Using Genre to Improve Consistency across the Literacy Curriculum in Dutch Secondary Education

ABSTRACT

In almost all subjects in secondary education, students experience texts of increasing complexity and abstraction, while also having to demonstrate their command of text at a satisfactory level. Research shows that some students have difficulty in reading and writing texts (Hacquebord et al., 2004; OECD, 2010), that structural text characteristics influence their level of comprehension (Land et al., 2002) and that learning genre-specific language features increases their writing skills (Hoogeveen, 2014). Genre-specific refers to different text types. From analysis of a database containing some 2000 student texts in the subjects of English, Science and History, Christie & Derewianka (2008) illustrate how student writing skills evolve with the use of increasingly genre-specific sources in creating texts. Our study analysing over 40 Dutch secondary education school subject texts (Van der Leeuw & Meestringa, 2014) investigated to what extent the genre classification of Martin & Rose (2008) helps to describe the school curriculum. The aim was to identify which genres are typical of secondary education in general, which genres are more applicable to specific subjects, and what their language features are. Results of the study are an illustrated typology of genres in school and an overview of their distribution in school subjects. Based on these research findings, precise descriptions were made of how language works in different subjects. The outcomes of the study can help to equip teachers of specific subjects with the tools they need to improve the learning achievements of their students, where oral and written texts are concerned.

The results of this study can be seen as a first step towards raising awareness amongst subject teachers of the specific characteristics of their own technical language and training them to work with the genre approach.

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Introduction

The role of language across the entire curriculum of secondary education has been a subject of attention for a long time now. In the early 1970s, several English authors already pointed out the close relationship between language and the curriculum (Britton, 1970; Barnes, Britton & Rosen, 1971; Barnes, 1976; also see Corson, 1990). The first Dutch researchers to systematically develop this linguistic perspective on the curriculum were Van der Aalsvoort and Van der Leeuw (1982). All this work centres on the concept that the language of schooling is fundamentally different from everyday language that students are used to. Students from socio-economically vulnerable groups in particular should receive additional support at school in order to familiarise themselves with the (more academic) language of schooling.

Even now, some forty years later, offering equal opportunities is one of the main driving forces behind the attention to language in the curriculum: "Recognition of the importance of academic language is (...) an essential aspect of working towards equity in educational outcomes." (Beacco, Fleming, Goullier, Thürmann & Volmer, 2015, p. 8). In addition, the development of the language of schooling, or more generally the development of literacy, is now being acknowledged as an essential characteristic of the quality of education; in the Netherlands, nowadays it is part of the generic knowledge base for the teacher education (Onderwijscoöperatie, 2014).

How does this language of schooling appear in education characterised by individual school subjects? In almost all subjects in secondary education, students experience texts of increasing complexity and abstraction. They also have to demonstrate their command of these texts at a satisfactory level in oral and written tests. These are linguistic challenges for the students: they have to get acquainted with the discourse of the subjects that their teachers have already mastered. Each subject has its own perspective on reality, its own programme of knowledge and skills, its own examination requirements and, last but not least, its own language (register). Many students find this double task – learning a subject and at the same time also acquiring the different subject languages – difficult. Research shows that many students have difficulty reading and writing school subject texts (Hacquebord, Linthorst, Stellingwerf & De Werf, 2004; OECD, 2010), and that learning genre-specific language features increases their writing skills (Hoogeveen, 2014). They do not talk at home the way they are taught to speak and write at school: as a geographer, a mathematician, a biologist, etc. The how and the importance of it do not come easily to the students: that requires education.

For subject teachers, the relationship between subject knowledge and the language that is used to express that knowledge is a natural one, albeit unarticulated: teachers often have no clear idea of how their professional language works, apart from the technical terms that are an obvious part of it. Their professional language allows them to address, in class, certain specific elements of their subject in a nuanced and detailed manner (Lemke, 1990). An important goal of their education is that students learn to use this more academic language of the subject, in order to demonstrate that they have mastered a certain subject knowledge and skills. In the Netherlands, when there is explicit attention given to the relation between the subject and the language of schooling, we call that 'language oriented subject education' (taalgericht vakonderwijs).

