

**Analysing Self-Regulation in Academic Writing:  
A Study of Select Essay Writers**

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**Abstract:**

A sociocultural approach to understanding how social environment and social interaction are connected to writing regulation has been more important in writing research over the past several decades. Self-regulation in three successful Bachelor essay writers in literature is examined via a participatory appropriation theory lens, and how contact with supervisors helped them acquire writing regulation in ways appropriate to their academic backgrounds. With the help of Pintrich's self-regulation framework, we conducted three in-depth qualitative interviews with participants at three different stages throughout the research. Using data from this study on students' self-regulation of writing and social interactions, such as their conversations with their supervisors, researchers were able to see whether there was any overlap between the two. In light of our results, we may infer that supervisors acted as socializers, helping students adopt disciplinary-relevant ways of thinking and behaving while also encouraging students' motivation and re-conceptualizing the writing process. This study, seen as a whole, answers to requests for research into the social framework in which self-regulation is rooted.

**Keywords:** writing supervision, disciplinary writing, writing regulation, metacognition, motivation

## 1. Introduction

"Academic writing, I'm madly in love with you," proclaims an outlandish essay. Hayot (2014) uses the term "Really, I do," to characterise the "experience of transformation," that is academic writing as follows:

While some of the people I know and don't know have been thwarted and disappointed, others have grown, been praised and transformed as a result of their journey through the writerly disciplines that now govern humanities studies... A self-chosen academic prose apprenticeship can be life-changing...

Throughout this article, we'll discuss three examples of personal development that were sparked by the creation of an academic composition—in this case, a bachelor's degree essay in humanities.

To become an expert in academic writing, one must first learn about a topic and then learn how to think about and communicate this information in a specific context for a certain audience (Berkenkotter&Huckin, 1995; Carter, Ferzli& Wiebe, 2007). Thus, academic writing involves a high degree of self-regulation of learning (SRL) in the form of setting objectives for one's writing in connection to one's topic and audience as well as controlling one's behaviour, thoughts, and feelings during the writing process. Self-regulation (SR) in writing development has been extensively researched, particularly in elementary and secondary school settings, from both a cognitive and a socio-cognitive viewpoint, according to the authors of this paper (see Graham, Gillespie & McKeown, 2013; Graham &Perin, 2007; Graham &Rijlaarsdam, 2016). Sociocultural studies that explain how writing control organically evolves in social contexts and advanced disciplinary contexts are becoming more popular, although they are still rare. According to Sala-Bubaré and Castelló's (2018) review of the past two decades of empirical research on writing regulations, an emerging challenge is to "account for regulation in situated [Higher Education] contexts," as well as the need for greater conceptual clarity about how regulation is investigated (2018, p. 773).

This study brings together sociocultural research on learning regulation and writing regulation, both of which are undertaken from a sociocultural perspective. Researchers in cognitive science and educational psychology have been more sensitive to context and social dynamics, acknowledging that research on self-regulation (SR) / self-regulated learning

(SRL) has become more sensitive to context and social dynamics (Nishino & Atkinson, 2015, p. 37). (Azevedo, 2009; Hadwin&Oshige, 2011). SSRL and co-regulated learning (cf. Hadwin, Järvelä, and Miller, 2018; Hadwin and Oshige, 2011), concepts that have only lately been recognised as socially embedded and growing processes of self-regulation. It has therefore moved closer to sociocultural studies of writing regulation, which tend to shift away from individual cognition in favour of socially-mediated processes of academic enculturation that are engaged in the creation of text (Prior, 2006; Prior & Bilbro, 2012). Researchers are clearly interested in the study of how academic writing self-regulation develops organically, especially in connection to interactions and socialisation. As a student, how do you keep yourself in check when you're writing an essay? Do they have any examples of important and transformational social encounters, and how did they come about?

SR of writing, like any other learning endeavour that takes place in the context of teaching, is a multifaceted endeavour that is both complicated, adaptable, and socially placed (Hadwin et al., 2018). We are also interested in the ways in which written self-reporting (SR) is generated from social contact—the interactions that allowed for the development and modification of regulating mechanisms. Students' own descriptions of the "the process by which a rookie writer gains and internalises writing control abilities while working with a more proficient writer," (Sala-Bubaré&Castelló, 2018) are taken into consideration. It's a rite of passage for English literature students to write a BA essay, and we follow three of them through the process. All of their endeavours have been successful. It is determined whether or if participating in interaction with their supervisor allows students to engage and experience writing in a disciplinary and culturally appropriate manner, hence fostering their own self-regulation of writing in transformational ways.

Qualitative data from three in-depth interviews conducted throughout the BA essay-writing semester were evaluated using a previously constructed framework (Pintrich, 2000, 2004). During the interviews, this framework was utilised as a heuristic to code the data. Analysis of this data was then done in accordance with the concept of participatory appropriation (PA) (Rogoff, 1990). An individual's transformation as a result of their engagement in a socially relevant activity is called participation-appropriation, which Rogoff contrasts to passive internalisation. "The act of appropriating something that belongs to someone else" is defined

by Rogoff as "participation in a socially meaningful activity" (Rogoff, 2008). As a result, it emphasises the dynamic, ongoing, and agentic aspect of cognitive growth as a result of involvement and interaction (Rogoff & Angelillo, 2002). Our interviews with students provide valuable insights into the kinds of social interactions (mainly with their supervisors) that they feel have had a significant impact on their writing. Each participant's unique process of self-regulation of writing was identified and documented using our data analysis technique, as well as where and how these processes were "transformed" by the students' interactions with their supervisors.

