



Spotlighting pedagogic metalanguage in Reading to Learn – How teachers build legitimate knowledge during tutorial sessions

Anna Maria Hipkiss^{a,*}, Pernilla Andersson Varga^b

^a Department of Pedagogical, Curricular and Professional Studies, University of Gothenburg, Box 300, SE-405 30 Gothenburg, Sweden

^b Centre for School Development, Box 5428, SE-402 29 Göteborg, Sweden

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ABSTRACT

This paper presents an analysis of professional metalanguage and is a contribution to the discussion of professional development in literacy teaching. By analysing tutorial sessions within a professional development programme, we investigate how teachers and experts leading the professional development programme, negotiate the new literacy metalanguage that is to be built and appropriated during the PD programme. LCT (Legitimation Code Theory), in particular the dimension of Semantics, has been used for analysing and visualising the negotiations and signs of development of the new metalanguage.

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1. Introduction

Since 2013, the Centre for School Development in Gothenburg, Sweden has run the literacy programme Reading to Learn (R2L) as a professional development programme (PDP), primarily in struggling secondary schools with a high number of underachieving students. The purpose of the R2L professional development programme is to increase school attainment and further develop teachers' pedagogical skills in order to more explicitly and thereby more successfully teach students with bilingual background and/or low socio-economic status (Rose & Martin, 2012). R2L pedagogy draws on Michael Halliday's Systemic Functional Linguistics, (hereafter SFL), Basil Bernstein's theory of pedagogic discourse, and Lev Vygotsky's theories of scaffolding and zone of proximal development. R2L has been described as the third phase of genre pedagogy and has become a comprehensive methodology and training programme which has been developed over ten years with teachers of primary, secondary and tertiary students across Australia and internationally (Rose, to appear-a, to appear-b; Rose & Martin, 2012). The overarching purpose of R2L is to decrease the gap between high and low achievers by developing the teaching to more effectively meet the literacy requirements of all subjects in the curriculum (Rose & Martin, 2012) or as Rose (to appear-a, p. 3) puts it: “..the

social goal of genre pedagogy is redistribution of semiotic and hence economic resources to less advantaged groups, a general recontextualising principle is to aim for equality in educational outcomes”.

The R2L literacy programme consists of workshops that apply both theoretical and practical aspects of the programme, spread over one or two years. In addition to the workshops, the PDP includes tutorial sessions, where teachers, individually or in pairs, meet with a R2L expert to discuss their understanding of the R2L pedagogy (which includes an understanding of R2L metalanguage) and how to implement the pedagogy into their own teaching context. The R2L experts are experienced as teachers as well as R2L instructors.

It has been suggested (Chen & Myhill, 2016; Rose, to appear-b) that building a professional metalanguage is a prerequisite for explicit teaching, i.e. a professional metalanguage helps to make teaching procedures visible. Timperley, Wilson, Barrar, and Fung (2007, p. 153) claim that factors like teachers' understanding of underlying theories and principles, and the opportunities they are given to translate these into their own contexts, are crucial when it comes to making PD work. The overall objective of this study is therefore to make visible the role that metalanguage plays when teachers build knowledge of R2L pedagogy during the tutorial sessions. The research questions are:

- What constitutes the expert's and the teacher's metalanguage, respectively, in the sessions?
- What differences are there in the expert's scaffolding between teachers in year 1 and 2?

* Corresponding author.

E-mail addresses: anna.maria.hipkiss@gu.se (A.M. Hipkiss), pernilla.andersson.varga@educ.goteborg.se (P.A. Varga).

To investigate this, we will make use of the theoretical and analytical framework of Legitimation Code Theory (LCT) and the dimension of Semantics in particular (Maton, 2013, 2014a). The dimension of Semantics (Maton, 2014a) brings an analytical lens to interaction which focuses on aspects of complexity of knowledge and context-dependence which, in turn, helps in illuminating the negotiations of metalanguage.

1.1. Appropriating metalanguage

Learning to teach according to the R2L pedagogy is about building an understanding of the procedures of how to explicitly teach reading and writing by acquiring and using a specific metalanguage which is twofold: curriculum genres and knowledge genres. At the same time, it is also about building a theoretical understanding of the foundational ideas of Systemic Functional Linguistics (Halliday & Mathiessen, 2004) as they have been applied in R2L. Without such a theoretical understanding, there is a risk that the knowledge will remain horizontal, context dependent and non-transferable (see also Timperley et al., 2007).

Appropriating a metalanguage will help in understanding the theory and its practical application (Wells, 2007). When acquiring a metalanguage, Matre and Solheim (2016:92) suggest that one moves along a continuum, from an instrumental to a functional approach, in order to gradually internalise theory and practice. The ability to use an advanced metalanguage becomes a critical aspect when aiming for a deeper understanding of the R2L pedagogy and its practical applications. In this process, the R2L expert becomes an important resource for teachers in building the theoretical understanding needed in order to develop a “self-regulatory” evaluative approach in their teaching practice (Timperley et al., 2007). Teachers’ theoretical understanding, as well as their pedagogic metalanguage, is linked to the success of their students. Myhill, Jones, Lines, and Watson (2012) show that students’ proficiency in writing is linked to their understanding of linguistic metalanguage as well as teachers’ proficiency in linguistic metalanguage. Also, when reasoning collectively, as in teacher-led classroom dialogues, or, as in this study, in expert-led dialogues, the social activity of interacting (the *intermental*) improves the individual development (the *intramental*) (Mercer, 2002, p. 1417). In Mercer’s example of teacher-led dialogues, students improved their reasoning skills through the use of exploratory talk (Mercer, 2002), characterised by critical and constructive engagement with each other’s ideas. Also, Chen and Myhill (2016) suggest that metalinguistic understanding is recognised as an ability to verbalise metatalk and metalinguistic discussion, making the study of these tutorial sessions an interesting addition to the studies of metalinguistic development through collective reasoning.

2. Theoretical framework

We draw on the theoretical framework of Legitimation Code Theory (LCT). This paper focuses on the dimension of Semantics and how semantic waves, movement between degrees of semantic density and semantic gravity, can play a part in building legitimate knowledge (Maton, 2014a), in this case the knowledge of R2L pedagogy, both theoretical and practical.

2.1. The dimension of Semantics

Semantics is a dimension of LCT that explores different practices whose organising principles are given by semantic codes, which in turn are generated by strengths of semantic gravity and semantic density. Semantic density and semantic gravity are independent of one another and are realised on a continuum between weaker and stronger (Maton, 2014a).