Recently, several publications came out about the backgrounds, principles and practical applications of 'language oriented subject education', including a clear and concise handbook (Hajer & Meestringa, 2015). 'Language oriented subject education' offers teachers tools to realise general didactic principles – rich in context, with plenty of interaction and the right language support at the right time – when designing the subject lessons, offering explicit attention to the use of language in class. Experiences with this 'language oriented subject education' have shown that the application of general educational principles (context, interaction, language support) by itself is not sufficient. In order to offer students a real 'introduction' into the professional way of thinking, a connection to the subject goals and the pedagogy of the school subjects is required (Hajer, Van der Laan & Meestringa, 2010). This gives 'language oriented subject education' more and more the character of education in the languages of specific school subjects and the language of schooling in general.

In order to develop this education in the language of schooling, a thorough analysis of how language works in subjects in schools is essential. The theoretical framework of *Systemic Functional Linguistics (SFL)*, which implies the genre concept (Halliday & Matthiessen, 2004; Martin & Rose, 2008), offers a usable tool, since it also includes the context of language in the analysis. The term *genre* refers to realisations of text objectives such as recount, explanation and discussion, as they manifest themselves in the concrete context of the use of language. For instance, the SFL concepts for Mathematics were used to explore how meaning is realised in an interplay of language, visual images and symbols (O'Hallaran, 2005). For History, researchers analysed the typical text types that are used in education, how these are constructed, and which characteristic language resources are being used (Coffin, 2006). As a final example: Christie & Derewianka (2008) used the analysis of a database containing some 2000 student texts in the subjects English, Science and History to illustrate how student writing skills evolve with the use of increasingly genre-specific sources in their texts.

We have researched whether this genre-based approach of the language in school subjects also offers perspective for Dutch secondary education, allowing for the description and understanding of the language of schooling, i.e. literacy in the curriculum, and to investigate whether this can create more coherence in a curriculum that is divided into separate school subjects. In this article, we first discuss our process, followed by the results obtained by the investigation, and subsequently we will discuss these results in light of the demand for curricular coherence and in light of international comparison.

Method

This investigation was carried out in the working context of the *Platform 'language oriented subject education' (taalgericht vakonderwijs)*, a collaboration of teacher educators, educational consultants, developers and researchers in the Netherlands. To get a better grip on the specifics of language in the various school subjects in secondary education, participants of the Platform have studied the possibilities of the so-called genre pedagogy. This study went through the following stages: a) orientation and self-education, b) exercise in the analysis of subject-specific texts, c) training of subject matter experts and d) compilation and analysis of a representative body of subject-specific texts.

Orientation and self-education

Schleppegrell (2004) has elaborated on a functional linguistic perspective to get a grip on the linguistic characteristics of languages that students must master for a successful career at school. She shows that the context influences the use of language resources, and simultaneously that the selected language resources constitute the context. However, the Dutch academic world has only limited experience in this approach. That is why, in the first stage of the study, about six participants of the Platform have broadly studied the relevant literature in this field. They have read and discussed texts by Acevedo (2002), Derewianka (1990), Coffin (2006), Gibbons (2006), Love (2009), Schleppegrell (2006, 2007), Schleppegrell & Achugar (2003), and Rose (2006, 2008), among others. The main question they asked during this stage was to what extent the presented – mostly Australian – insights and examples are applicable to the Dutch education context.

In order to share the collected knowledge and the usability question with a wider audience of teacher educators, educational consultants, developers and researchers, the Platform in 2010 organised a symposium on genre pedagogy with speakers from Australia – Pauline Gibbons – and Sweden – Mariana Sellgren and Mikael Olofsson (Van der Leeuw, Meestringa & Pennewaard, 2011).

The literature review and symposium were so promising that two members of the Platform (the authors of this article) travelled to Lisbon in the summer of 2011 to attend the 38th International Systemic Functional Congress. As part of this congress, they took special SFL courses with Hood (2011), Christie (2011) and O'Donnell (2011).

Practice in the analysis of subject-specific texts

Using the learning points from the first stage, we analysed sixteen subject-specific texts from the Dutch secondary education system. The majority were textbook texts, in addition to some student texts and protocols of classroom interactions in the subjects of History, Geography, Economics, Dutch, Biology and Chemistry. The texts were supplied by curriculum experts for the specific subjects (Van der Leeuw & Meestringa, 2014a). In the analyses, we determined what genre was expressed in the text and the global genre specific structure of the text. We also discussed the language resources that are used to expand on the topic (field), to take a position with respect to the subject and the reader or interlocutor (tone), and for structuring the text (mode), respectively.

Analysing the subject-specific texts not only offered insight into the specifics of the professional languages that are taught at school, it also gave us useful ideas for the training of subject matter experts who have no linguistic background. The next stage of the study looked at the design and implementation of such training.