## 2. Review of theories and research

Students who are new to a certain topic of study have an extra challenging creative challenge when it comes to writing about it. As a result, authors find it difficult to adapt their writing talents and topic knowledge to meet their readers' needs, because writing expertise in disciplinary groups is often implicit. While researching university writing practises, Elton (2010) makes use of concepts like "craftsmanship" (Sennett, 2008) and "knowing with" (Bransford & Schwartz, 1999) to argue for studies that take into account the complexities of university writing practises, which frequently revolve around students' perceptions of writing quality and expectations that are difficult to formulate even by the experts themselves (see also Dysthe, 2002). In addition, writing a Bachelor's essay is, for the majority of students, their first exposure to fully independent disciplinary academic writing, necessitating, among other talents, the capacity to coordinate a range of knowledge kinds across tasks and genres, critical thought, and creativity (Johns, 2011; Tardy, 2016). In the humanities, where disciplinary epistemology is more fluid and less enclosed in typical rhetorical structures (Kuteeva&Negretti, 2016), this may be particularly difficult, but there are some advantages: genres are focused on argumentation and disposition, and they tend to avoid schematization of form or discourse (Kuteeva&Negretti, 2016). For example, Carter et al., 2007; Shaw, 2009; Social experiences and, in particular, the relationship with an expert, aid these novices in the management of their writing talents.

There is some comfort in our study's findings in this regard, but more clarification on the conceptual basis of our study is needed, especially in light of the fact that the theoretical

landscape of self-regulated learning (SR/SRL) and writing regulation is itself complex and not always consistent in its definitions (Sala-Bubaré&Castelló, 2018).

If theoretical models of SRL haven't always been in agreement, all theories agree that SRL comprises the capacity to actively participate in behaviours, thoughts, and feelings in order to achieve learning objectives (Zimmerman, 1989, 2000). The focus of cognitive research has traditionally been on individual processes, but in recent years significant shifts have occurred in the research on SR/SRL, as reflected by the emergence of concepts like co-regulation and socially shared regulation (Hadwin et al., 2018; Hadwin&Oshige, 2011; Järvelä&Hadwin, 2013; Molenaar&Järvelä, 2014; Hadwin et al., 2018). Interaction, contextual opportunities, emotional dimensions, and perceptual aspects of learning are all being examined in this research. In these conceptual modifications, which describe regulation as a continuous, active and dynamic process of growth, individual and social circumstances are considered. Studying how children and adolescents develop their own individual, autonomous self-regulation has shown that interactions, particularly in episodes of co-regulation where teacher and learner exchange ideas, negotiate thinking, and make decisions together, are critical to the development of co-regulation in children and adolescents (Hadwin&Oshige, 2011, p. 248).. Consequently, our study might be considered to include elements of co-regulation since we see interaction as a vital location for continued individual growth and appropriation of regulatory mechanisms (Hadwin et al., 2018).

## 2.1 The study of cognitive and socio-cognitive processes in writing control and academic writing

As a central component in writing studies, theories derived from cognitive/socio-cognitive research have made up the bulk of writing regulation research in recent decades.. Writing regulation research in higher education has been analysed by Sala-Bubaré and Castelló (2018), which we shall refer to in this section (HE). As stated by Breiter and Scardamalia (1987), as well as Flower and Hayes (1980), research in the cognitive paradigm sees writing regulation as essentially a cognitive process of rhetorical problem solving (Bereiter and Scardamalia, 1987; Flower and Hayes, 1980). Non-authentic activities, as well as ratings of writing quality, were commonly included in experimental designs (e.g. Breetvelt, van den Bergh & Rijlaarsdam, 1994; Ong, 2014; Van den Bergh & Rijlaarsdam, 2001). There is some

overlap in the research undertaken from a socio-cognitive perspective on interventions with some of these studies that focus on treatments and their effects.

Social cognition research has frequently focused on the various consequences of interventions targeted at enhancing learners' writing techniques, such as tutoring. (Graham et al., 2013; Graham & Perin, 2007; MacArthur, Philippakos & Ianetta, 2015; Rogers & Graham, 2008). The students' beliefs and attitudes on self-regulation, the task, and metacognition are also examined in this research (see Sala-Bubaré and Castelló, 2018 for more information). It has been particularly prevalent in second-language writing and academic writing, addressing, for example, task perceptions and mental perceptions of audience and purpose in connection to writing strategies and achievement, writing processes; metacognitive skills; metacognitive aspects tied to genre awareness and rhetorical effectiveness (Linares Cálix 2015; Negretti & Kuteeva, 2011; Negretti, 2017; Schoonen & van Geli, 2015; van Geli, 2015). A longitudinal study involving foreign language writers in an English for Academic Purposes (EAP) course found that students' conceptions of writing as a product oriented effort or a problem-solving process led to the development of more complex task perceptions and goals for writing, affecting their ability to write effectively and efficiently. Researchers have discovered that students' self-regulation techniques for writing alter as a result of rhetorical and audience-oriented task perceptions, and that scaffolding metacognitive abilities along with genre knowledge growth is vital for students' success (Negretti, 2012; Negretti & McGrath, 2018). To attain a communication objective, self-regulation is seen as a complicated collection of cognitive, emotional, and social components that students must monitor. Social and cultural interactions and influences shape all elements of self-regulation, including motivational control, according to recent socio-cognitive research (Wolters & Mueller, 2010, p. 633, quoted in Teng & Zhang, 2016, p. 21).

When it comes to writing regulation, however, a large portion of the social-cognitive research has focused solely on individual writing regulation (SR) and has not given much attention to its interplay with other forms of writing regulation (SR) (Hadwin & Oshige, 2011). Furthering sociocultural approaches, we investigate how participants' interactions with their supervisors may have mediated and influenced their own writing control.

The control of writing in society: sociocultural studies

According to Hadwin et al. (2018) and Järvela&Hadwin (2013), new research on co-regulation demonstrates several areas of convergence with research on writing regulation that takes a sociocultural perspective. Outside of socioculturally focused studies, "there is still a strong propensity to perceive a student's success or failure in writing a thesis as a question of individual writing talents" according to Dysthe (2002, p. 494). A student's sociocultural viewpoint influences their capacity to self-regulate as they engage and adapt the modus operandi of an academic community, which is both beneficial and important to comprehend how social components of the writing process impact students' ability to self-regulate.