Semantic gravity relates to degrees of *context-dependence*; the stronger the semantic gravity the more meaning is dependent on the context, such as during lab work in a classroom, where students only need to use demonstrative pronouns to communicate which sample to use. The weaker the semantic gravity, the less meaning is dependent on the context, such as in a textbook describing a general protocol for lab work.

Semantic density, on the other hand, relates to *degrees of complexity*, as in the amount of meaning that can be condensed within symbols or text (Maton, 2014a, 2014b), such as terms, concepts and expressions. These meanings are further related to different sociocultural practices, which can be illustrated by the concept *democracy* (see also Meidell Sigsgaard, 2015). The condensation of the meaning of democracy in a course book for upper secondary school provides stronger semantic density than, for example, practising democracy in a classroom meeting in primary school, where meanings of democracy can relate to fairness and a majority vote. The students reading a textbook in upper secondary school, on the other hand, will understand that democracy has many more meanings.

Vygotsky suggested that scientific concepts grow downward through everyday concepts and vice versa (Wells, 2007). This development entails two processes: generalisation and systematisation and also result in a metalinguistic awareness (Wells, 1999). Generalisation occurs on both a vertical and a horizontal dimension, relating to degrees of abstraction and connections to other concepts (compare with semantic gravity and density above). All concepts are generalised, but in school, the process of systematisation is introduced to the learning of concepts. Following this explicit teaching of concepts, the spontaneous generalisations of everyday concepts become systematised as well (Wells, 1999).

In teaching, the theory of Semantics can be illustrated by the textbook, which has stronger semantic density in its subject-specific and academic terminology and language use. In classroom interaction, teachers unpack the textbook contents, realising weaker semantic density by means of concrete examples and less specialised and technical language, i.e. horizontal discourse (Hipkiss, 2014; Macnaught, Maton, Martin, & Matruggio, 2013; Maton, 2013; Matruggio, Maton, & Martin, 2013). Translated into LCT terminology, this means that teachers scaffold students from the direct experiences, i.e. stronger semantic gravity and weaker semantic density, to generalised understanding, i.e. stronger semantic density and weaker semantic gravity.

2.2. The semantic plane

The semantic plane (Fig. 1 below) illustrates the relationship between the two factors and their respective codes. The semantic codes relate to strength and weakness of semantic gravity and semantic density, and can be varied independently to generate semantic codes (Maton, 2014a; Maton, Hood, & Shay, 2016):

- rhizomatic codes (SG–, SD+), context-independent and complex stances
- prosaic codes (SG+, SD–), context-dependent and simple stances
- rarefied codes (SG–, SD+), context-independent stances with fewer meanings
- worldly codes (SG+, SD+), context-dependent and manifold meanings

The semantic codes are illustrated on the semantic plane as showed in Fig. 1 below. What appears in each corner of the quadrant of the plane thus varies depending on the focus of study, the sociocultural context. For example, in the top right-hand corner we find a rhizomatic code generated by weaker semantic gravity and stronger semantic density (SG–, SD+), as for example the concept

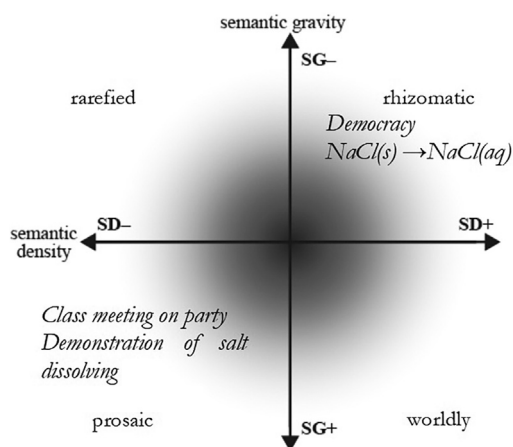


Fig. 1. The semantic plane (based on Blackie, 2014; Maton et al., 2016; Meidell Sigsgaard, 2015).

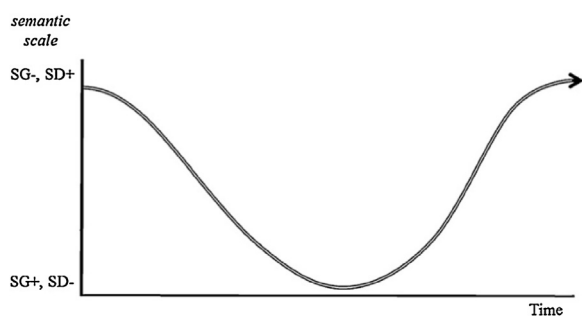


Fig. 2. An example of a semantic wave (Matruglio et al., 2013:40).

of *democracy* in the school subject social studies (Meidell Sigsgaard, 2015). And in chemistry, an example of SG-, SD+ can be an equation such as $NaCl(s) \rightarrow NaCl(aq)$ (Blackie, 2014). In the opposite quadrant, lower left, we would find the prosaic code (SG+, SD-), the everyday and context-embedded class meeting to decide on a school party (Meidell Sigsgaard, 2015) or a demonstration of mixing salt into water until it dissolves (Blackie, 2014).

2.3. Semantic waves and profiles

The movement between stronger and weaker semantic gravity, as well as movement between stronger and weaker semantic density, is in LCT terminology also referred to as a semantic wave (Maton, 2014a). Semantic profiles of these waves can be used as an illustration as to how interaction (e.g. in the classroom between teachers and students) or printed texts develop over time. The illustration in Fig. 2 below is an example of a semantic wave. It is suggested that generating semantic waves, by moving up and down the semantic wave, upshifting and downshifting (Maton, 2014b) academic contents and language, is important for cumulative knowledge building (Maton & Doran, 2017).

Studies of classroom interaction, both over a course of lessons and individual lessons (e.g. Hipkiss, 2014; Macnaught et al., 2013;

Martin, 2013; Maton, 2013) suggest that teachers unpacking the technical language is essential in order to make the required knowledge concrete and horizontal (SG+, SD-). However, in these studies, repacking of the same technical language and learning the reading and writing the required language for displaying knowledge was left to the students to manage on their own, or it was assumed that this knowledge had already been acquired (cf. also Martin, 2013:33; Andersson Varga, 2014). This lack of re-packing of language (e.g. vocabulary, sentence structure and text structure) has consequences for the building of cumulative knowledge (Maton, 2014a; Maton & Doran, 2017).