Training subject matter experts

There are some exquisite English introductions into SFL and genre pedagogy available (Rose, 2011; Humphrey, Love & Droga, 2011; Coffin, Donahue & North, 2009; Eggins, 2004), as well as training programmes (Polias & Dare, unlockingtheworld.com). Such materials were not available in Dutch, and we therefore had to create them ourselves.

The sixteen subject-specific texts and the analyses that we had created, as an exercise, eventually formed the basis for a course 'Genres in school subjects' for a number of experts (teacher trainers, curriculum developers) in different subject fields: Physics, Biology, Chemistry, Geography, Mathematics, Dutch, vocational subjects and the Arts. Besides these text analyses, the study material consisted of a brief introduction to genres and genre pedagogy, based on Martin & Rose (2008) and Rose & Martin (2014).

During the one and a half days of training, the experts got acquainted with the genre concept and the applications of it in the school subject education. The experts gained experience with the analysis of subject-specific texts and the reconsideration of the use of such texts in an educational setting. In a follow-up assignment (homework), the participants selected a number of texts that they considered typical of their school subject, and then went to work analysing them according to the instructed method and commenting on them.

Compiling and analysing a representative body of subject-specific texts

In the fourth and final stage of the study, the training participants worked on compiling a representative body of 38 subject-specific texts. The sixteen texts that were the input for the training of the subject matter experts, formed the basis of that body of texts. This collection was complemented by a number of texts that we had in stock (not analysed), but more importantly with texts that were provided as being 'typical for their school subject' by the subject matter experts, following the training.

The selected texts were all analysed using the genre concept. These analyses were usually carried out in several rounds: the expert who selected a typical subject text first commented on certain aspects of the text, regarding genre selection, structure, field, tone and mode. Subsequently, one of the authors processed these rather informal notes into a coherent discussion of the relevant text, and submitted this for approval by the professional expert. In the final round, the second author checked the analysis and discussion again for internal consistency and external coherence with the analysis of other texts from the body of works.

The result of this multi-year study involving numerous language and subject matter experts participated, was the first Dutch-language introduction to the method of Systemic Functional Linguistics and genre pedagogy, applied to eleven subjects in secondary education (Van der Leeuw & Meestringa 2014b).

Results

The most important outcome of the study is an overview of prevalent genres that play a role in the different subjects of Dutch (secondary) education. Moreover, the overview shows how these genres are interrelated. In this context, we speak of genre families, and we can distinguish two distinct narrative genres, four factual genres and three evaluative genres (see Table 1).

Table 1. Genres in school subjects in the secondary education system in the Netherlands

Family	Genre	Purpose	Stages*
Narrative genres	Recount	Recounting personal experience	Orientation ^ Experiences (^ Personal comments)
	Narrative	Sharing feelings and/or assessing behaviour	Orientation ^ Complication ^ Solution (^ Evaluation)
Factual genres	Report	Describing an event	Identification ^ Events
	Description	Specifying and classifying the case or event	Identification ^ Specification
	Procedure	Describing how to act	Goal ^ Equipment ^ Steps
	Explanation	Explaining and interpreting the event	Identification of the phenomenon ^ Explanation of the sequence
Evaluative genres	Discussion	Investigating the issue from different perspectives	Issue ^ Perspectives ^ Position
	Argument	Arguing a statement	Thesis ^ Arguments ^ Confirmation of thesis
	Response	Reacting to a cultural expression	Orientation ^ Description ^ Evaluation

* The ^ sign means 'followed by'. The brackets indicate that the stage between the brackets is optional.

Below is a short description of and an explanation for each of the genres. We cluster those descriptions by genre family (narrative, factual and evaluative) and offer one concrete example from the body of school subject texts. We conclude with an overview of the distribution of genres within the studied school subjects.

Narrative genres

In the Dutch secondary education, we find two narrative genres: the Recount and the Narrative. We all know about the ***Recount*** genre from our everyday oral communication with family, friends and colleagues. The goal of a Recount is to tell something about an event from personal experience. Recounting stories keeps people informed about what others encounter every day. Also, Recounts often ensure social bonding. Although recounts occur mainly in oral form, they can also be displayed in writing; previously mainly through letters, but now also via electronic mail.

A recount can consist of the following stages: Orientation ^ Experiences (Personal comments). A recount starts with a brief orientation on the participants, time and place of the action. Subsequently, there is a series of experiences; an event that the narrator has experienced. In some cases, there is some kind of closure, in the form of a personal comment from the narrator.