Research in this tradition, according to Sala-Bubaré and Castelló (2018), regards writing regulation as a process of "intrinsically tied to processes of internalisation of cultural practises, discourses, and acts" (Sala-Bubaré&Castelló, 2018, p. 769). A common characteristic in sociocultural studies of writing regulation is that they emphasise the complexity of social behaviours to explain writing growth and expand their attention beyond the individual learner to incorporate many layers, often by looking at the complete writing context (Beach, Newell &VanDerHeide, 2015; Prior, 2006; Prior & Bilbro, 2012). Many students, whether they're in undergrad or grad school (Castelló, Iesta&Corcelles, 2013), struggle with the most difficult components of academic text production because of the way it's time-based and cyclical in nature. Students face the most challenging obstacles in academic writing regulation when it comes to establishing an authorial identity in the text—strategizing characteristics of voice and stance—and rethinking the text as an activity or artefact rather than a product or item.

Academic writing requires students to participate in social interactions, particularly with a mentor or a tutor, in order to succeed. It has long been recognised by scholars that a teacher's position as a facilitator of the disciplinary ways of creating knowledge and arguing has been studied extensively (e.g. Castelló&Iesta, 2012; Castelló et al., 2013; Eriksson & Mäkitalo, 2015; Lee & Schallert, 2008). Enculturation opportunities have been demonstrated in supervisory meetings (Björkman, 2017), and the writing-centered dialogue between supervisor and student can serve as a forum for the collaborative construction of knowledge, transformation and internalisation ways to "think and write in the discipline where the work

is situated" (Björkman, 2017). (Dysthe, 2002, p. 499). When it comes to writing disciplinary-relevant texts, undergraduate students have a hard time designing and conceptualising them, say Eriksson and Mäkitalo (2015). Supervisory interactions help students to see the text as a work in progress rather than a finished product, as well as to redefine and strategize the text's organisation as time goes on. A distinct sort of academic writing regulation with second-language undergraduate students found that revision was another tough aspect to control. A student's strategy for in-depth and transformational changes (see also Feltham & Sharen (2015) in the context of L1 college writers) is particularly difficult to devise for students. Finally, social connection with a supervisor appears to be the most critical setting for forming complex writing control abilities. This study focuses on the interaction between a student and an expert from an academic community of practise, with text production at the centre of this encounter.

### 2.3 Participatory appropriation of resources

Table 1. Rogoff's (1990) framework of social learning.

Participatory Appropriation	Guided Participation	Apprenticeship
Spotlights individual cognitive changes, and aims to illuminate how these changes stem from interaction and participation in meaningful practices.	Frames <i>processes and systems of involvement</i> of participants in culturally relevant activities, both in interaction and side-by-side: <i>how directions are given and how participation is organized.</i>	Focuses on the plane of <i>community activity</i> , and spotlights the culturally organized activities, and their <i>relations to the practices and institutions of the community</i> in which activities occur.

For this reason, the notion of participatory appropriation (Rogoff, 1990) serves as a useful tool for examining this transformational process of writing regulation construction. When it comes to explaining contextual learning practises, the triadic framework of Rogoff (1990, 2008; summarised in Table 1) comes into play. In accordance with Vygotskian social learning theory, this framework emphasises the need of engaging in meaningful social practises.

Because these ideas are complementary rather than different, they should be taken into consideration. The only difference between them is the focus placed on the phenomena under investigation, which is the sole difference between them. Due to our focus on personal development as a result of social contact, participation appropriation (PA) was the best notion for capturing this phenomenon.

Adopting the idea of appropriation, which was inspired by Bakhtin's (1981) notion of appropriating words, is meant to contrast the view of internalisation as a passive process of movement from the outside to the inside, and emphasise individual development as agentic and socially integrated "Appropriation, in my opinion, is a transformative process.

In my view, appropriation refers to the alteration that occurs as a result of a person's personal participation in an activity, rather than their internalisation of some external event or method" (Rogoff, 2008, p. 67, italics in the original). It's crucial to explore two key aspects of Rogoff's PA theory in order to make sense of this investigation. Participatory appropriation is concerned first and foremost with the process through which and why changes in an individual's behaviour emerge and endure. As a second example, the term "appropriation" implies an agentic and creative negotiation of ways of thinking (and writing) that have been experienced through social interaction, an aspect that has been emphasised in sociocultural research on the role of dialogue in writing supervision and writing instruction (Dysthe, 2002). Learning new ways of thinking and managing writing may subsequently be applied to other settings and scenarios as a result of their engagement in a socially significant activity, notably through discourse. When participants describe, engage in, and turn into new thoughts and questions discourse and social interactions that they feel are significant for their writing regulation, the notion of appropriation helps us to highlight those times in the data where appropriation is proven.

Our research stands out in this regard for a number of key reasons. First and foremost, we adopt a method often used in sociocultural research (Sala-Bubaré&Castelló, 2018) to explore SR in writing, in a naturalistic environment, and with a genuine writing task. Because of this, we must map SR over the whole learning process, as previously indicated (Molenaar&Järvela, 2014). According to Hadwin and colleagues (2018), regulation is a multifaceted phenomena that encompasses the control of motivation, behaviour, and agency

in connection to the external environment. It is possible to describe regulatory actions and cycles across the learning process by using Pintrich's (2000, 2004) framework to code the regulation of writing described in participants' interviews. We used the SRL as a coding heuristic because it provides a relatively macro-description of regulatory actions and cycles across the learning process. Though it isn't explicitly created for writing (or learning to write), the SRL model is a well-established one that can describe the entire self-regulation process without getting bogged down in the nitty-gritty of microcognitive processes. For this reason, we hypothesised that its comprehensiveness and breadth might also be used to the process of teaching students how to write, and that it would allow us to document how students learn to regulate their writing in contexts other than the one detailed here. We have demonstrated that participation affects writing regulation, as well as other kinds of social regulation, and we agree that participation moulds writing regulation as well as other forms of social regulation. on the second to last page (*italics added*). With PA, we may identify occasions in which students' contacts with their supervisors are described by the students as places of significant writing control, possibilities for idea negotiation, and personal growth by the students themselves. We're looking for responses to these questions:

Three successful BA literature essayists self-regulate while writing their essays.