3. Data/material

The R2L literacy programme consists of workshops and tutorial sessions, where teachers, individually or in pairs, meet with a R2L expert to discuss their understanding of the R2L pedagogy and how to implement the pedagogy in their own teaching context. The layout of the workshops and tutoring sessions of the PDP are illustrated in Fig. 3 below. Year 1 consists of four two-day-long workshops and two individual tutoring sessions. During year 2, teachers participate in four one-day workshops and are afforded two individual tutoring sessions. These tutorial sessions form the basis for this study.

Out of 15 recorded tutorial sessions with 23 teachers (henceforth R2L novices or novices), two were selected and transcribed for further analysis: one from year 1, with one R2L expert and two R2L novices, and one from year 2, with one R2L expert and one R2L novice. These two sessions were selected on the basis that they were typical examples of dialogues between experts and novices which focused on R2L pedagogy. The sessions took place in December 2015 and were held in Swedish. The sessions were recorded and transcribed and then translated into English.

The expert has comprehensive teaching experience of the R2L pedagogy and has been an instructor in the PDP for seven years together with an even more experienced expert colleague. Two of the R2L novices are attending the PDP for their first year in term one, and one is attending the PDP for the second year in term three. The teachers were asked to bring some kind of teaching material to the sessions: lessons plans, extracts from textbooks that they have used or plan to use or an audio/video recorded sequence from a lesson where they have applied the R2L pedagogy. The expert brings printed illustrations of *the map of genres* and *the teaching/learning cycle* (see below), which both experts and novices integrate into the sessions. There is also other R2L material at hand, which participants refer to during sessions.

3.1. Reading to Learn metalanguage

A cornerstone of R2L is teaching about language and through language (Rose, to appear-a; Rose & Martin, 2012). Therefore teachers need to build a metalanguage for text selection and analysis, for lesson planning and assessment and for preparing all students in their classes to successfully identify elements to help comprehension and discover linguistic patterns in texts (Rose, to appear-b). A trained R2L teacher uses common shared texts to teach reading and writing to whole classes. R2L pedagogic metalanguage is informed

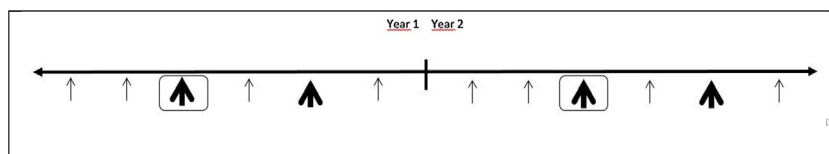


Fig. 3. The PD programme workshops and tutorial sessions. Bold arrows = tutorials. Boxed, bold arrows = tutorials analysed. Narrow arrows = workshops. The two tutoring sessions marked in Fig. 3 are the ones that are presented in this study.

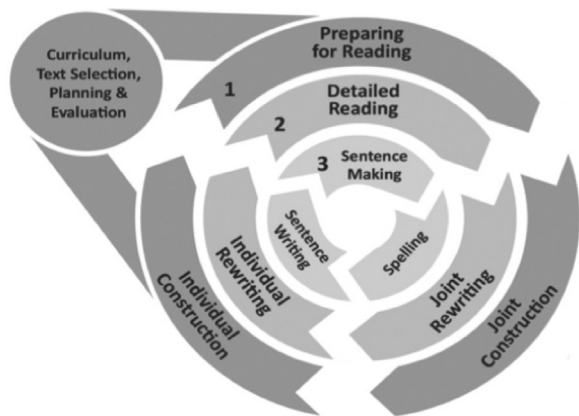


Fig. 4. R2L curriculum genres as teaching/learning cycle (Rose, 2010).

by SFL descriptions of language and learning in social contexts. The metalanguage is, however, recontextualised, reducing the density of technical field (SFL) and grounding it in familiar contexts (classroom teaching), from the context of linguistic and educational research to the context of classroom teaching and teacher education (Rose, to appear-a).

R2L pedagogic metalanguage consists of two sets of metalanguages: one concerning *curriculum genres* in which teachers and students are engaged during classroom work and the other one concerning *knowledge genres*, which relate to the characteristics of texts used in the classroom for reading and writing (Rose, to appear-a, to appear-b).

3.1.1. Curriculum genres

The curriculum genres are designed to emphasise learning as a social activity in the classroom, guided by expert teachers (Martin & Rose, 2013, p. 24). There are five main curriculum genres: *preparing for reading*, *detailed reading*, *intensive strategies*, *joint rewriting* and *joint construction* (Rose, to appear-a, p. 12). The teaching/learning cycle provides three levels of support (Fig. 4).

The external circle relates directly to the teaching contexts of curriculum, text selection, lesson planning and evaluation. According to the R2L pedagogy, the curriculum is mainly taught through reading and writing and therefore the selection of texts is an important starting point (Rose & Martin, 2012). The texts selected for reading must then be analysed in order to plan reading lessons for the intended group of students. Similarly, school genres for the students' writing must be selected and analysed when evaluating

learning through writing. Depending on the text and student group, the teacher also plans which levels of support in the teaching and learning cycle are applicable.

3.1.2. Knowledge genres

The other set of metalanguage concerns knowledge about language (KAL), which teachers need to gradually acquire to enable them to explicitly teach reading and writing according to the R2L pedagogy and in the long run understand some of the theoretical foundations of the R2L pedagogy based in Systemic Functional Linguistics. The metalanguage of knowledge genres "is formed by linguistic analysis, but is shaped by pedagogic application" (Rose, to appear-b, p. 5), meaning that teachers are required to understand and be able to apply the taxonomy of, for example, *the knowledge genres for teachers (map of genres)* (Fig. 5) in order to learn to identify the various school genres (types of texts students read and write at school), and to label their *stages* and *phases*. KAL in R2L pedagogy entails much more than the map of genres (Fig. 5 below), though, such as grammar and discourse semantics. In the analyses of the studied tutorials, the map of genres and the teaching and learning cycle were foregrounded and are therefore selected for inclusion here.

3.2. Analysing metalanguage

Transcriptions of the tutoring sessions were analysed using semantic gravity and semantic density as illustrated in the four fields of the semantic plane (Maton, 2014b:131) and then transferred into a graph illustrating the semantic profiles that were constructed in the session.

As a starting point, in the present study, the pedagogic metalanguage of R2L knowledge genres and curriculum genres is seen as an "ideal" metalanguage that is to be appropriated by novices and thus ought to belong to the top right quadrant, the rhizomatic code, (SG-, SD+), as it has abstract meanings and uses technical language. Consequently, the analyses started out with identifying communicative turns relating to specific contents and abstractions of the R2L pedagogy, both concerning knowledge genres and curriculum genres (Rose, to appear-a, to appear-b; Rose & Martin, 2012). See Sections 3.1.1 and 3.1.2 for recap of knowledge genres and curriculum genres.