In many ways, the ***Narrative*** genre is similar to the Recount genre. This is also about an event or series of events, but the Narrative is not so much focused on the experience of the speaker/writer, but mostly deals with a fictional, unexpected event that serves a different purpose. The goal of a Narrative is to use events to entertain, to share feelings and/or to assess possible behaviours.

The stages are: Orientation ^ Complication ^ Solution (^ Evaluation). A Narrative starts with an orientation on people, time and place of action. Subsequently, the Narrative does not just focus on a series of events, but on problematic events. That is what we call the Complication. A Narrative ends with a Solution to that Complication. In some cases, the speaker/author will add an Evaluation.

In secondary education, the Narrative genre is predominantly used in literature education, both in Dutch and in the classical and modern foreign languages. Narratives are part of the education in those subjects, and are being read and interpreted by the students. In some cases, the students are asked to write their own narratives. The Narrative is not exclusively a part of language education; it is also used in other subjects, such as Economics and Mathematics, where students are presented with a case in the form of a Narrative. This narrative contains a problem (Complication) that must be analysed and solved in a subject specific way. We notice that in textbooks for subjects such as Geography and History, the Narrative is being used to bring certain subject matter closer to the student. The Narrative allows students to form an image of a geographical phenomenon, such as immigration (see Figure 1), or gives them a connection to people from a specific historical era.

Figure 1. An example of a Narrative (fragment) from a Geography book.

Orientation	Paolo is in his early twenties. Two years ago, he got married and he has a son who is one year old. He just couldn't manage to earn a decent income for his young family. The life of a farmer on the plains between the mountains of the Sierra Madre is hard.
Complication	Three days ago, they boarded a bus in their native village on the Mexican Plains, north of Mexico City. This was the beginning of a long and exciting journey, straight through Mexico on their way to Ciudad Juárez, on the border. When they arrived, late yesterday evening, they were met, as agreed, by a human trafficker. 'Travel agent', as Pedro likes to call himself. For $50 each, he takes them to a place where they can swim across the river. In the middle of the night the four friends start the dangerous crossing. They are lucky: at this time of year, the currents aren't too strong. The trickiest part is to get a garbage bag full of possessions safely across.
Solution	Paolo Montoya crawls through the mud in the final metres to the Northern shore of the Rio Grande. He quickly pulls the plastic bag with dry clothes from the water and hides as fast as he can in the low brushes on the shore. His friends crawl out of the cold water around him. They've made it, they've crossed the border!

Factual genres

The Dutch secondary education shows four factual genres: the Report, the Description, the Procedure and the Explanation. The **Report** genre centres, like the Recount and Narrative, around an event or a series of events. However, in a Report, the story focuses on the facts, and not so much on the way they are perceived. A report is meant to be a chronological description of an event. The stages are: Identification ^ Events. A Report starts with an identification of a phenomenon; this may be a case, a process, or a period, but it can also be about people. It then becomes a chronological description of Events. The factual sequence is typical for a Report.

The subject where the Report is used most often is History. History is, after all, reporting on events in the past. The term we use here is 'historical reports'. In the History textbooks, we find historical reports of certain periods, such as World War II or the Batavian revolt, as well as certain individuals, such as William the Silent or Anne Frank. When these reports are about people, we call them 'biographies', which is a specific form of historical report.

The genres Recount, Narrative and Report each focus in their own way on an event or a series of events. The time sequence is always a central part of this. The **Description** genre shows a fundamentally different approach. In this genre, the focus is aimed not at chronology, but at specification and classification of a certain phenomenon in reality. The stages of a Description are: Identification ^ Specification. A Description starts with an Identification of the case, informing the interlocutor or reader about what is going on. The Identification may appeal to the experience with and knowledge of the particular phenomenon. Next, the characteristics of the phenomenon are described. They may be assigned, for example, to a particular group or type (a cow is a domesticated mammal); this is called a classification. But you can also expose certain properties (this black and white cow still has its horns); with such a specification we distinguish the cases with those characteristics from those without.

In secondary education, students are introduced to historical, scientific and cultural phenomena from the real world, through descriptions of these items. To test their knowledge, students are asked to give descriptions of those items. In all school subjects, the Description as a genre is used to explicate the specific subject knowledge. For instance, Geography is a subject that uses this genre to describe phenomena, such as mountains, seas, nature reserves, means of existence and climates. Some of these things are concrete and directly observable – like a river or a village – and therefore easy to describe. But it can also involve complex processes – such as weathering or migration – that require a more technical description. Figure 2 shows an example of a (shortened) Description from a Biology textbook.