It's unclear how students' self-regulation of writing is affected or explained by participatory appropriation (mostly in the form of engagement with a supervisor).

### 3. Method

#### 3.1 Context

This study's research was conducted in a big, research-intensive Swedish university. A group of English Language and Literature bachelor's degree students picked them, and each participant was in the middle of writing an English Literature essay at the time of their selection. After completing a series of two-hour writing workshops on various topics, students write their BA essay over the course of one term (roughly five months) in the final term of this programme. They also have individual tutorials with a supervisor (15 hours of supervision time), who reads their drafts and provides feedback as well as discussing their essay with them. You will be supervised by English linguistics, literature, and literary theory

scholars and professors in the department where you are enrolled. Students are allocated mentors who are specialists in their disciplines based on their interests.

According to the institution, the BA essay must be based on "an independent research of a limited problem in the subject of English Linguistics or Literature" (quote from the essay instructions). Students and their supervisors work together to restrict the topic of their essay. A lengthier piece of work than they've done so far in the programme will be required to finish the BA essay, which is projected to be between 6000 and 8000 words. The essay in English literature must include both primary and secondary sources (i.e., the students' chosen works of literature) (literary criticism and theory). First, students are given a list of grading criteria and detailed instructions on how to write their Bachelor of Arts essay. Essays are judged on their originality, relevance to the subject, and the ability of pupils to work on their own are all factors in the grading process. A member of the department's faculty examines each student's essay once it has been finished in a public seminar. The examiner and supervisor work together to decide the final grade.

### 3.2 Participants

It was a final-term session for three BA English literature students who were working on a range of subjects and works of English-language literature for their BA essays. They were assigned supervisors who were experts in the fields they were studying or in the works of literature they were assigned to supervise.

Participants were given the names of fictional characters Kurt, Jane, and Virginia. One semester, all three students finished their BA essays with high grades (A or B). Prior to the first interview, all three students met with their supervisors, albeit Virginia and Kurt did so earlier in the semester than Jane. Kurt and Virginia's supervisory meetings were more in-depth in character, but Jane's meeting was a preliminarily discussion of her issue. informed permission was obtained from all participants before the study, and they had the option of withdrawing at any time. Participation in the study was fully voluntary, anonymous, and would have no impact on their grades.

### 3.3 Interviews

At the beginning of the semester, after submitting their first draught to their supervisor, and at the conclusion of the term, after submitting their final essay, each student was interviewed three times. Both researchers were in the room for the entire time the interviews were being done in English. For this study, a semi-structured interview with follow-up questions to obtain clarity and elaboration was undertaken as per the technique (see Appendix). Students were encouraged to discuss their ideas, goals for writing, writing techniques and problems, as well as their comments on the work they had produced, when given the protocol questions. For this reason, we urged applicants to bring a printed copy of their most recent work to the interview so that they could keep an eye on their work while the interviewer was asking probing questions (Gass& Mackey, 2000). Once interviews were finished, they were recorded and transcribed. Documents with personal information, such as supervisor names, novel titles, and authors' names, were then deleted. False beginnings, grammatical inconsistencies, and repetitions have been removed from the quotes shown here.

### 3.4 Information gathering and analysis

Interview transcripts were used at every step in the study process to categorise our data, check inter-rater reliability, count particular categories, and extract representative examples from the coded data using nVivo 11.

#### 3.4.1 Categories

To classify the study's self-regulation findings, researchers used Pintrich's (2000, 2004) framework for self-regulated learning. Frameworks for self-regulated learning can be found in a wide range of formats (c.f. Zimmerman, 2000; Winne, 1995). Using the Pintrich framework as a coding strategy, we were able to capture all aspects of self-regulated learning—cognition, motivation, behaviour and context (which was intended as monitoring, control and evaluation of a learner's perceptions of contextually-determined task conditions and the affordances of the learning environment)—for our study. That's not all; this paradigm also focuses on discrete stages of self-regulation, which allowed for the systematic analysis of naturalistic data to be done. Our in-depth interviews combined with stim. may be able to capture a "very microlevel grain size in terms of the actual cognitive events of tactics used by students" as Pintrich (2004) points out, while a focus on "general aptitude or propensities to

use different self-regulatory processes" may be better evoked and explained through SRL models that support this research focus.

Cognition, motivation, behaviour, and environment are all included in this model's discussion of self-regulation (see Table 2). Forethought, planning, and activation are the first three steps of self-regulation, followed by monitoring, control, and reaction and reflection (or reaction and reflection). These stages don't have to follow one another in order; they might occur simultaneously. Cognition's "forethought" phase can include strategic responses (SRs), such as goal-setting and activating metacognitive knowledge of various aspects — task perceptions and subject-matter knowledge, (writing) strategies, previous experiences, and the self — in a more or less declarative, procedural, or conditional manner (when and why). We won't summarise all of the SR tactics here for the purpose of concision (see Pintrich, 2000, p. 458).

Table 2. Phases and areas for self-regulated learning.

