* has two interrelated strands. On the macro-level, Culture refers to how teaching promotes students' intercultural and interpersonal understanding. This encompasses both traditional notions of 'intercultural' as understanding otherness, as well as the often-neglected notion of understanding oneself and one's own values (Byram, 2014, p. 213). On the micro-level, Culture refers to how teaching facilitates apprenticing students into the discourse, genres and/or approaches specific to each (school) subject (Coyle, 2015a, 2015b). The 4Cs framework was designed to guide the fundamental elements of CLIL teaching from a holistic perspective (Coyle et al., 2010).

It has been argued that whilst the 4Cs Framework is useful in guiding understanding of *what* CLIL teaching ought to encompass, it does not indicate *how* the integration of content and language at the core of CLIL might take place or *how* the complex relationship

between the 4Cs can be conceptualised (Coyle, 2015a, 2015b; Meyer et al., 2015). As emphasised by Fielding and Harbon (2018, p. 34) in the Australian context, whilst such theoretical constructs are available, teachers are still not clear about what their practice might look like in the classroom. As Llinares (2015, p. 61) emphasises, to understand how language and content are not only balanced, but *integrated* in CLIL pedagogies requires the application of theoretical models that see language as inseparable from the meaning (and content) it conveys. Genre-based pedagogy (e.g. see Rose & Martin, 2012), from systemic functional linguistics (Halliday, 1994) has been argued to be particularly relevant in this regard. This is because a key aspect of learning an academic subject involves becoming a user of the various genres through which subject knowledge is constructed. For example, using insights from genre-based pedagogy, Meyer et al. (2015) present a pluriliteracies model, building on the 4Cs, which represents how integration might take place, that privileges *Culture* in its micro-level form as a 'a subject-disciplinary filter through which the other Cs are interpreted and inextricably melded together uniting conceptual and language progression' (p. 51). As these authors explain, to actively construct knowledge and promote subject-specific literacies, learners need to conceptualise content in ways that are appropriate to the subject-*Culture*. It is this subject-*Culture* that determines how the *Cognition* is put to use in the way that *Content* will be conceptualised and how the *Communication* is used to (co)construct knowledge. As emphasised by Garzón-Díaz (2018, p. 34), ideally attention to both macro- and micro-level culture should be integrated into teaching, for example in science, by setting tasks through which students experience acting both as scientists and citizens, and in so-doing supporting them to articulate scientific knowledge and to use scientific reasoning to think more critically and creatively about world issues. Hence, to analyse integration and to understand how it unfolds in classroom interaction, it is necessary to first analyse the characteristic genres of each subject (Llinares, 2015, p. 60).

3.2. CDF construct

Essential to capturing the integration in content and language learning and teaching in the above described pluriliteracies model (Meyer et al., 2015) are so-called CDFs (Dalton-Puffer, 2013). The CDF Construct bundles the multitude of verbalizations which express acts of thinking about subject matter in the classroom into seven basal categories, called CDF types (Classify, Define, Describe, Evaluate, Explain, Explore, Report). Each type is based on an underlying communicative intention, which is realised by teachers and/or students in the process of teaching and learning. Table 1 provides an overview of the seven basal CDF types, their members and underlying communicative intentions. As Dalton-Puffer emphasises (2013, p. 235), the categories are not all equally populated or extensive. Moreover, the categories have fuzzy borders in the sense that they are not mutually exclusive. The aim of the construct is to serve as a heuristic, which enables more specific explorations of subject matter.

A main focus on CDFs to capture integration is that *language* is considered to be the 'primary evidence of learning' (Mohan et al., 2010, p. 221) and, as such, successful learning has to translate into the learners' ability to articulate their own knowledge and understanding appropriately. This fits with today's competence-oriented principles in education, requiring students to not only be knowledgeable, but also able to do something with what

Table 1. List of CDF categories, their members, and underlying communicative intentions.

Category	Members	Communicative Intention (I tell you …)
Classify	Classify, compare, contrast, match, structure, categorise, subsume	How we can cut up the world according to certain ideas.
Define	Define, identify, characterise	About the extension of this object of specialist knowledge.
Describe	Describe, label, identify, name, specify	Details of what I can see (also metaphorically).
Evaluate	Evaluate, judge, argue, justify, take a stance, critique, recommend, comment, reflect, appreciate	What my position is vis-à-vis X.
Explain	Explain, reason, express, cause/effect, draw conclusions, deduce	About the causes or motives of X.
Explore	Explore, hypothesise, speculate, predict, guess, estimate, stimulate, take other perspectives	Something that is potential (i.e. nonfactual).
Report	Report, inform, recount, narrate, present, summarise, relate	Something external to our immediate context on which I have a legitimate knowledge claim.

Source: Dalton-Puffer, 2013.

they have learned. This 'doing' consists to a considerable degree of 'languaging', that is, being able to express understanding in language (Dalton-Puffer et al., 2018, p. 6). CDFs, which structure and drive academic discourse, are argued to lie at the interface between thinking and languaging (Dalton-Puffer, 2013).