Figure 2. A Description from a Biology textbook

Identification	In chapter 6, you learned that plants make glucose. That takes part in the *green leaf cells* (**source 17,** page 104). The creation of glucose is called *photosynthesis* (**source 12**).
Specification	This process is not visible on the outside of a plant. To give you an idea of what happens within a leaf, you can compare each green leaf cell with a factory. The factory uses raw materials to create a product. The factory needs energy to do this, and produces waste. The product produced by the green leaf cells is called *glucose*, a kind of sugar. For the production of glucose the green leaf cell uses the raw materials *water* and *carbon dioxide*. The energy the green leaf cell needs, is *sun light*. The waste that it creates, is *oxygen* (**source 12**).
(Completion)	All plant leafs together contain millions of green leaf cells. The plant has millions of little sugar factories.

Like the Report and the Description, the **Procedure** is a factual genre. However, the Procedure does not relate to talking/writing about phenomena in reality, but deals with acting in that reality. The Procedure genre is meant to tell the reader or listener how he or she should do something. The stages of the Procedure are: Goal ^ Equipment ^ Steps. A Procedure starts by naming or describing the end result. That goal can be something material, but also something immaterial, for example, that the operator knows or masters something. After the goal has been clarified, it is followed by a description of the Equipment. For instance, when the goal is to hang a painting on the wall, you will need a hammer and a nail. The final stage in a procedure is a step-by-step instruction that explains how you should act, how – if hanging a painting – you should mark a point on the wall, how you put a nail there, how you should hold the hammer, and so on.

In secondary education, the core activity of teachers is to provide instruction, using the Procedure genre, both orally and in writing. For instance: a teacher wants students to write a summary of a text in the Biology textbook by the end of class. He explicates this goal, indicates where the text can be found and where the summary should be captured (material), and specifies a number of steps that the students can carry out in the creation of the summary.

Just as the Description and the Report, the Explanation is also a factual genre. The **Explanation** is aimed at understanding and unravelling processes, while a Description focuses on specifying or classifying a phenomenon in reality, and the Report focuses on

capturing the chronology of events. The Explanation genre is meant to explain and interpret an event or process. The stages of an Explanation are: Identification of the phenomenon ^ Explanation of the sequence. An Explanation starts with the appointment or designation of a phenomenon with a process-oriented approach, such as a coffee machine, or currencies on the foreign exchange market. This designation is the precursor of the question: how does it work? How can coffee come from that machine, how can it be explained that the dollar is lower than the euro? In the Explanation of the sequence, this question is answered.

In secondary education, explaining something or giving an explanation of something is a frequent activity of both teachers and students. For instance, teachers give an explanation for the battle of Waterloo (History), the jagged coastline of Greece (Geography), lightning and thunder (Physics), or the hardness of plastics (Chemistry). In turn, students are expected to be able to give explanations about complex elements of the subject matter. By explaining a phenomenon, students show their knowledge (naming and describing) as well as their understanding (insight).

Evaluative genres

Finally, the body of subject-specific texts contains three evaluative genres: the Discussion, the Argument (Exposition) and Response. The **Discussion** genre strongly deviates from the genres that were discussed earlier. It is not narrating, like the Recount and the Narrative, and it is also not strictly factual, like the Report and the Description. The Discussion deals with the evaluation of something or someone. The purpose of a Discussion is to explore a subject or issue from different perspectives. The stages are: Issue ^ Perspectives ^ Position. A Discussion starts by determining and describing an issue. This can be a question, a statement or a measure; in any case it is something that offers room for different perspectives. Subsequently, the different Perspectives on the problem are outlined. These multiple perspectives are an essential element of the Discussion. After comparing and weighing these perspectives, the Discussion ends with a conclusion, taking a Position regarding the issue.

In Dutch (upper) secondary education, the Discussion genre forms an explicit part of the subject of Dutch language and literature. The Dutch language education teaches students to use the specific characteristics of contemplative texts, both in reading texts and in writing their own texts. The Dutch language education also uses verbal forms of consideration, for example in discussions and work meetings where views are exchanged in order to reach a decision. It has become apparent that the Discussion genre plays an increasing role in other school subjects. For instance, the subjects of Biology, Physics and Chemistry are increasingly raising subject-related societal and ethical issues. The Discussion is an appropriate genre for these subject issues. Figure 3 shows a student text from the subject of Economics. The assignment was to write an advice; a specific form of a Discussion.