In the process, "general literacy metalanguage" was identified and added to the analyses, as it played a part in expert-novice negotiations. Here, general literacy metalanguage was placed in the top left quadrant, the rarefied code, (SG-, SD-), having abstract meanings but using everyday language. To explain further, we see

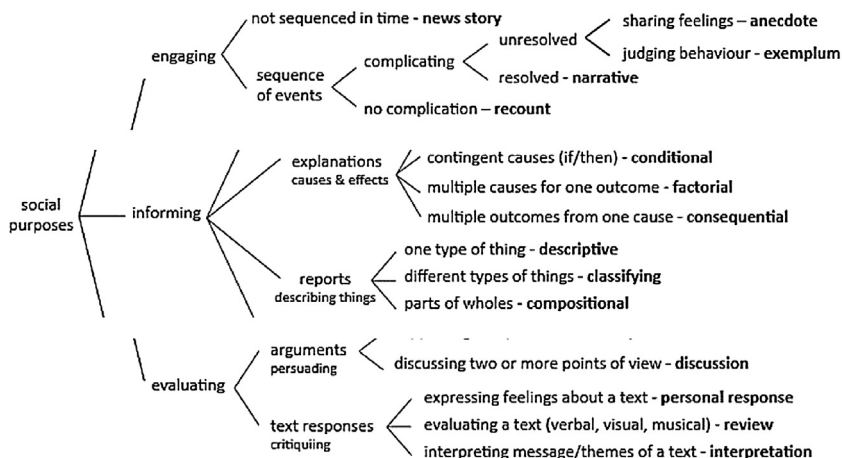


Fig. 5. A typology of knowledge genres for teachers (Rose, to appear-b, p. 12) [selection]. From the left, the genre system network is to be read as follows: social purpose of text, how the specific genre is constructed, and to the very right: the name of the school text genre in bold letters.

general literacy metalanguage, in the context of this study as an already appropriated metalanguage. Consequently, general literacy metalanguage is considered to have everyday meaning to these relatively experienced teachers in the study and to be less complex (when they began their teacher training many years ago, general literacy metalanguage would have been the “ideal” metalanguage to be appropriated). The reason for this distinction is to make visible the challenges of appropriating a new metalanguage (R2L) which carries new and complex meanings within the terminology. We have opted to assign R2L metalanguage stronger semantic gravity (SG+) when its use is dependent on artefacts or the expert’s prior turns. We suggest that this makes the use more context dependent, thus the worldly code, (SG+, SD+). And finally, interaction relating to the context of the tutorial session or general interaction was positioned in the bottom left quadrant, as these turns were not abstract in meaning and used everyday language, the prosaic code, (SG+, SD–). Everyday language, the prosaic code, has not been included in the analyses.

4. Results

Below, two extracts from the tutoring sessions are presented in which we can follow the negotiation of metalanguage relating

have worked together to some extent with planning R2L lessons. They have been requested by the expert to try working according to the pedagogy by trying out curriculum genres from the teaching/learning cycle. The teachers presented experiences from teaching applying R2L pedagogy in both subjects. The session lasted for 56 min.

The excerpt below is an example of how experts and novices negotiate the understanding of one of the key concepts of Reading to Learn – how to identify a genre which is part of R2L knowledge genres. During the session, the conversation was complemented with different artefacts that are part of the PDP, such as printed copies of the *map of genres* and the *teaching/learning cycle* (see images above).

The excerpt from the negotiation between the expert and the novices in year one has been divided into three parts. This first excerpt is from the early stages of the session when the teachers present a “factual text” that they have worked with about a rune stone and the expert asks them what they mean by “a factual text”.

The beginning of the negotiation starts out in classroom work that Novice 2 (N²) has carried out working with a textbook text about a rune stone in the north of Sweden.

<p>Excerpt 1: Part 1/3. R2L novices (N¹, N²) year 1 and R2L expert (E) Bold: R2L pedagogic metalanguage: R2L knowledge genres (rkg) R2L curriculum genres (rcg) Bold + underlined: general literacy metalanguage (glm)</p>	<p>rkg rcg glm</p>
<p>N²16: We start easy to get the structure, and then we began with this, a factual text about the Frösö stone. And then I read it with the students and then we had key questions, what, who, why. E26: And when you say factual text, what do you mean? N²17: Just that I mean simply an explanatory, yes .. good question .. what text is it really (ha ha ha) it's not an instructional it's an explanatory text yes or historical text, you can also say .. that Frösö stone is well actually .. nah an, explanatory text, I would say E27: Are there connections? N²18: Ah yes.. E28: If you think that the Frösö stone is a stone <i>because</i> ... or N²19: A sequence of events, I would just say. It's a little story about this stone .. so huh <i>the Storsjö monster</i> is stuck in the stone .. uh .. etc. N¹23: Yes, but it is an explanation for why they have erected it... N²20: Mm that's right N¹24: And that's where the difference is from other rune stones that were erected to mark .. N²21: Mm</p>	<p>glm glm glm rkg rkg , rkg glm rkg glm/rkg (our italics) rkg, glm rkg</p>

Excerpt 1: Part 1/3. Novices in year 1.

to general teacher metalanguage, R2L curriculum genres and R2L knowledge genres. The analyses show differences between the two tutorials in regard to metalanguage, which are illuminated through the analytical tools of the semantic plane and semantic waves.

4.1. R2L novices year 1

This first excerpt is from a tutoring session with the R2L expert and two R2L novices from year one. The novices have thus far taken part in two workshops led by the experts. They have also engaged in R2L classroom work locally at their school. Both teachers are in their early thirties and teach English and Swedish in a natural sciences programme in upper-secondary school and

The text the novice brought is presented as a *factual text* (N²16) and quite quickly the novice is requested to elaborate on the choice of *factual text* (E26). Both novices look at the text and the map of genres, and negotiation ensues.

Novice 2 suggests the text is either *explanatory* or *historical* before receiving leading questions from the expert (E27, E28); “are there **connections**?” and “if you think that the Frösö stone is a stone *because..* or”. Both of these turns from the expert specify aspects of the genre to help the novice decide whether it is explanatory or not. Novice 1 gets involved with additional suggestions and the two novices have a discussion. They come to some sort of conclusion that the text is explanatory (N²21).

The negotiation is then led on by the expert who adds her analyses of the text (E29) as being a *descriptive report*. This starts new

negotiations between the novices, again using the map of genres in the process.