More specifically, the CDF Construct, as developed by Dalton-Puffer (2013; 2016), allows the identification of verbalizations linked to cognitive processes that are routinely performed in the course of dealing with specific curricular content while working towards curricular goals in subject-genre specific ways. As these cognitive processes are not directly observable, verbalizations are taken as the accessible analogues of thought. Dalton-Puffer proposed the CDF Construct as a conceptualisation that would speak to subject teachers from within their own subject-cultures. The construct is founded in both educational curriculum theory and linguistic pragmatics (see Dalton-Puffer, 2013 and 2016 for a detailed discussion of theoretical background).

Dalton-Puffer et al. (2018) report on steps taken towards empirical validation of the CDF construct from the results of five studies investigating the occurrence of CDFs in the teaching of various traditional CLIL Austrian school subjects (Biology, Physics, Economics, History and EFL). Their results reveal that CDFs are indeed a staple of teaching and learning, but that they are not equally distributed. In all but one study, *Describe* was the most frequently observed CDF, followed by *Explain* and *Define*, while *Explore* and *Evaluate* were side-lined. Also, the corpus of Austrian CLIL lessons showed that explicit communication about CDFs was rare and indirect, rather than something that might be understood as 'teaching (about) CDFs' (p.23).

4. This study

This study uses the CDF Construct in combination with a focus on subject-specific Culture as a heuristic to analyse integrated content-language learning pedagogies of GP teachers in Dutch bilingual schools. This allows us to address the current gap in CLIL research about how content and language are *integrated* in the context of teaching specific subjects. Evidence of this integration will help clarify both for researchers and practitioners the features of CLIL in relation to subject and context, and specifically *what* aspects of language (including genre and discourse features) subject teachers make accessible to students and *how*

they do so. To this end, the following research question guided our study: 'How can integrated content-language learning pedagogies of GP teachers in Dutch bilingual schools be characterised?'

5. Method

In this descriptive study, data was collected through interviews and observations.

5.1. Participants

We selected teachers to participate in the research with the help of Nuffic[2], who provided us with a list of schools in the Netherlands offering *Global Perspectives & Research* (Cambridge International version) at upper secondary level. We also searched for schools offering GP, but not (yet) the Cambridge International version using our professional network and the Internet. We sent all schools within two hours thirty minutes travelling distance from the institution where the first author worked, an invitation to participate in the research. Eleven teachers from seven different bilingual schools agreed to participate in the research in the school-year 2016-2017. No other selection mechanisms were applied. Approval was obtained from each of the participating schools and the participants gave their consent to participate. The participating teachers were promised anonymized reporting, that the collected data would be used for research purposes only and that they would have the opportunity to learn how GP teaching was conducted by the teachers at the other participatory schools. Participant names are pseudonyms.

Table 2 provides information about the participating teachers. They included a wide range of subject backgrounds, from more language-dense subjects (such as Social Studies) to less language-dense subjects (such as Physics).

5.2. Data collection

Data was collected from participating schools and teachers by the first author. Firstly, individual semi-structured interviews, lasting on average forty minutes, were held with GP teaching-team members at each participating school about the goals and curricular organisation of their GP programme. Interview prompts centred on the questions: 'How is GP organised at your school?' and, 'Why have you organised it in this way?'. Secondly, for

Table 2. Participating teachers.

School	Teacher	Main Subject	Nationality
1	Richard	Physics	American
	Riley	Social Studies/History	Dutch
2	Susan	History	Dutch
3	Henry	Physics	Dutch
4	Joshua	Geography	Dutch
5	Jenny	English	American
6	Frank	Social Studies/History	Dutch
	Ross	Geography	Dutch
7	Gregory	History	Dutch
	Usain	Physics	Swiss
	Cecil	Biology	Dutch

each participating teacher, a series of two to six (near) consecutive GP lessons were observed and video-taped. The length of lessons was, on average, one hour, except for school 6 where all GP lessons lasted two hours. All video data was collected from a similar part of the course in order to make the data comparable. For the schools offering the Cambridge International version of GP, we asked to observe lessons preparing students for and delivering the Component 3 Presentation. For this, students need to present their solution to a local problem, which has global significance from a particular perspective they have chosen to investigate within their project group [i]. For schools that were not (yet) offering the Cambridge International version of GP, we observed lessons preparing students for and delivering a presentation. In all cases the videos focused on the teacher, specifically on his/her interaction with the students.

5.3. Data coding and analysis

5.3.1. Coding

Van den Akker's (2003) curriculum levels framework was applied to analyse the data at two different levels. Firstly, we used the programme organisational interviews as data about the 'Intended Curriculum', i.e. the rationale underlying the curriculum. These interviews were analysed through a thematic analysis of what the teachers reported focusing on in their GP curricula. An initial sensitising concept of a focus on teaching only domain-specific academic skills, and teaching both domain-specific *and* general academic skills (as noted earlier) was applied. Moreover, a focus on teaching only academic skills, and a focus on teaching both academic skills *and* general knowledge appeared so distinctive in the data, that it was applied as a second sensitising concept.