Figure 3. A Discussion (advice) from a student about an economic issue

Issue	I understand that you have some doubts about the distribution of tickets for the upcoming football match between Deurne and Feyenoord*. It seems logical to me that you, as the selling and price-determining party, will want to raise as much as possible. The fans, however, will want to enjoy the match as cheaply as possible. These are opposing interests.
Perspectives	When you charge a price of €50 per ticket, this will mean that 1500 will attend, which yields 75,000. As this means that the stadium won't even be half full (there are 5900 available seats), perhaps you can lower the price to €40. Due to an increase in the number of fans willing to pay no more than €40, you will sell (1500 + 3200=4700 tickets for €40. This would yield €188,000. That would still leave some seats open. However, a price of €30 would only yield 5900 (max. number of seats) × 30 = 17,700. So a price of €40 would seem best, even though this will not fill the stadium completely. However, when you apply price discrimination, and first set the price at €50, then adjust it to €40 and for the final 1200 seats at €30 (after 3200 + 1500 = 4700) that would leave 5900 – 4700 = 1200 seats. Applying this price discrimination would yield 1500 × 50 + 3200 × 40 + 1200 × 30 = 239,000, the maximum profit for your club.
Position	The fact that this would fill up the stadium almost exclusively with fans of Deurne would surely be beneficial for the performance. However, make sure the fans do not find out about this, as they will all be waiting for the prices to lower!

* FC Deurne is a small local amateur club that is playing a cup match against Feyenoord Rotterdam, one of the top three Dutch premier league clubs.

Just as the Discussion, the ***Argument*** (also known as Exposition) is an evaluative genre. However, while the Discussion focuses mainly on the perspectives that are used to look at an issue, the Argument focuses on underpinning an opinion. An Argument is meant to substantiate a claim. The stages are: Thesis ^ Arguments ^ Confirmation of thesis. An Argument generally starts with determining a position or opinion. This position can be related to a range of topics and may be formulated in various ways. For instance: 'Bad drivers should get higher fines', or more explicitly: 'I think X is a suitable candidate for the premiership'. The Thesis is subsequently supported with Arguments; this stage is also when counter-arguments are stated and refuted. The Argument generally closes with a Confirmation, i.e. a repetition or reinforcement of the Thesis.

In secondary education, the Argument occurs in all school subjects. In all subjects there are possible situations where pupils must form their own opinion, on the basis of arguments. For example, they should be able to formulate informed opinions about labour migration from Eastern to Western Europe (Geography), or the processing of chemical waste (Chemistry).

Similarly to the Discussion and the Argument, the ***Response*** is one of the evaluative genres. Where the Discussion and the Argument focus on the formulation of views and perspectives on diverse topics, the Response solely focuses on cultural expressions. A response is meant to be a reaction to a cultural expression, such as a book, a film, a concert or a painting. The stages are: Orientation ^ Description ^ Evaluation. A Response starts with an orientation on the cultural expression, for example, in the case of a book to say

something about the author, or commenting on the museum where a painting is on display. The cultural expression is subsequently described. In the case of a book you can give a small impression of the storyline, in a painting you can pay attention to the scene, the use of colour, the details, the effect of light. A Response ends with an Evaluation: a personal reaction that offers the personal experience of the speaker or writer with the piece of art, possibly in terms of appreciation or disapproval.

In secondary education, the Response is mainly used in the cultural subjects, such as arts and languages. In both Dutch and foreign language education, part of the educational time is spent reading and discussing literature. Students are introduced to literary works through reading, but also through the Responses of others, for example, when the teacher discusses it, or when they read a review.

## Distribution of genres across the subjects in secondary education

On the basis of a (limited) body of 38 texts from various subjects, we have described above which genres are important in secondary schools, how those genres can be characterised and how they relate to each other. The research material also offers us the opportunity to investigate which genres are used more often and which less often in certain subjects. The results of the study give the impression that the distribution of genres across the subjects is not entirely arbitrary (see Table 2).

Table 2. Distribution of genres across the subjects in secondary education

	Narrative genres		Factual genres				Evaluative genres			Total
	Recount	Narrative	Report	Description	Procedure	Explanation	Discussion	Argument	Response	
History			■					■		4
Geography		■		■		■				4
Economics				■			■			2
Dutch	■	■			■		■		■	8
Mathematics				■						2
Biology				■	■					5
Chemistry				■		■				3
Physics						■				3

(To be continued on the next page.)