E29: Though I'd probably rather say that this is a descriptive report	rkg
N ² 22: A descriptive report	rkg
E30: Because it answers the question "what is the Frösö rune stone" but then there are some sequences in here .. now I have	rcg
N ¹ 25: Yes there is some explanation	rkg
N ² 23: Mm	
E31: What you have done with it maybe	
N ¹ 26: Mm yes it's true	
E32: Uh ..	
N ² 24: Mm description of an item, description is, yes it's report	rkg, rkg, rkg
E33: Yes I would	
N ¹ 27: Yes, but with some explanatory elements	rkg
E34: Yes because you have to remember that a text has an overarching objective	rkg
N ² 25: Yes	
E35: But it can also have multiple objectives so it can of course be, it depends on how you now describe this stone what aspects are important here and that can be something in some part that contains some little explanation of something like that .. it was erected because of something	rkg
N ² 26: Mm	
E36: I do not know about the entire text .. I would say that it has been written so that we can know what the Frösö rune stone is	rcg
N ² 27: Mm	
E37: If you think about the question what, it often leads to descriptions	rcg
N ² 28: Mm	
E38: But if you ask the question how or why, it leads to explanations ..	rcg
N ² 29: Yes, right	
E39: So you can also consider	
N ² 30: Mm	
N ¹ 28: Then it must surely be an explanatory	rkg
N ² 31: Explanatory	
N ¹ 29: Unlike the one??	
N ² 32: Yes exactly that for this it is more a sequence of events	rkg
N ¹ 30: Indeed	
N ² 33: But of course also some kind of historical	rkg

Excerpt 1: Part 2/3. Novices in year 1.

N² comes to a conclusion with some certainty; “mm description of an item, description is, yes it's report” (N²24), but N¹ is not as convinced so she adds “yes but with some explanatory elements” (N¹27). The novices are reminded that texts have a main social purpose (E34) and that there are examples of texts with parts that might belong to other genres. The expert presents the novices with an explanation for why she suggests that the text is a descriptive report – that the social purpose is to inform the reader **what** the rune stone is (E37). She then provides the novices with questions to ask about a text to find its purpose (E37 and E38). This leads the novices to return to the text and the typology of knowledge

genres and their negotiations start again. This time, other genres are suggested with reference to the map of genres and how the text is structured (N¹28–N²33). The negotiation that takes place illustrates well how difficult the novices find it to agree on genre and the expert calls for a pause in the negotiations and returns to the key understanding of R2L genres and genres as being staged, goal-oriented social processes (E40) and why this knowledge is important in the R2L pedagogy.

In part three, negotiation continues, with the expert adding the perspective of needing to know the genre in order to plan the practical work in the classroom.

E40: Yes, it can of course also huh. But we can wait a little with it, and then one can ask why it is important to know that in detail	glm
N ² 34: Mm	
E41: .. And it helps us of course when we will implement preparation for reading	rcg
N ² 35: Yes	
E42: So that I do not really know what you said then	
N ² 36: Nooo, and quite frankly so .. I feel that I'm still learning this	
E43: Yes	
N ² 37: So huh	
E44: And that is the point of this, that we remind you	
N ² 38: Yeah so it's great that I feel it is terrible to say it, but you get to recognise it as sometimes they say what kind of text , but they forget to go into that in detail	glm
E45: Yeah and you do not go into a lot of detail, but	
N ² 39: Nah	
E46: It is enough after all that, but talking about now we will read a text about Frösö rune stone to know what text it is	glm
N ² 40: Yes something like that, I think I said,	
E47: So the text will describe what Frösö rune stone is, more you don't need to say	rcg
N ² 41: Nah	
E48: And you certainly did something similar	
N ² 42: Something like that but I think I	
E49: But my question now because you said you read a factual text	glm
N ² 43: Mm	
E50: And if you say that because you can say that, as a teacher, that we're going to read a factual text but then we're, then there are lots of alternatives and to give the students a better idea of which, and sort of narrow it down a bit and not have all these to choose from, we try to go in and look at the text beforehand and see, is it an explanation or is it a description or is it a historical narrative ?	glm rkg rkg, rkg

Excerpt 1: Part 3/3. Novices in year 1.

The expert yet again picks up on their uncertainties and argues for the need for knowing how to identify the genre (E40) and relates it to the curriculum genre of preparation for reading (E41). At this point, the novices express their lack of knowledge of what preparation for reading is and the expert assures them that that is part of the PDP project of learning the R2L pedagogy (E44). The closing of the negotiation about the genre of the rune stone text is a summary by the expert (E50) that goes from an everyday understanding of introducing texts to students (“read a factual text”) to an argument as to why teachers need to be more specific (“to narrow it down”) and to be able to look at a text and identify its social purpose (“is it an explanation or is it a description. . .”).

The novices' and the expert's turns have been placed in the semantic plane (Fig. 6 below) according to the established analytical standpoints (see Section 3.1 above).

We can see that much interaction can be positioned in the lower right quadrant, a worldly code, where the novices negotiate the social purpose of the rune stone text with the help of the map of genres and cues from the expert. Their R2L metalanguage is dependent on the artefacts and the expert. The few examples of interaction as rhizomatic code, placed in the upper right quadrant, are dominated by the expert and relate to the key understanding of genres as being staged and goal-oriented and having a social purpose. The novices have yet to master the social purpose before analysing the stages, but in the exchanges, they make use of the map of genres to help identify the genre by discussing their classifications.

Over time, with the help of the semantic profile (Fig. 7 below), we can see the development of the negotiation over which genre the rune stone text is. Starting out from a general literacy metalanguage and understanding of text types (16N²), the negotiation ends, for this session, on the borderline between the target language of R2L metalanguage and a description of the “practical use” of the metalanguage in a concrete situation (E46–E50).

The semantic profile also illustrates how the expert in this exchange realises more abstract and technical language, as the expert has already appropriated the R2L metalanguage. The novices are on their way, but are “restricted” to the use of R2L terminology in a concrete situation where, to some extent, they repeat the expert's suggestions or read out loud from the map of genres as part of their negotiations.

4.2. R2L novice year 2

Excerpt 2 is from a 54-minute-long tutoring session with the R2L expert and a R2L novice participating in the PDP in year two. The novice is an experienced teacher, teaching Swedish and art at a secondary school. She had thus far taken part in six workshops and this was her third individual tutoring session. She had brought to the tutorial a copy of Shaun Tan's graphic story *The Arrival*, which she had used during art classes. In turns E1–E6, the novice relates that she and her students had read aloud and interpreted the graphic

text, picture by picture, and then transformed the graphic text into written text.