Secondly, we used the videos as data about the 'Implemented Curriculum', i.e. the actual learning activities. The video-data (forty hours total) was transcribed, then divided into coding units by Event Sampling. An 'Event' was defined as a combination of a Task and an Episode. All academic occurrences, such as a lecture, a discussion or other, were labelled as 'Tasks'. Five types of tasks were identified. We used the term 'task-type' in a generic way, meaning that the task-types lack specification regarding the concrete-content operations required (Llinares & Dalton-Puffer, 2015, p. 71). The five task-types were: (1) Instruction - teacher instructing the class; (2) Post-assignment discussion - teacher leading a discussion of a previously completed assignment (e.g. homework); (3) Whole-class discussion – teacher led whole class conversation; Group-work discussion – small group problem solving with limited teacher intervention; and, (5) Student Presentation - individual or group monologues relating knowledge gained outside of the whole-group plenary to the members of that plenary (Llinares & Dalton-Puffer, 2015, p. 72).

Within each of these Tasks, data was coded at the 'Episode Level'. An 'Episode' was defined as a 'longer stretch of talk serving one overall communicative function' (Dalton-Puffer et al., 2018). Each Episode was coded with one or more of Dalton-Puffer's (2013) seven basal CDF categories that best described the communicative intention. Both teacher and student language was coded. In addition to the CDF type, each Episode was also coded in terms of CDFs use the meta-talk level. Our definition of meta-talk aligns with Dalton-Puffer (2013, 2016, 2018) and Lemke: 'Metadiscourse is Talk about

talk' (1990, p. 118). Episodes had to be in the Target Language (TL) and/or a combination of the TL and the L1 to be coded.

5.3.2. Analysis

The coded video-data was then analysed using the following steps. First, the relation between the coded CDF categories and the task-types was analysed. Second, for each individual teacher, the share of individual CDFs as a percentage of the total number of CDFs coded was analysed. Also, for each individual teacher, the share of individual task-types as percentage of total number of tasks coded was analysed. CDF categories most frequently used by each teacher in combination with the task-types most frequently used by each teacher were used to characterise their integrated content-language learning pedagogies.

We then compared the characteristic content-language learning pedagogies identified for each teacher. Teachers who worked in schools where teaching-teams had a similar Intended Curriculum focus and who used similar characteristic integrated content-language pedagogies were labelled as belonging to a certain 'type'. In this way, five characteristic types of integrated content-language pedagogies were identified as being used in GP teaching from this sample. These five types are described in the Results section.

The second author conducted an audit procedure as a validity check on the data of one teacher for each of the three Intended Curriculum foci. The second author examined the Results section to assess if (1) information could be traced back to the coded data, and (2) information was omitted which was included in the coded data. This led to a minor adjustment of adding three additional *Evaluate* codes to the overall data-set.

6. Results

6.1. Intended curriculum foci

As shown by Table 3, based on the Intended Curriculum for the GP programme in its entirety, the analysis of the interview data showed schools participating in the research had three distinct kinds of foci: (1) teaching academic skills *through* global content; (2) teaching academic skills *and* global content (i.e. general knowledge); and, (3) teaching *domain-specific* (i.e. Humanities/Sciences) academic skills and global content. These results show that even though all seven participating schools taught 'Global Perspectives there were three distinctly different overall curricular foci for this subject; the results are discussed in more detail in the Discussion.

Table 3. Overview of Intended Curriculum foci.

Intended Curriculum focus	Schools (Teachers)	Years offering GP	Offering Cambridge programme?
1. Teaching academic skills *through* global content.	1 (Richard; Riley); 2 (Susan); 3 (Henry); 4 (Joshua)	≥3	Yes
1. Teaching academic skills *and* global content.	5 (Jenny); 6 (Ross; Frank)	Pilot year	No
1. Teaching *domain-specific* academic skills and global content.	7 (Gregory; Usain; Cecil)	0–2	No

6.2. Implemented curriculum: relation between task-types and CDFs

Table 4 shows the relation between task-types and CDFs across all cases. Additionally, the total number of codes in the data-set per CDF and how many of these codes concerned Meta-level CDFs are indicated.

Regarding the total number of codes per CDF, *Classify* hardly occurs in the data-set (N = 2). *Evaluate* is the most frequent (N = 353), followed by *Describe* (N = 224) and *Report* (N = 203). *Define* (N = 66) and *Explore* (N = 34) occurred relatively few times. At the Meta-level, *Report* (N = 24) and *Evaluate* (N = 22) occurred most often. The following examples illustrate these two codes:

> to help you guys as a sort of practice, we're going to do what you call a pitch. … A very short presentation.. you stand up and you really try to sell your ideas so you should sound a little bit enthusiastic about it … So it shouldn't take more than a minute for you to explain: what was the problem, what is your perspective or way of looking at it to offer a solution, what is the solution – what are benefits and that's it (Henry – school 3 – meta-*Report*).