Phases and relevant scales	Areas for regulation			
	Cognition	Motivation/Affect	Behavior	Context
Phase 1 Forethought, planning and activation	Target goal setting	Goal orientation adoption	Time and effort planning	Perceptions of tasks
	Prior content knowledge activation	Efficacy judgements	Planning for self-observations of behavior	Perceptions of context
	Metacognitive knowledge activation	Perceptions of task difficulty		
Phase 2 Monitoring	Metacognitive awareness and monitoring of cognition	Task value activation		
		Interest activation		
Phase 3 Control		Awareness and monitoring of motivation and affect	Awareness and monitoring of effort, time use, need for help	Monitoring changing task and context conditions
			Self-observation of behavior	
	Selection and adaptation of cognitive strategies for learning, thinking	Selection and adaptation of strategies for managing, motivation, and affect	Increase/decrease effort	Change or renegotiate task
Phase 4 Reaction and reflection	Cognitive judgments	Affective reactions	Persist, give up	Change or leave context
	Attributions	Attributions	Help-seeking behavior	
			Choice behavior	Evaluation of task
				Evaluation of context

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The interview data was broken down into areas of self-regulation and stages of self-regulation using line-by-line analysis. Some categories have been blended together due to the fact that some locations and stages overlap (i.e. parts of text were marked as two areas or two phases). Pintrich (2000) points out that the borders between these regions are ambiguous: phases and interactions among various components may take place at the same time, and the boundaries between these areas might become confused (p. 455). The ability to tell the

difference between behaviour and cognition, for example, is not always apparent. Therefore, it's part of the phenomena under inquiry, and it's an ideal illustration of how the phenomenon under investigation is examined in conjunction with cognition, behaviour, and goals as part of SR's cycle and complexity. Data analysis required us to study and debate Pintrich's descriptions of each region and phase (2000, 2004) often; execute an inter-rater reliability pilot; engage in numerous rounds of coding comparison to guarantee systematicity and reliability (Creswell, 2007). We were able to multilayer code the students' remarks as a consequence of evaluating data coding repeatedly (areas and phases).

There is an additional layer of codification that was introduced when SR, or instances of participatory appropriation, was discovered (Rogoff, 1990; 2008). When participants made particular mention of their supervisors or their contacts with them, their remarks were classified as PA (or more seldom, other peers or teachers). A real-world encounter or a fictitious one are both possible venues for this exchange of ideas. Students, for example, might sometimes have a hypothetical conversation with their supervisor ("I guess my supervisor may say...") to help them make writing-related decisions. It should be noted that both SR and PA were set up as separate categories (nodes) in nVivo, and so, in order to answer RQ2, we focused on the overlap between these categories.

### 3.4.2 Procedure

The data-analyzing procedure has a number of stages. We began by coding data from a single interview that we performed together in the initial phase of the research process. To check that our coding was accurate, we conducted a second interview with the same kid. According to inter-rater agreement results (Cohen's Kappa values ranging from 0.52 to 1.00), agreement was reasonably good across all categories. The section "Cognition: Reaction and reflection," had the least agreement, with just a moderate percentage of agreement. Only 82 percent to 100 percent of the respondents agreed on most of the other issues, depending on which category they were looking at (mean: 95 percent).

In the second round of analysis, we coded all of the data together and re-examined the theoretical framework to ensure that all of our findings were consistent and accurate. Next, both of us re-checked our coding, noting any places in which we needed to redistribute our

findings from the literature (Pintrich, 2000). In the end, it was decided not to recode any of the previously examined cases.

Our coding's consistency and stability depended on this method, which took a long time to perfect. To observe the general pattern of how the data were coded, such as the proportion of interview data covered by each code for each student, and to show how the data were coded across all students, matrix queries in nVivo were utilised. After doing three interviews with each of our students, we were able to identify their distinct SR processes and compare their replies. Using a matrix query analysis, we were able to determine how much data was classified into the two categories of participatory appropriation and the four areas and stages of self-regulation (RQ2). Finally, we drew on the experiences of each student/interviewee to draw conclusions and results. We were able to do a last "quality check" on our interpretation during this final stage.

#### 4. Findings

Data on self-regulation and participation appropriation are included in this section, which provides a summary of the participants' writing self-regulation (SR) throughout time. Table 3 summarises the SR data collected from the three participants during the course of the research. Table 4 shows that the total number of observations for data classified as PA and SR overlapped.

*Table 3. An overview of the students' self-regulation.*

		Kurt				Jane				Virginia			
		Cog	Mot	Beh	Con	Cog	Mot	Beh	Con	Cog	Mot	Beh	Con
Interv 1	%	64.8	1.6	5	9.8	43.7	6.2	10.8	21.4	41.1	0	7.6	2.9
	(nr)	(42)	(2)	(8)	(8)	(19)	(4)	(7)	(11)	(29)	(0)	(9)	(4)
Interv 2	%	43.4	0	14	19.3	54.4	1.5	7.3	10.6	44.8	0.4	9.6	8.6
	(nr)	(20)	(0)	(9)	(8)	(44)	(5)	(11)	(16)	(54)	(1)	(16)	(18)
Interv 3	%	46.5	0	12.3	19.7	58.8	1.6	3.2	11.9	52.1	2.6	0.8	3.9
	(nr)	(7)	(0)	(3)	(3)	(24)	(3)	(5)	(10)	(71)	(5)	(2)	(4)

*Note.* Cog: Cognition. Mot: Motivation. Beh: Behavior. Con: Context. Numbers in parentheses indicate how many instances of the code were identified in the data source (e.g. Interview 1), and percentages indicate the proportion of the coded data in relation to the data source.

Table 3 shows that the bulk of the data for all three persons (including the researcher) appears to fall into the category of SR of cognition (percentages ranging from 41.1 percent to 64.8 percent ). Due to our request to reflect on their work before submitting, this may not be surprising. It is remarkable that all three students looked to be thinking about their writing in a metacognitive fashion as a result of the interview setting. As a general concept, "a generic term that relates to both knowledge and strategies that the writer uses to manage his or her cognitive processes while writing" can be used to describe how a writer manages his or her cognitive processes while writing (Escorcia, Passerault, Ros & Pylouster, 2017, p. 235). Examples of metacognition may be seen in students' comments, such as this one:

One story focuses on... whereas the other is more general and concerns... Our conversations thus far have convinced me that some of the novel's content will have to be pared back, such as the tale not being retold. I hope you find this information useful as well! Kurt turns over his manuscript. After that, oh, umm... Because I'm not sure how I'll connect them, I'll have to revisit the introduction and revise the thesis, which will add time to the project. There were a lot of these kind of "think-aloud" musings among Kurt's interviewers during all three of the participants' sessions, but Kurt's was the most prolific (as shown in Table 3).