										Total
Arts										3
Vocational subjects										3
Exercise, sports & society										1
Total	1	2	3	8	9	5	3	4	3	38

Legend: One text: ☐   Two texts: ▨   Three texts: ▨

In History, we encountered two Reports (biographies in fact) and two Arguments. In Geography, we discovered one Narrative in a textbook (see Figure 1), and two Descriptions and an Explanation of geographical phenomena. In Economics, we found a Description of the relation between demand and price, and a Discussion that is typical for that subject: an informed a device based on economic data (see Figure 3). In Dutch language we found a wide range of texts: a Recount, a Narrative, and two Procedures (a recipe and how to give a presentation), two Discussions and two Responses ('book report'). In Mathematics, there was a Description (of a diagram) and a Procedure. In Biology we found a Report of the life cycle of a plant, two Descriptions including one on photosynthesis (see Figure 2), and two Procedures on conducting research. In Chemistry we found a Description, a Procedure and an Explanation. In Physics we encountered three Explanations. The Arts subjects showed a Description (of interculturalism), a Procedure for drawing a self-portrait, and a Response to a work of art. The vocational subjects showed two Procedures (one for setting the table and one on commerce) and an Argument on parenting issues. And finally, the text for the subject Exercise, sports & society, from a textbook about taking care of sports injuries, appeared to be an Argument.

In general, we can conclude that factual genres are in majority: we have found 25 texts of factual genre, compared to 3 narrative and 10 evaluative texts. Within the factual genres, the Procedure (9 texts) and the Description (8 texts) are particularly common. You would expect Narrative texts in Dutch language education, but we have also encountered them in the social sciences, such as Geography. The fact that factual genres predominate in science and social subjects, is in line with the expectations. The evaluative genres are reflected in various subjects, particularly in Dutch language and Art subjects, where the Response genre occupies a special place.

Because of the limitations of the body of texts, this overview only offers a first impression of the distribution and use of genres in the subjects of secondary education. More research will specify and modify this impression.

Discussion

The careful analysis of oral and written texts from secondary education, in collaboration with subject matter experts, has led to the classification of nine genres, clustered in three genre families (see Table 1). In the context of Dutch secondary education, the genre-based approach of Systemic Functional Linguistics has also proven to be a useful tool for mapping the language of schooling. At first sight, this language of schooling is immensely varied; each school subject uses its own professional language, with a specific jargon and ways of verbal knowledge construction. For students, especially students from social groups where academic language is not often used, all this linguistic variation forms an enormous barrier, if not to say chaos; this leaves them with insufficient access to valuable knowledge or education success.

We feel that the genre-based approach to the language of schooling offers opportunities to tackle the negative effects of subject-based education systems. We see that, despite the large variation in specialised languages, there are also some clear constants. In all subjects, the language is characterised by a limited number of similar genres. In all subjects, the teacher and students use the language of schooling to describe, to explain, to argue, to recount. The nine genres that resulted from this small-scale study form an expression of the linguistic coherence in the curriculum.

We expect that explicit attention to genres will benefit education in all subjects. In order to achieve this, teachers should explicitly indicate the genre that is used at a certain point, both when a text is being discussed, and when students are given assignments. The knowledge of genres, both of their linguistic and subject-specific elements, offers teacher and students a powerful tool to decipher the meaning of subject texts.

The classification into nine genres is on the one hand based on what we have encountered in the body of texts, and on the other hand we were inspired by reports and formats in international literature. We want to conclude this article by directing further attention to a number of these sources of inspiration, in order to achieve a small international comparison (see Table 3).

Table 3. Genre classifications in four sources from four countries (shaded is category)

The Netherlands Van der Leeuw & Meestringa 2014	US Schleppegrell 2004	Sweden Olofsson 2010	Australia Rose & Martin 2012
Verhalende genres (Narrative genres)	Personal Genres	Personliga genrer (Personal genres)	Engaging
- Vertelling (Recount)	- Recount	- Återgivande (Interpretation)	- sequence of events
- Verhaal (Narrative)	- Narrative	- Berättande (Recount)	- not sequenced
Feitelijke genres (Factual genres)	Factual Genres	Faktagenrer (Factual genres)	Informing
- Verslag (Report)	- Report	- Beskrivande (Description)	- chronicles
- Beschrijving (Description)	- Procedure	- Instruerande (Instruction)	- explanations
- Procedure (Procedure)	Analytical Genres	Analytiska genrer (Analytical genres)	- reports
- Verklaring (Explanation)	- Account	- Redogörande (Response)	- procedural
Waarderende Genres (Evaluative genres)	- Explanation	- Förklarande (Explanation)	Evaluating
- Betoog (Argument)	- Exposition	- Argumenterande / Diskuterande (Argument / Discussion)	- arguments
- Beschouwing (Discussion)	Expository Essays		
- Respons (Response)			- text responses