> … in your presentation, I would like, at the end, to get a short reflection from you … A reflection would be – well, when I read those pro-life arguments … I also realized that it's not as straightforward as I thought before.. you're reflecting on the whole process and what it did to your opinion. So, don't mistake reflection for giving your opinion flat out. You always have to give good reasons for it – why your opinion is the way it is. That's the most important bit (Riley – school 1 – meta-*Evaluate*).

In contrast, there were no Meta-level CDFs for *Describe* (N = 0) and only one for *Explain* (N = 1).

With respect to the relation between task-types and CDFs across all cases, Table 4 shows row percentages, indicating the percentage of all CDF codes in the complete data-set coded as occurring during a specific task-type, and column percentages, indicating the percentage of all task-type codes in the complete data-set coded with a specific category of CDF. Below we report the most frequently occurring relations per task-type.

Firstly, of all episodes coded with task-type Instruction, more than three-quarters (76.4%) belong to the CDF type *Describe*. Moreover, from all codes *Describe*, Instruction

Table 4. Relation between task-types and CDFs across all cases.

Task/CDF	Classify	Define	Describe	Evaluate	Explain	Explore	Report
Instruction							
(% row)	0	9,1	73,7	5,9	6,25	5,9	6,4
(% column)	0	2,8	76,4	9,7	4,2	0,9	6
Post-assignment discussion							
(% row)	0	10,6	0,4	2,5	10,4	0	11,3
(% column)	0	12,5	1,8	16,4	27,3	0	41,8
Whole-class discussion							
(% row)	100	30,3	8,5	42,2	36,8	41,2	14,8
(% column)	0,7	7	6,6	51,9	18,5	4,9	10,5
Group-work discussion							
(% row)	0	40,9	13,4	34	20,8	50	39,4
(% column)	0	8,9	9,9	39,5	9,9	5,6	26,3
Student presentation							
(% row)	0	9,1	4	15,3	25,7	2,9	28,1
(% column)	0	3,7	5,5	32,9	22,6	0,6	34,8
Total	2	66	224	353	144	34	203
Total Meta-level	1	4	0	22	1	7	24

occurs most frequently (73.7%). This occurs mainly through the teacher describing instructions for an assignment that students have to complete.

Post-assignment discussions are most often (41.8 Column %) coded with the CDF *Report*. This is mainly in terms of students reporting their answers to a previously completed assignment.

For Whole-class discussions, more than half of the cases (51,9%) are coded with the CDF *Evaluate*. From all codes *Evaluate*, Whole-class discussions occur most frequently (42,2%). This mainly happens in two ways: students and teachers provide feedback on students' presentations or teachers comment on student responses during whole-class discussions. In terms of code frequency across the complete data-set, CDF *Define* (30,3%) occurs frequently during Whole-class discussions, mainly in the form of teachers asking students to define key concepts. *Explain* (36,8%) also occurs most often during Whole-class discussions, mainly in the form of teachers asking students to explain why something is the case or why something remains relevant today. Finally, when *Explore* does occur in the data-set, it is mostly during Whole-class discussions, and mainly in the form of a teacher exploring possible solutions to an issue together with students.

Group-work discussions are most frequently coded with the CDF *Evaluate* (39,5%). From all codes *Evaluate*, Group-work discussions occur frequently (34%). This is mainly in the form of the teacher evaluating students' progress during group work discussions. Another CDF that occurs frequently during Group-work discussions is *Explore* (50%), mainly in the form of teachers helping students to explore global issues they are interested in and possible perspectives they can take. *Define* (40,9%) occurs most frequently during Group-work discussions, in the form of teachers helping students to specify their research focus (more) precisely or to clarify the meaning of key concepts. *Report* (39,4%) most frequently occurs during Group-work discussions, mainly in the form of the teachers asking students to report on their research progress.

Finally, Student Presentations are most frequently coded by the CDFs *Evaluate* (32,9%) and *Report* (34,8%). *Evaluate* occurs mainly in the form of students evaluating sources or ideas during the presentation, mainly due to the curriculum emphasis on this aspect, while *Report* occurs mainly in the form of students reporting knowledge gained during their research.

6.3. Five different types of integrated content-language pedagogies

Table 5 shows the five integrated content-language learning pedagogies identified within the three identified Intended Curriculum foci discussed above. These pedagogies are based on the individual teachers' characteristic relations with task-types and with CDF types.[3] Characteristic task-types and CDFs are defined as those most frequently occurring relations. We do not discuss *Classify* results because, as described earlier, this CDF-type hardly occurs in the data-set. Below, we describe each of the five integrated content-language learning pedagogies.