Table 3's second general finding is that the SR of motivation was applied to just a limited subset of the data (from 0 percent to 6.2 percent ). Few clear comments of self-efficacy were found in this category, which may be classified as Ease of Learning (EOL) assessments of specific goals rather than the entire work of text production (for example, giving a persuasive case for a single idea utilising secondary sources) (see Pintrich, 2000, p. 462). All three students showed a strong interest in their primary source material, which might have provided an extra source of intrinsic drive for them to complete their projects. Time management and time planning techniques (when and how to complete specific sections of the text, time necessary) were referenced in between 0.8% and 14% of the coded occurrences, as well as help-seeking measures (the need to contact the supervisor or wait for feedback before proceeding). On a few times (Jane), the SR of behaviour alluded to the layout of physical space, but it was unclear how to classify these occurrences because the SR of context usually followed (monitoring deadlines, requirements). This term's SR context codes all times in which students evaluated and/or reacted to the BA programme and its structure, such as

seminars and their content, the order of activities, and the additional learning opportunities it provides.

We also wanted to know if the students' ability to self-regulate was influenced by the participatory appropriation experience, which was the focus of our second study question. When students directly reported dialogues or interactions with their supervisors or with seminar professors and other students, we categorised these as PA using the criteria described in the preceding section. We wanted to know how our participants interpreted and used these interactions, whether real or imagined, to self-regulate their writing — in other words, how these dialogues could be examples of co-regulation and how the students themselves seemed to appropriate and transform these co-regulatory events into individual ways of regulating their writing, as in the following example:

(2) "how you want to structure the essay, for example, how you intend to write about the two books." [Supervisor] asked. (2) I attempted to think of a way out of this problem. In my opinion, it won't stand up in the long run. Because of this, I decided to break apart bits of (the book) that weren't about those specific topics, but kept the way the book was read in other places intact. (Virginia)

The percentage of data categorised as both SR and PA varied between 8% and 35% among the three patients, with substantial variation across the three persons (a further breakdown across the areas and phases is available in Tables S1, S2 and S3, in the Appendix). The quality of the data categorised as PA was more important to the students than the quantity, as we'll see in the next sections for each interview. Following up on our earlier discussion of PA, we searched for evidence of students' appropriation of ideas, concepts, and techniques drawn from their interactions with supervisors in the interview data. Interactional experiences are not just remembered; they are also actively engaged with, reasoned about, and transformed into new regulatory mechanisms by the students involved, as the above sentence indicates. We were able to learn more about the students' perceptions of this encounter and the way in which it transformed their lives through the use of the SR/PA overlap analysis than we could have by simply looking at how frequently the students mentioned it in their interviews (indicated by the percentages of overlap). When students talked with their supervisors, it seemed like they got "food for thought" at crucial points in their writing process. For

monitoring and assessing their task perceptions, goals, topic knowledge, thoughts and arguments, among other things, students regularly referred to this conversation in their remarks. It was also possible that the supervisor would be called in an imaginative manner, notably by Kurt, as a means of further considering numerous pathways for the essay's future.

*Table 4.* An overview of the students' participatory appropriation + SR.

		Kurt	Jane	Virginia
Interview 1	% (nr)	23.7 (19)	10.6 (10)	13.1 (11)
Interview 2	% (nr)	33.4 (17)	24.1 (22)	20 (23)
Interview 3	% (nr)	35.6 (4)	9.7 (10)	8.3 (9)

*Note.* The table shows the percentage of data source (e.g. Interview 1) coded both as SR and PA. Numbers in parentheses indicate how many instances of the code were identified.

#### 4.1 The first interview, Invention: Activating content knowledge and identifying a "angle,"

It seems that the students were engaging in what we might refer to as innovation at this point: how to choose a specific problem, bring together information and insights obtained from reading primary and secondary sources, and establish coherence in their reasoning. The disparities between the three students can be noted in Figures 1 and 2, even before the first interview, which may be connected to the scheduling of the supervision meetings in which they had taken part: Figure 1 shows that Kurt and Virginia had met with their superiors sooner than Jane, which shows that Kurt and Virginia had met with their supervisors earlier than Jane.

As part of this interview, Kurt focused his attention on the cognitive and metacognitive aspects of writing, describing strategies such as activation and retelling of content knowledge, planning the essay, establishing specific argumentative/rhetorical goals, metacognitively monitoring and regulating his ideas, and reflecting on and evaluating his argumentative strategies. All of these characteristics were regularly related to what the supervisor had said, or to what the supervisor was likely to say in the future (Figure 2, cognition). Kurt had already had numerous in-depth sessions with her supervisor, so Virginia, playing the part of Kurt, was concentrated on thinking forward and preparing the essay. Jane had finished one month of the BA essay writing term as a consequence of her original meeting with the

supervisor, but she was still unsure of where she should go with her writing. During Jane's attempt to determine the requirements of the programme and various routes of support, she gathered information (Tables 3 and 4) that pertains to the control of behaviour and contextual factors. Throughout the article, she discussed the classes she took and the professors she communicated with in detail, as well as deadlines and how events in the learning environment influenced her development.