<p>Excerpt 2: Part 1/3: R2L novice (N) year 2 and R2L expert (E) Bold: R2L pedagogic metalanguage Bold + underlined: general pedagogic metalanguage</p>	<p>rkg = R2L knowledge genres rcg = R2L curriculum genres, glm = general literacy metalanguage</p>
<p>N1: Yes...what I've been doing this term... I've been working with...I sat and had a think about what different text types I've been working with when I've worked with the whole process E2: ...Yes N2: From preparing for reading to joint construction... Then I've been working with an anecdote, in two different ways, one could say...worked with this "Molly and Gracie" text E3: What grade do you teach? N3: Year 6 and 9...worked with the same text in year 6 and 9...so we did joint construction and then they did individual construction ...then the second anecdote, it was in fact an illustrated story...it was actually really funny...we did it in parallel, you could say, and I did it without thinking that I was doing R2L... E4: ...Then you've started to think...it becomes automatic... N4: ...Because I did this (pointing at and showing her material) during the art lessons, then I sort of realised that I've done preparing for reading on this (showing the illustrated story)...then we read it like systematically, looking at...in this case picture by picture, describing... E5: ...You emphasised the meaning of the picture N5: ...Exactly...then after having done that...it the first chapter in the book...We did a joint construction into a text... E6: ...OK, so you swapped medium...</p>	<p>glm rcg rcg, rcg rkg rcg, rcg rkg, glm rcg rcg glm rkg rcg glm</p>

Excerpt 2: Part 1/3: Novice year 2.

The first part of the excerpt (E1–E6) shows us that the novice dominates the dialogue, using general literacy metalanguage as well as R2L pedagogic metalanguage, both the curriculum genres and knowledge genres, quite independently. The expert supports the novice by confirming and encouraging. In turn E5 though, the expert scaffolds the novice's understanding of the essence of genre pedagogy/R2L "*the meaning* [our italics] of the picture" – that the purpose of language is to communicate meaning and that all texts or utterances have an overarching social purpose.

The second part of Excerpt 2 is a short passage where the expert comes back to emphasising language/texts as meaning-making systems:

<p>N16... I was thinking about what is a text, the widened concept of text...I feel like I'm starting to get a grip of... I work 'naturally' when teaching...including when teaching art...if you consider the widened concept of texts, then a picture is also a kind of text...</p>	<p>glm glm glm</p>
<p>E17: ...Everything, there are different meaning-making systems we use to communicate various meanings and sometimes we do it orally, sometimes via written language, on other occasions through pictures...or music, films so there are lots of different ways to create meaning – you could see them all as a unit...they look different and we use them on different occasions, maybe with different purposes...</p>	<p>rkg rkg rkg</p>

Excerpt 2: Part 2/3: Novice year 2.

Here the novice elaborates on the idea of the widened concept of text, using general metalanguage. Again, in E17, the expert returns to the foundational and highly abstract (SG–, SD+) idea of genre pedagogy and R2L that all texts are "meaning-making systems we use to communicate various meanings". The expert unpacks "meaning-making systems" by becoming more concrete and states that "there are lots of different ways to create meaning...//... they [texts] look different and we use them on different occasions, maybe with different purposes. . ."

In the third part of Excerpt 2, the novice discusses her teaching of a sequence of a text deriving from a textbook in social science:

N26: I've got some more questions that I would like to discuss....	
E25: Ok, let's take them now....	
N27: Something that I've found interesting to do together with the students here... unfortunately I didn't have the opportunity <u>to work across the curriculum</u> with the social science teacher...so I sort of included social science in the Swedish curriculum you could say...feel like it is important to study textbook texts together with the students...it sort of was connected to the <u>message</u> in "Molly and Gracie"	glm glm glm glm
E26: Did you study the whole book or just that <u>sequence</u> ..?	
N28: Just that sequence ...the <u>theme</u> for our working area was human rights...	
E28: ...really suitable...	
N29: ...Then we studied a textbook text relating to United Nations and human rights... this is a <u>typical text from a textbook</u> ... <u>a multimodal text</u> ...what it looks like with <u>short paragraphs</u> , each <u>paragraph</u> has a <u>title</u> , some words in <u>bold letters</u> , and there are synonyms explained with other words...there are <u>boxes with facts</u> and questions... <u>quotations in the margin</u> and various pictures and how one should...what is actually <u>the meaning-making information</u> in this text and it was like a chapter we studied...and so...to <u>identify the different text types</u> and when we read...it took quite a lot of time...they could see when we were doing it all together, we read <u>paragraph by paragraph</u> , and looked at <u>text types</u> , get them to really	glm,glm glm, glm gml gml,glm rkg rkg, glm rcg, glm rkg rkg, rkg rkg
E28: ... <u>What was the purpose</u> ...?	
N30: ... <u>Purpose</u> ?...they could <u>identify</u> that 80% was a <u>descriptive report</u> , the rest was an <u>argumentative text</u> ...	rkg rkg
E29:...Eh...ok?	rkg
N31: There was a lot of <u>appraisal</u> ...wealthy nations ought to give more and that you must understand that you ought to cooperate...a whole <u>paragraph</u> in the middle of...	glm
E30:...This can happen in those kind of texts... appeals about how we are supposed to relate to certain issues...how we ought to do...it's interesting that there was so much of...and no <u>explanations</u> ?	rkg
N32: ...Eh, to...?	rkg
E31:...I think that... 80% of the text was <u>descriptive report</u> and that's not very strange but what surprises me a bit is that there were no <u>explanations</u> ...But there don't have to be any...so you can think forward – what are the requirements later? Are they [the students] supposed to be able to <u>explain</u> anything in the subject area?... no <u>model text</u> in the chapter?...how did the students react when you were studying the text?	rkg rkg, rkg
N33: They were very...critical of the text in the <u>textbook</u> ...and to the United Nations...seemed like the United Nations is the solution to everything.	gml

Excerpt 2: Part 3/3: Novice year 2.

In turns N29–N30, the novice unpacks another concept – the multimodal text – using general literacy metalanguage as well as R2L metalanguage. What is striking is that she picks up and rephrases the expert's explanations from the first and second part of the excerpt, in turn E17. The novice uses the formulation "*meaning-making* [our italics] information in this text". This indicates a certain independence and confidence in the use of R2L metalanguage. At the same time, the turns E28–E31 illustrate that the abstract notion of all texts having a main purpose which determines the genre of the text is not yet fully internalised in the novice's mind. She talks about "text types" (N29) rather than genre, and gets a bit uncertain when asked to define the genre of the text sequence: "80% was a descriptive report, the rest was an argumentative text" (N30). The novice and the expert negotiate the genre, and the expert suggests that the genre was possibly an explanation, and elaborates on the fact that textbooks are often characterised by macro-genre texts (Rose & Martin, 2012), which makes it harder to define a main purpose, and therefore to determine the genre of a specific text, or sequence of a text.