6.3.1. Intended curriculum focus: teaching academic skills through global content [types 1A and 1B]

The pedagogies observed of the teachers from the schools with an Intended Curriculum focus on teaching academic skills *through* global content can be divided into two

Table 5. Overview of five identified integrated content-language pedagogies.

Integrated content-language pedagogy type	Teachers (School)	Intended curriculum focus	Characteristic task-types	Characteristic CDFs
1A	Richard; Riley (1)	Teaching academic skills *through* global content	Whole-class discussion; Student presentation	Evaluate
1B	Susan (2); Henry (3); Joshua (4)		Instruction; Group-work discussion	Describe; Evaluate; Explore
2A	Jenny (5)	Teaching academic skills *and* global content	Whole-class discussion; Student presentation	Define; Describe; Evaluate; Explain; Report
2B	Ross & Frank (6)		Instruction	Describe
3	Gregory; Usain; Cecil (7)	Teaching *domain-specific* academic skills and global content	Group-work discussion	Evaluate

characteristic types. *Type 1A* in which the focus is on the CDF *Evaluate* through use of task-types that focus on the end-product (Richard and Riley) and *Type 1B*, in which the focus is not only on the end-product, but also very much on the process of students engaging in a group research project (Susan, Henry and Joshua).

Type 1A: *Evaluate* occurred in two main ways. Firstly, the nature of the presentation task set by Richard and Riley was such that it required students to 'Deconstruct' sources and 'Reflect' on how engaging in this process changed their view on their chosen issue. While the chosen issue needed to fit the global theme chosen by Richard and Riley, the focus of the task was on the skill of evaluating. Both teachers spent the lessons prior to the presentations teaching students how to evaluate sources. Secondly, both teachers spent ample time after each student presentation, on the careful Evaluation of these presentations, using the extensive Cambridge International marking rubric [i]. This process was led by the teachers but required active student participation for which students received grades. Furthermore, characteristic of both Richard and Riley's pedagogy was that students were required to prepare individually for their presentations at home, there was very limited time for this during class.

Type 1B: the prevalence of the CDFs *Describe, Explore* and *Evaluate* are a result of the nature of the presentation task set and the fact that, in the lessons observed, students were allowed to spend class time working on the research for their presentations. The presentation task set by the teachers mirrored the Cambridge International Component 3 task. The task required students to: *Explore* a local problem, perspectives and solutions; *Explain* their chosen solution to the whole group with supporting evidence; and *Evaluate* their group-work process. The teachers in this type all spent a lot of time with each individual student group, evaluating their progress and also helping them to Explore potential local problems and viable perspectives and solutions. It should be noted that *Explain* did not feature prominently in the data due to the fact that the observed lessons did not include the final student presentations.[4] A lot of time was dedicated to *Evaluate* through students reflecting on the task in their groups, however evidence was not often captured on video because the video camera followed the teacher at all times, not the student-student verbalizations occurring when the teacher was not present.

6.3.2. Intended curriculum focus: teaching academic skills and global content [types 2A and 2B]

Table 5 shows that the pedagogies observed of the teachers from the schools with an Intended Curriculum focus on teaching academic skills *and* global content can also be divided into two characteristic types (types 2A and 2B). *Type 2A* (Jenny) is a pedagogy characterised by the greatest diversity of CDFs and task-types. This is the result of the dual curricular focus on teaching both academic skills and also global content. In the six lessons observed, two lessons took a more traditional form in that, for example, students were asked to watch videos and then summarise (i.e. *Report*) the main message. Preemptively, Jenny also provided students with a list of vocabulary words and phrases linked to the theme to *Define* whilst watching the videos. *Explain* also occurred fairly frequently in these lessons in that students were asked to reflect on the relevance of, or to explain the principle behind, certain concepts. In the next two lessons, groups of students prepared their presentations. Here the CDFs *Describe* and *Evaluate* featured most prominently in that the teacher briefly explained what students should be doing and evaluated student progress in their groups. The final two observed lessons consisted of student presentations, so the CDFs *Report* and *Explain* featured most prominently. The presentation task required students to explore a given issue from different cultural perspectives, but not to come up with solutions (as in Type 1B) or to deconstruct a set number of sources (as in Type 1A). During the presentation lessons, Jenny did not ask students to do anything other than listen to the presentations.

Type 2B (Frank and Ross, who are combined as one case because they co-taught all observed lessons) is a pedagogy that cannot be characterised as an *integrated* content-language pedagogy. In a bilingual context, one would expect a strategic focus on students communicating through the TL and our analysis revealed, to a large extent, this was not the case. Characteristic of Ross and Frank's lessons was that there was no strict enforcement of students or teachers speaking the TL. Generally, only at the beginning of class when giving instructions, the teachers spoke in the TL and for the majority of the rest of the lesson they spoke with students in Dutch. This is the reason for the low number of total CDFs (n = 44) in relation to the total lesson hours observed (n = 8). The affordance that their class contained a mix of students from the school's bilingual stream and the school's non-bilingual stream, whilst in all other schools only students from the bilingual stream were in the classes, played a significant role here. The teachers appear to have made a conscious choice to let the focus on the subject prevail as the TL was not employed strategically as a learning support tool. This had the effect that, for example, regarding the delivery of final student presentations, the teachers challenged the students to present in the TL, but only one group out of the four presentations filmed actually did so.