In the US, Schleppegrell (2004, p. 83-88) arrives at a categorisation of seven *Genres of Schooling: two personal genres: Recount, Narrative; two factual genres: Procedure, Report; and three analytical genres: Account, Explanation, Exposition.* What we call narrative genres, she calls personal genres. It is remarkable that she classifies two of our factual genres (Account/ Description and Explanation/Statement) as analytical genres, along with the Argument genre. The evaluative genres Discussion and Response are missing in her overview, rather unassumingly titled 'Some Genres of Schooling'. Texts as argument, discussion and response are dealt with separately as Expository Essays (ibid, p. 88-111). Schleppegrell further distinguishes the genres in the specific subjects of Science and History (ibid, p. 115,

127), which we have left out of this table for clarity. This deals, for instance, with the science report and the historical explanation.

In Sweden, Olofsson (2010) more or less follows the Schleppegrell categorisation, where he merges Discussion/Diskuterande (from the Expository essays) with the Exposition/ Argumenterande. In the Netherlands the distinction between Discussion and Exposition is emphasised, because these genres are part of the curriculum Dutch language in the senior years of secondary education.

In Australia, Rose & Martin (2012, p. 128-132) give an overview of a total of 24 genres, divided into three families and eight genre subgroups. Table 3 shows the subgroups. They take the refinement that Schleppegrell introduces even further, e.g. by distinguishing sequential, conditional, factorial and consequential explanations. The classification into families that they propose, is similar to other formats presented here. They distinguish Engaging, Informing and Evaluating genres. What also attracts attention is that in the Engaging genres, the (personal) Recount and Narrative fall under the group 'sequence of events'; the news report is an example of a genre 'not sequenced in time'. In the Arguments, they make a distinction between the Expositions (supporting one point of view) and Discussions (discussing two or more points of view).

These genre classifications are broadly similar, for example in the division into families. The differences between the classifications reflect the fact that this genre approach arising from the SFL, is descriptive in nature. Depending on the circumstances and the need for detailing, the researchers make choices and come to a more or to a less extended classification. The differences can be explained and argued, and the classifications offer a basis for further analysis and research.

Martin & Rose (2008) conclude their basic introduction to the genre theory, underpinning what has come to be referred to as the 'Sydney School', with a chapter entitled 'Keep going with genre'. In it, they stress that there is obviously more than just the 'canvassed' overview of genres that they have offered. Chats and dinner table conversations, for example, can be in part analysed as a series of recounts and narratives, but the successive turns people take often serve mainly as a way to keep the conversation going. Those texts have a more serial nature, instead of the focused texts we are envisioning. Each context has its own requirements and can lead to other genres. Other cultures lead to other interpretations of genres, or to new genres. The descriptions on the basis of distinct stages in the text, as well as the linguistic means that are used to give meaning, offer the opportunity to engage in conversation about the similarities and differences, and arrive at custom-made categorisations. The classifications are not exclusive, normative, or prescriptive. They therefore do not inhibit the creativity, as some fear, but offer room to express that creativity.

In addition to the Sydney School (Johns et al., 2006), there are other genre theories, such as English for Specific Purposes (ESP, Swales, 1990; Bhatia, 1993), which focuses on the subject-specific content of the texts (what we would consider 'field'), the New Rhetoric perspective (e.g. Freedman, 1999) that emphasises the relationship between text and context, and the theory of Hyland (2005), which explores how the writer is positioned (stance) in relation to the subject and the reader (which falls under 'tone' in our analysis). These theories focus primarily on texts in (second language) education at colleges and universities, and are hardly useable for primary and secondary education.

Our choice for the Sydney School offers opportunities for continuing the work on genres to increase consistency in the curriculum of secondary education. To achieve more coherence between the subjects (horizontal) and across the years (vertical), we need more research into the use of genres in the different subjects at school. A more thorough knowledge of the use of subject languages by students can lead to better learning lines for the teacher. Furthermore, insight into the objectives of texts and the linguistic tools that are used to realise them, will offer teachers and students the necessary tools to take a critical look at texts and to create new, good texts.

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