As shown in the semantic plane below (Fig. 8), there is a substantial amount of metalanguage in the dialogue between the novice and the expert, R2L metalanguage as well as general literacy metalanguage. The novice moves in the three quadrants of the semantic plane, which were part of the analyses, the rarefied, worldly and rhizomatic codes. The novice shows signs of having built legitimate knowledge of R2L pedagogy by moving in the top left quadrant and the bottom right quadrant, and therefore the expert can 'stay in the background' to a large extent, and her comments tend to be confirming or/and encouraging. However, it becomes evident that the novice of year 2 has not yet built solid legitimate knowledge of one of the essences of genre pedagogy: texts as meaning-making systems. Twice, in part 1 and 2 of the excerpt, the expert addresses the issue by unpacking and repacking the notion of texts as *meaning-making* systems. In the third extract, the novice herself uses the concept of meaning-making system, but still has problems with internalising a fundamental aspect of this concept, i.e. that all texts have a main purpose which must be displayed to the students.

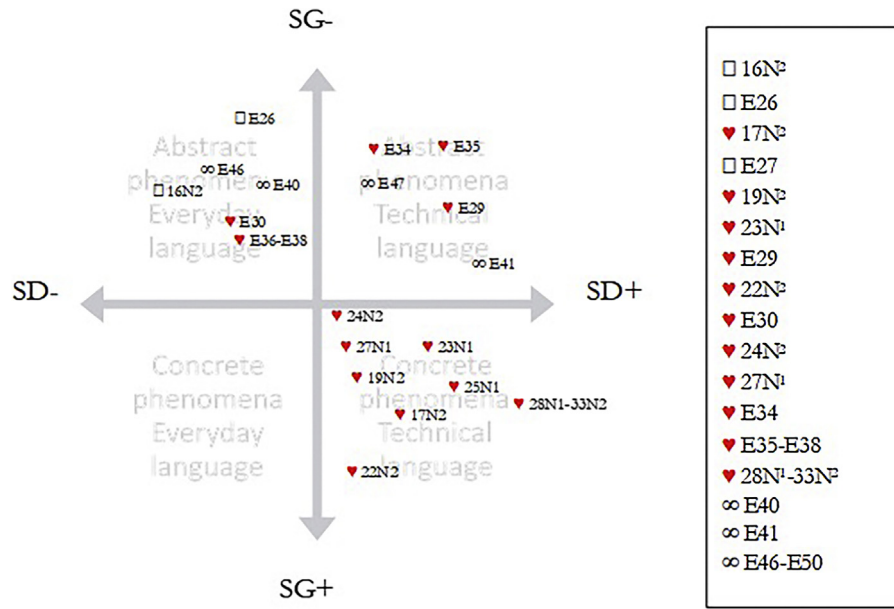


Fig. 6. Excerpt 1 transferred into the semantic plane. □ General literacy metalanguage; ♥ R2L knowledge genre; ∞ R2L curriculum genre; E = R2L expert; N = R2L novice.

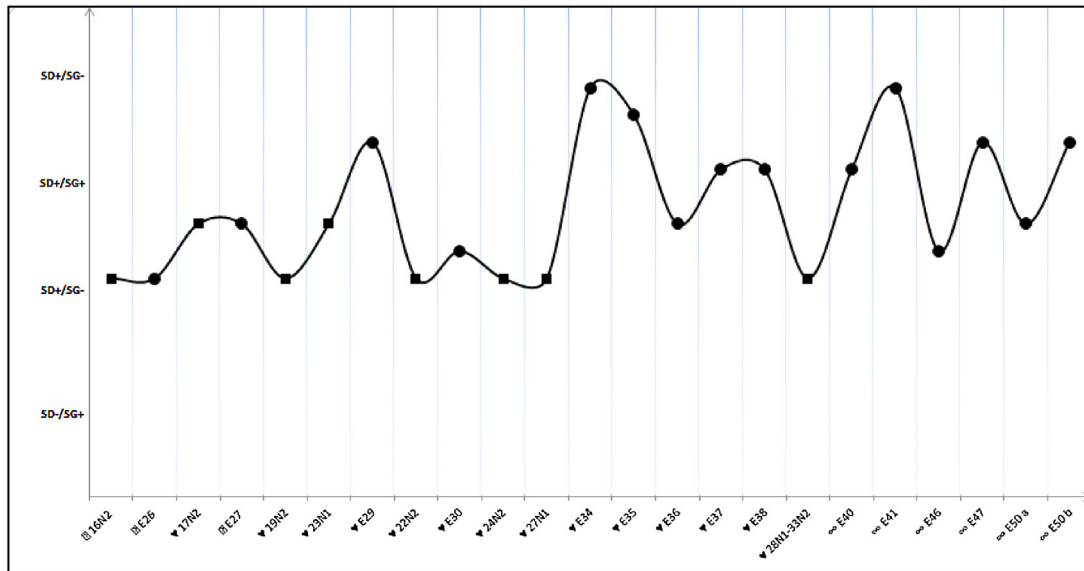


Fig. 7. Extract 1 transferred into a semantic wave. □ General literacy metalanguage; ♥ R2L knowledge genre; ∞ R2L curriculum genre. Circles are R2L expert statements (E), boxes are R2L novice statements (N).

The same tutorial session in a semantic profile (Fig. 9 below) shows the movement in both R2L expert's and R2L novice's use of metalanguage over the course of the session.

The novice starts the session by talking about her teaching during art classes, quite independently shifting up and down, using a substantial amount of abstract and technical metalanguage, both more general literacy metalanguage and the more specific R2L metalanguage. The expert encourages the novice, staying down the wave. Just once, in turn E5, the expert moves up the wave, elaborating on the abstract idea of a text's or an image's meaning. In the next part of the session, the novice discusses her understanding of the widened concept of texts and here as before, the expert moves the negotiation about texts as meaning-making systems with different purposes, high up the wave, elaborating on this rather abstract idea. In the last excerpt from the tutoring session, the novice moves up and down the wave rather autonomously when describing and discussing the social science text. In this passage, she uses both general

literacy metalanguage and R2L metalanguage (knowledge genres), and touches on the abstract notion that texts carrying meaning-making information. However, the expert seems to feel a need to unpack the idea of meaning-making and its relation to genre and in doing so moves down the wave. The expert emphasises the importance of deciding on the genre of the text before initiating the curriculum genre *preparing for reading*, in order to be able to guide the students through the stages and phases of the particular text.