6.3.3. Intended curriculum focus: teaching domain-specific academic skills and global content [type 3]

Finally, the pedagogies observed of the teachers from school 7 with the Intended Curriculum focus on teaching *domain-specific* academic skills and global content, constitute *Type 3* (Gregory, Usain and Cecil). The integrated content-language pedagogies observed of these teachers were most often characterised by the CDF *Evaluate* in combination with group-work. This was in part a result of the timing of the lessons we were invited to

observe. These were the final lessons prior to students delivering their presentations to their parents, in which the teachers were predominantly giving final feedback to students about their upcoming presentation and the final report.

The nature of the task set to students was to conduct research in their domain (Humanities, Sciences or Biology) and to communicate the outcomes of this research in a manner appropriate to their domain. In the observed lessons, teachers focused specifically on evaluating student progress related to how they could best communicate the results of their research projects. For example, Usain's pedagogy is most characterised by his continual emphasis to students about the nature of the language of Sciences, emphasising to students that scientific communication needs to be precise and concise. To emphasise this, Usain, for example, asks students to come up with two titles for their presentations – one 'sexy' title and one 'scientific' title. As Usain described to them: 'a sexy title is like in the Dutch newspaper – it doesn't tell you what is coming but it sounds really sexy … the scientist title, if I read that title, I know what is coming.' In both Gregory and Usain's lessons, the teachers also let the students evaluate their peers practicing delivering (parts of) their final presentations. Finally, characteristic in the lessons observed was limited reference to culture/global perspectives. The student research projects were domain-specific but did not necessarily require investigating global perspectives as with the tasks set described in types 1A, 1B and 2A.

7. Discussion

Through this research we have sought to characterise the integrated content-language learning pedagogies of GP teachers in a sample of Dutch bilingual schools. Our study aims to address the current deficit in research in this area. Analysing data at the level of the Intended Curriculum and the Implemented Curriculum revealed that although all of the seven participating schools taught '*Global Perspectives*', there were three distinctly different overall curricular foci for this subject, and that, within these different foci, five different characteristic types of integrated content-language learning pedagogies could be identified.

Analysis of the Intended Curriculum revealed that there was not one identifiable overall subject-specific culture for '*Global Perspectives*'. The schools with a focus on teaching academic skills *through* global content appear to have a clear emphasis on students' self-understanding and questioning their own values. This emphasis is noteworthy as Byram (2014) emphasises this is a meaning of 'intercultural' that is still mostly neglected. These schools, in part, apply 'intercultural citizenship' pedagogy as developed by Byram in language education and as argued by Porto (2018) to be relevant for the CLIL context. Although they do not meet the criteria of students engaging in concrete civic actions in the community beyond the classroom, they do (in the lesson tasks we observed) engage students in critically thinking about specific solutions to local problems, from various perspectives. In contrast, the schools with the focus on teaching academic skills *and* global content appear to have more of a traditional understanding of the concept of 'intercultural' with a focus on 'understanding otherness' (Byram, 2014) through expanding students' general global knowledge. This emphasis is consistent with the aim of Dutch bilingual education to not just improve students' TL proficiency, but also to promote and improve students' global citizenship and personal development (Van Wilgenburg & Van

Rooijen, 2018). These findings also suggest that what is considered essential in promoting students' 'global citizenship' in a subject such as GP is not yet clearly defined.

Analysis of the Intended Curriculum of the participating schools also reflects the division in the literature between those who argue that teaching academic skills needs to occur in a subject- or domain-specific context (e.g. Pellegrino & Hilton, 2012) and, those who advocate teaching general academic skills, because these can complement and synergize with subject- or domain-specific skills (e.g. Perkins & Salomon, 1988). For those schools offering a skills-focused subject, the majority reflected the view of Perkins and Salomon (1988), teaching GP as a stand-alone subject to all students together. However, one school (school 7) very consciously organised GP as a stand-alone subject, divided into specific domain areas. In the observed lessons at this school, the culture emphasis was focused on the domain-specific culture, for example, with Usain's emphasis on scientific communication as concise.