(3) Because I wasn't sure if this would be my first choice or not when I initially considered it. As well as collaborating with [Teacher], I had hoped to see this through to completion. Starting off, I wasn't sure whether I wanted to go with this or children's books as a starting point for the project. The next day, we were unable to schedule our first meeting with [Supervisor] until several weeks later. We had a preliminary conversation in which we simply discussed, right, we simply discussed, and then we went on to the main subject. Rather having a specific topic, it was more of a broad discussion. (Jane)

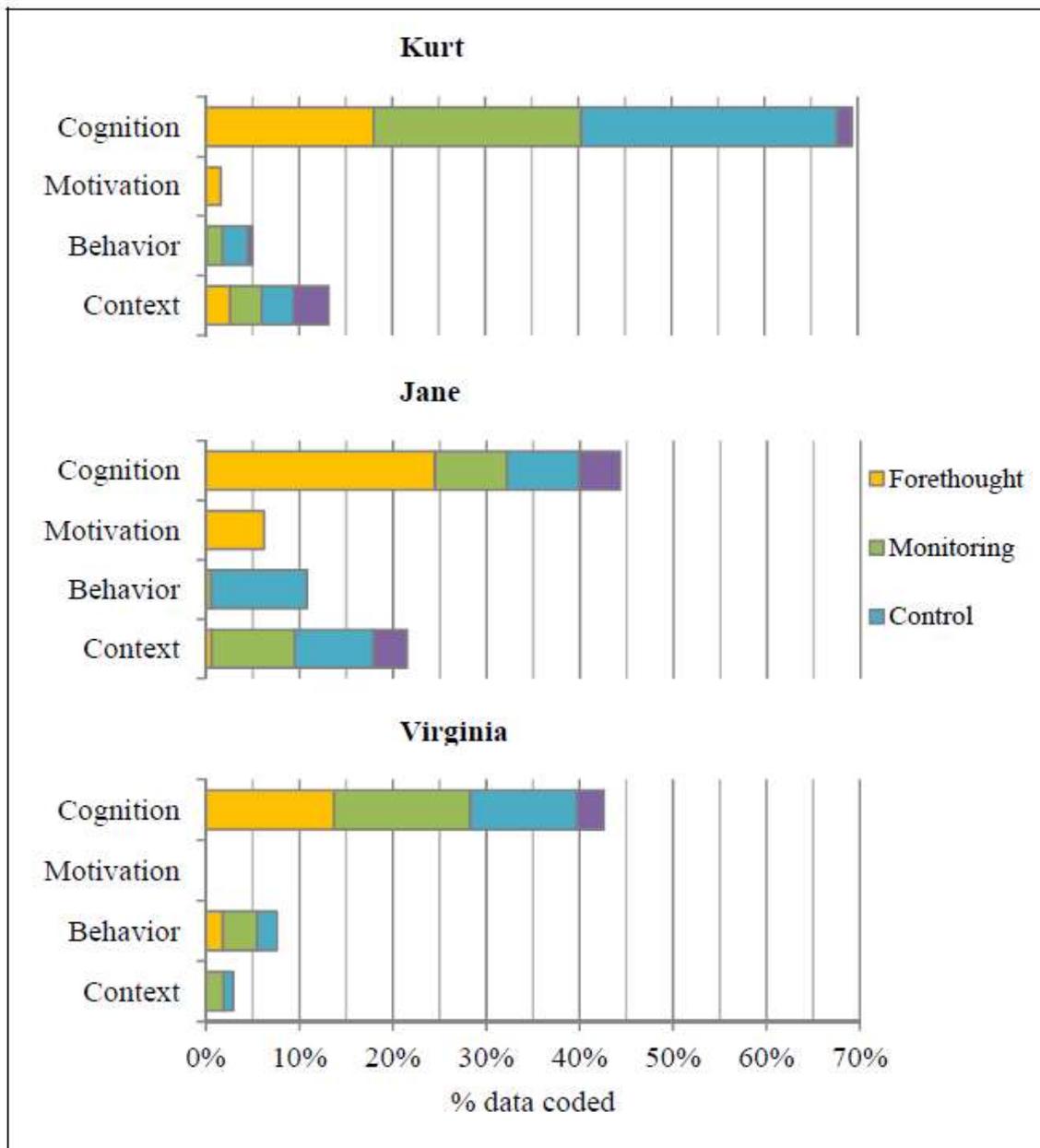


Figure 1. Phases of self-regulation in Interview 1. The percentages show what proportions of a particular area belonged to different phases.

First interviews with three students focused on aspects of writing known as "cognitive planning" (see Figure 1). This information triggered a significant increase in my knowledge of the subject issue. A thorough examination of their primary source material was conducted by all three authors in order to ensure that they had a thorough understanding of the stories

and authors they wanted to include in their pieces. Using the following qualities, they were able to further create and examine their essay topic ideas:

I'm looking for some kind of political message in them... As a general pattern, several of them neglect the political message and two of them make significant changes to the political message. (Kurt) \s(5) I'm going to look at the trauma from the perspective of the people in the neighbourhood. Yes, I will investigate his personal history of trauma. (Jane)

The statements in this section also provide light on another aspect of foresight that was evident in the original interviews: the development of objectives and strategies for achieving those goals, as well as the monitoring and control of those strategies. For their research papers, all three students appeared to be struggling to come up with an angle and/or a preliminary thesis statement for their work. As an example:

That's the crux of my problem: I can't seem to pin down a single idea. It is, nevertheless, meant to serve as a place of seclusion and solitude in some capacity. (Virginia)

(7 But I still felt like I was stumbling about trying to put together a clear thesis, which I still haven't managed to accomplish. Despite this, there has been development. As though I had contemplated it. A wide range of fascinating subjects might be covered... Concerned that it's going in too many different directions. (Jane)

The fact that many instances of "cognition/forethought" overlap with data labelled as PA, in which students review and reflect on their discussions with their supervisors, is relevant in this regard. They obtained useful insights into conceptualising their writings and setting specific goals, such as the need to produce an engaging thesis statement and contextualise their issue. Moreover, they were able to focus their thoughts. a formalised adverbial adverbial [Supervisor] and I had a conversation about contextualising, but I'm not sure what I'm expected to contextualise or even whether I should dare to contextualise or historicize... not because I have a limited comprehension, but rather because I have a very limited chance of catching up on this from secondary sources because I haven't looked into it before. (Kurt)