4.3. Summary

The tutorial sessions in the PDP are examples of discourse where experts through scaffolding move between stronger and weaker semantic gravity, regulating the novices' ideas and thoughts, leading them on their way to self-regulation and turning the role of the expert into a supportive role instead of the initial guiding role (cf. Timperley et al., 2007).

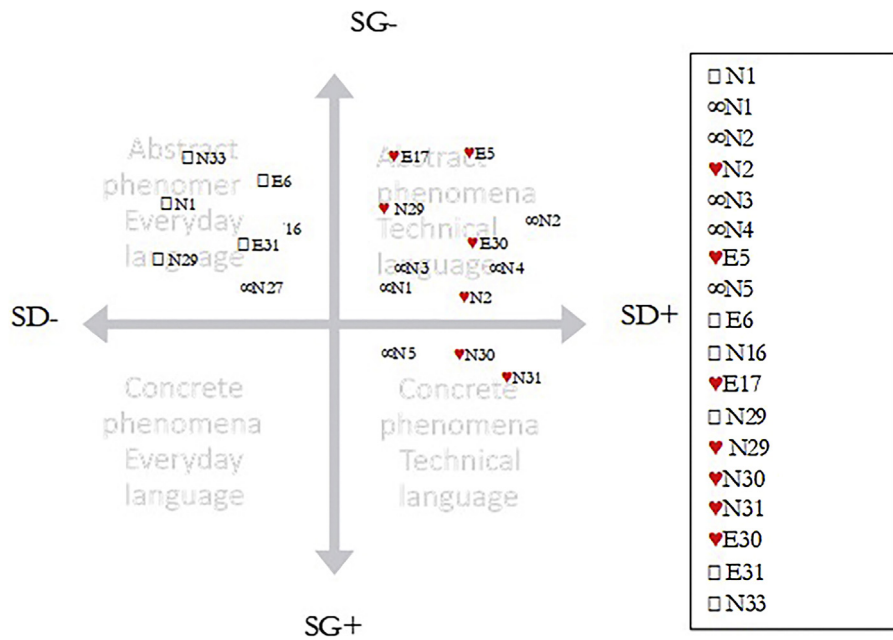


Fig. 8. Excerpt 2 (selections) transferred into the semantic plane. □ General literacy metalanguage; ♥ R2L knowledge genre; ∞ R2L curriculum genre; E=R2L expert; N=R2L novice.



Fig. 9. Extract 1 transferred into a semantic wave. □ General literacy metalanguage; ♥ R2L knowledge genre; ∞ R2L curriculum genre. Circles are R2L expert statements (E), boxes are R2L novice statements (N).

5. Conclusions and implications

The point of departure for this study was to contribute to the understanding of how negotiations of metalanguage are realised and enable teachers to build knowledge of the R2L pedagogy. Below, we discuss our finding with these intentions in mind.

R2L tutoring sessions in the PD programme have multiple purposes. We have focused on their potential in building a pedagogic metalanguage, thus appropriating a theoretical and practical understanding of the R2L pedagogy. The teachers’ building of the R2L metalanguage is thought to contribute to their understanding of their pedagogic practice (Wells, 2007; Matre and Solheim, 2016), which in turn provides potential for improving teaching. As

the intention embedded in R2L is that the pedagogy will improve teaching practices to more explicitly teach literacy, R2L pedagogy also has the potential to lead to increased equity in education and consequently even out differences in student attainment. We have used the Legitimation Code Theory dimension of Semantics for analyses. Both theories share a common denominator of making knowledge visible, making knowledge a democratic right for all and in this study LCT has also proved to be a useful tool for categorising metalanguage and visualising how different semantic codes are generated in the sessions. The semantic profiles provide a clear illustration of what happens over time.

During the PDP, teachers are trained to learn the curriculum genres and to choose the appropriate one(s) from the teaching/learning

cycle when teaching reading and writing the texts of the curriculum to their students. By practising them throughout the PDP, the teachers acquire both the procedures for classroom curricular genres, and the metalanguage for discussing them (Rose, to appear-a, p. 1). In this process, a theoretical understanding of knowledge and curriculum genres is developed simultaneously with a knowledge about language, as they are prerequisites for one another.

In the analyses of two of the many tutorial sessions that take place, we have found that the expert has an important role in supporting teachers both in year 1 and in year 2. In year 1, the tutorials focus on supporting the teachers in understanding the curriculum genres – how to use R2L strategies – and in particular understanding the idea that genres have a social purpose. The R2L artefacts, *the map of genres* and *the teaching/learning cycle*, are present in the tutorials. The expert refers to them and the teachers use them to support/scaffold their metalanguage when talking about strategies and genres they have used thus far in the PDP. During the tutorials, the expert does most of the talking, explaining and elaborating. The expert upshifts and downshifts by unpacking and repacking R2L metalanguage and R2L methods.

In year 2, the teacher does most of the talking. To a large extent, the expert's role is to encourage and confirm. The teacher uses the R2L metalanguage and moves relatively independently on the waves. Also, the teacher in year 2 uses more general literacy metalanguage than the teachers in year 1, suggesting that “fluency” in both metalanguages is essential. The learning of a new metalanguage might make the teacher in year 2 more conscious of her general literacy metalanguage, and reflect upon the two, thus incorporating them to a larger extent in her tutorial session. The teachers in year 1, on the other hand, need more time to first incorporate the R2L metalanguage into their teaching vocabulary, and then to combine the “old” with the “new”.

Despite the teacher in year 2 displaying a well-developed metalanguage, the expert goes back to explaining the R2L idea of texts as meaning-making systems with different social purposes (genres), which might indicate that this is an aspect of the abstract/technical R2L theory that take the longest time to build. We find that the continuum suggested by Matre and Solheim (2016:92), where one moves from an instrumental to a functional approach, in order to gradually internalise theory and practice, is useful for understanding how the novices in year 1 are relatively instrumental and rely on the artefacts in order to use R2L metalanguage, whereas the novice in year 2 is using a rich metalanguage suggesting she has internalised R2L theory and practice. Additionally, the study illustrates the time aspect of the building of legitimate knowledge: it is evident that the teachers' abilities to talk about and internalise R2L pedagogy develop both *within* tutorials and *between* tutorials.

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