In terms of the Implemented Curriculum, our analysis of CDFs within Episodes revealed both similarities and differences with the Austrian findings of Dalton-Puffer et al. (2018). A main similarity is that CDFs were a staple of teaching and learning, but that they are not equally distributed, occurring in varying degrees of frequency. However, contrary to the Austrian findings of very infrequent occurrences of CDF *Evaluate*, this CDF occurred most often in our data-corpus. Partly, this can be explained by the fact that the Austrian findings summarised investigations into CDF occurrences in five different 'traditional' school subjects, whereas in our case a skills-focused subject was investigated in which the academic skill of Evaluating had a central place in the Intended Curriculum. In our data on CDF occurrences in GP, *Evaluate* occurred in different formats depending on the task-type used. The main forms in which it occurred were: (1) students evaluating sources in presentations; (2) teachers evaluating the progress of individual student(s) (groups); and, (3) teachers and students together evaluating student presentations. Also noteworthy was that the CDF *Classify* hardly occurred in the entire data-set. Similar to the Austrian findings, *Describe* occurred second most often. We agree with Dalton-Puffer et al. (2018) that *Describe*, rather than being specific to CLIL, is characteristic of classroom teaching in general irrespective of whether it occurs in L1 or L2 (p. 26).

Contrary to the Austrian data, where CDFs were almost never the object of conscious attention, our data showed that some teachers did teach about CDFs at the Meta-level. This was especially the case with *Report* and *Evaluate*, with teachers discussing with students how they should communicate (Report) their results and how they should go about evaluating sources and/or the presentations of peers. It appears that the nature of the skills-focused subject might contribute to this emphasis on explicitly teaching about how to use CDFs.

Finally, as also emphasised by Dalton-Puffer et al. (2018), we found that individual teachers and their preferred classroom activity types and beliefs about the nature of the subject-matter, have an impact on how CDFs are performed in the classroom. Our analysis revealed that the generic task-types used by teachers had a big influence on the type of CDFs used. While, in this study we focused on characterising types of integrated content-language learning pedagogies used by teachers, future research could focus on individual teachers in more detail and, for example, how their subject-backgrounds and their preferred classroom activity types relate to CDFs observed. Moreover, although this study

included various contexts and instructional forms, more variety in data and instructional contexts might give more insight into variation of these pedagogies.

8. Implications

Overall, our findings show that focusing on subject-specific culture and using the CDF Construct at Episode level is a useful heuristic to allow analysis of teachers' *integrated* content-language pedagogies. Furthermore, we consider that it appears not only a practical conceptual framework for research focusing on the analysis of pedagogies of CLIL subject teachers, but that it may also provide a useful framework for both pre- and in-service teachers in CLIL contexts to emphasise the *integrated* nature of CLIL teaching. To-date, the models used in teacher education have been predominantly based on insights coming only from language education and, as a result, are often perceived as generic but not directly relevant to the (subject-)specific context of subject teachers. A valuable avenue for future research would be to address CDFs in traditional domain subjects (e.g. Science or Humanities) and compare these to our current findings. In this way, the work can contribute to further bridging the current gap between theory and practice in CLIL and therewith ensure a high quality of CLIL education is sustained.

Notes

1. Please see the GPR syllabus for further information: https://www.cambridgeinternational.org/Images/202589-2017-2019-syllabus-.pdf.
2. Nuffic is a government-financed agency, which coordinates all activities related to bilingual education in the Netherlands.
3. See Table 6 in online materials.
4. In Susan and Joshua's case this was because these presentations were recorded and sent to Cambridge International for examination. In Henry's case it was because he chose to only focus on the process, students were asked to film their presentations outside of class time.

Acknowledgements

We would like to thank all participating teachers who so kindly shared their teaching practices with us.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Evelyn van Kampen http://orcid.org/0000-0002-3677-1478
Wilfried Admiraal http://orcid.org/0000-0002-1627-3420

References

Byram, M. (2014). Twenty-five years on – from cultural studies to intercultural citizenship. *Language, Culture and Curriculum*, *27*(3), 209–225. https://doi.org/10.1080/07908318.2014.974329

Cambridge International Examinations. (2016). *Syllabus. Cambridge International as and a level global perspectives & research*. Version 4, 9239.

Coyle, D. (2015a). Moving from the 4Cs Framework to a PluriLiteracies approach for CLIL. Presentation on behalf of the Graz Group ECML.

Coyle, D. (2015b). Strengthening integrated learning: Towards a new era for pluriliteracies and intercultural learning. *Latin American Journal of Content and Language Integrated Learning*, *8*(2), 84–103. https://doi.org/10.5294/laclil.2015.8.2.2

Coyle, D., Hood, P., & Marsh, D. (2010). *Content and language integrated learning*. Cambridge University Press.

Dalton-Puffer, C. (2013). A construct of cognitive discourse functions for conceptualizing content-language integration in CLIL and multilingual education. *European Journal of Applied Linguistics*, *1*(2), 216–253. https://doi.org/10.1515/eujal-2013-0011

Dalton-Puffer, C. (2016). Specifying an integrative interdisciplinary construct. In T. Nikula, E. Dafouz, P. Moore, & U. Smit (Eds.), *Conceptualising integration in CLIL and multilingual education*. Multilingual Matters.

Dalton-Puffer, C., Bauer-Marschallinger, S., Brückl-Mackey, K., Hofmann, V., Hopf, J., Kröss, L., & Lechner, L. (2018). Cognitive discourse functions in Austrian CLIL lessons: Towards an empirical validation of the CDF Construct. *European Journal of Applied Linguistics*, *6*(1), 5–29. https://doi.org/10.1515/eujal-2017-0028

Dalton-Puffer, C., & Smit, U. (2013). Content and language integrated learning: A research agenda. *Language Teaching*, *46*(4), 545–559. https://doi.org/10.1017/S0261444813000256

De Graaff, R., & Van Wilgenburg, O. (2015). The Netherlands. Quality control as a driving force in bilingual education. In P. Mehisto, & F. Genesee (Eds.), *Building bilingual education systems: Forces, mechanisms and counterweights* (pp. 167–180). Cambridge University Press.

Fielding, R., & Harbon, L. (2018). An exploration of content and language integrated pedagogy. *Babel*, *52*(2-3), 32–45.

Garzón-Díaz, E. (2018). From cultural awareness to scientific citizenship: Implementing content and language integrated learning projects to connect environmental science and English in a state school in Colombia. *International Journal of Bilingual Education and Bilingualism*. https://doi.org/10.1080/13670050.2018.1456512

Halliday, M. (1994). *An introduction to functional grammar*. Edward Arnold.

Lemke, J. L. (1990). *Talking science. Language, learning, and values*. Ablex Publishing.

Llinares, A. (2015). Integration in CLIL: A proposal to inform research and successful pedagogy. *Language, Culture and Curriculum*, *28*(1), 58–73. https://doi.org/10.1080/07908318.2014.1000925

Llinares, A., & Dalton-Puffer, C. (2015). The role of different tasks in students' use of evaluative language. *System*, *54*, 69–79. https://doi.org/10.1016/j.system.2015.05.001

Meyer, O., Coyle, D., Halbach, A., Schuck, K., & Ting, T. (2015). A pluriliteracies approach to content and language integrated learning – mapping learner progressions and knowledge construction and meaning-making. *Language, Culture and Curriculum*, *28*(1), 41–57. https://doi.org/10.1080/07908318.2014.1000924

Mohan, B., Leung, C., & Slater, T. (2010). Assessing language and content: A functional perspective. In A. Paran, & S. Lies (Eds.), *Testing the untestable in language education*. Multilingual Matters.

Morton, T., & Llinares, A. (2017). Content and language integrated learning (CLIL). Type of programme or pedagogical model? In A. Llinares, & T. Morton (Eds.), *Applied linguistics perspectives on CLIL* (pp. 1–16). John Benjamins.

Nikula, T., Dafouz, E., Moore, P., & Smit, U. (2016). *Conceptualising integration in CLIL and multilingual education*. Multilingual Matters.

Pellegrino, J. W., & Hilton, M. L. (eds.). (2012). *Education for life and work: Developing transferable knowledge and skills in the 21st century*. The National Academies Press.

Pérez-Cañado, M. L. (2012). CLIL research in Europe: Past, present and future. *International Journal of Bilingual Education and Bilingualism*, *15*(3), 315–341. https://doi.org/10.1080/13670050.2011.630064

Perkins, D. N., & Salomon, G. (1988). Teaching for transfer. *Educational Leadership*, *46*(1), 22–32.

Porto, M. (2018). Intercultural citizenship in foreign language education: An opportunity to broaden CLIL's theoretical outlook and pedagogy. *International Journal of Bilingual Education and Bilingualism*. https://doi.org/10.1080/13670050.2018.1526886

Rose, D., & Martin, J. R. (2012). *Learning to Write/ Reading to learn: Genre, knowledge and pedagogy in the Sydney school: Scaffolding Democracy in Literacy classrooms*. Equinox.

Ruiz de Zarobe, Y., & Cenoz, J. (2015). Way forward in the twenty-first century in content-based instruction: Moving towards integration. *Language, Culture and Curriculum*, *28*(1), 90–96. https://doi.org/10.1080/07908318.2014.1000927

Van den Akker, J. (2003). Curriculum perspectives: An introduction. In J. Van den Akker, W. Kuiper, & U. Hameyer (Eds.), *Curriculum landscapes and trends* (pp. 1–10). Kluwer Academic Publishers.

Van Kampen, E., Mearns, T., Meirink, J., Admiraal, W., & Berry, A. (2018). How do we measure up? A review of Dutch CLIL subject pedagogies against an international backdrop. *Dutch Journal of Applied Linguistics*, *7*(2), 129–155. https://doi.org/10.1075/dujal.18004.kam

Van Wilgenburg, O., & Van Rooijen, B. (2018). Expanding the field: New developments in Dutch bilingual education. *Dutch Journal of Applied Linguistics*, *7*(2), 274–278. https://doi.org/10.1075/dujal.00004.wil

Watkins, C., & Mortimore, P. (1999). Pedagogy: What do we know? In P. Mortimore (Ed.), *Understanding pedagogy and its impact on learning* (pp. 1–19). Paul Chapman/Sage.