(8/9) You gave the idea that you were still struggling with a solid thesis, which you were right about. In spite of this, progress is nevertheless being made. Although the supervisor could see that the employee was well-versed in the subject matter of the book and had

thoroughly enjoyed reading, he added, "But, okay, I see you know a lot about this book, and you've definitely enjoyed the novel, but you just need to organise your thoughts a little bit better," (Jane)

Students looked to be confused about the text's direction from the responses above (6, 7, 8, and 9): metacognitive monitoring and emotional control were evident. It was very uncommon for pupils to express themselves in the form of "possibilities" or "self-questions," and these utterances were often followed by suggestions about how to maybe push their own thinking in the appropriate direction. Because, you know, how do I portray it, how do I create a communal image of. (10)... and what does that imply in terms of what we're talking about here? I'm not sure I want to have that talk right now since I know it will be unpleasant. (Kurt)

SR/PA statistics show that students credit their interactions with the supervisor, as shown in (8) and (9), for helping them work out their problems and keep their writing under control. Speaking with the supervisor helped not only conceptualise the essay but also monitor and regulate thinking, such as by appropriating particular questions or purposes to frame and monitor the argumentation (11, 12):

To be honest, I'm stumped by this one. This is something I think I should bring up with my supervisor. I'm well cognizant of the fact that I'm not absolutely insane. While I believe I'm not doing anything wrong, she could tell me something like, "I've read the part you wrote," or anything along those lines if she feels I need to make any changes. Even if this is the most hypothetical of situations and she could respond, "not all of this is necessary" or "I'm not sure this is to your favour," we'll see what she has to say. (Kurt)

In order to make the article coherent, I need to combine the close readings with the theoretical framework and secondary sources. Nevertheless, I'll need to talk to my supervisor about this before I can make a decision about my future. (Virginia)

They looked to be quite self-critical and metacognitive in their initial interview, which indicated that they were confused about how to proceed with their writing. "I guess" and "I don't know" remarks were frequently used by Virginia during her interview, showing a need for further information.

From the statements made by the SR and PA, it is clear that the supervisory meeting is an important tool for supervising not just planning and innovation, but also effort and conduct. According to the students' explanations in the following two cases, their supervisors helped them determine what they wanted to work on.

To practise my close reading, I merely glance at a few words that, uh... I'd sit down and declare, "This is a close reading," and then proceed to read a few parts really closely before moving on. (Virginia)

I also drafted a rough draught of a bibliography to use as a starting point. I've got between 15 and 20 titles, depending on how you count them. I need to go back and re-read a couple since they are so intricate, even though I've already read some of them and have others written down. So I had to go back and look for them at the library. (Jane)

It was said at the beginning of this section that the three pupils may be distinguished individually. People's varying rates of progress through the essay, as well as their supervisor's ability to meet with them, may have contributed to these variations. The larger chunks of "cognition" data recorded under monitoring and control (see Figure 1) indicated that Kurt had a head start over Jane and Virginia, while Jane and Virginia were still mulling over potential ways to proceed with their investigation. Even though these examples of assistance seeking and time management were rare for Kurt and Virginia, they were more pertinent to Jane at this particular stage in her academic career (see Figure 1).

A student's social environment and the elicitation of feedback from their supervisor are essential in this study's conclusions. As seen in the chart below, nearly all of the events classified as evaluations during the first interviews also fell within the umbrella of the PA dimension.

This workshop with [Teacher] has made me realise that I may have gone a bit too far in my rendition of the narrative. It's true that I can presume that whoever will be reading it has already read it, so I don't have to do much more than provide a brief summary. (Kurt)

After that, I had to come up with a topic idea for my research paper. It's true that I wrote something, but I think it was similarly ambiguous to the argument. (Jane)

It's also worth noting that Kurt regularly uses the word "we" to suggest that the writing process is in some way collaborative or at least co-constructed: (17)

And yet.....I would rather that I be able to comprehend my actions as they take place. A week ago, I emailed [Supervisor] with a few questions, and I think we're close to a deal on numerous issues. (Kurt)

In the second interview, the case was put together and the corner was turned.

All three students looked to have reached a turning point in their study at the time of the second interview and had refocused their attention. Their article, which they were now rewriting and revising, was accompanied with a visible excitement and a strong devotion to their work. These findings may be seen by looking at how much data was entered in the cognitive science SR (CS) (see Figure 3).

Figure 3 shows how Jane and Virginia used cognitive monitoring and control to guide their thoughts and provide structure to their writing: Figure 3: Jane and Virginia emphasise cognitive monitoring and control.

Everything else was just notes to myself, telling me things like, "Go read this and then go here and do this. " "This is in need of further development." Write down the notion you'd want to return, along with the area you'd like to go back to. (Jane)

In (19) she discusses how she depends on secondary sources to support her own work. Because they went too far off the rails, some of them may have had a connection to my topic, but I had to drop them from consideration. And I'm sure I'll use some of it in the future, but for now I'm only focusing on the most essential information. (Virginia)

A comparison of SR/PA data shows that students' ability to regulate their writing is strongly influenced by their interactions with their supervisor, both in terms of their cognition and their behaviour. All three individuals cite consulting their supervisor as a way to get out of a writing rut (seeking assistance). Figure 4 shows that the primary impact is on the cognitive plane, and these excerpts demonstrate how a real or imagined dialogue with a supervisor (or a peer) is once again evoked to describe strategies for monitoring and controlling the text by both Kurt (20), and Virginia (21), and strategies for evaluation and further planning the text

by Kurt (22). (20). (21). Note how these comments suggest a metacognitive awareness of the significance of the supervisor's techniques, as shown by the following: Take note:

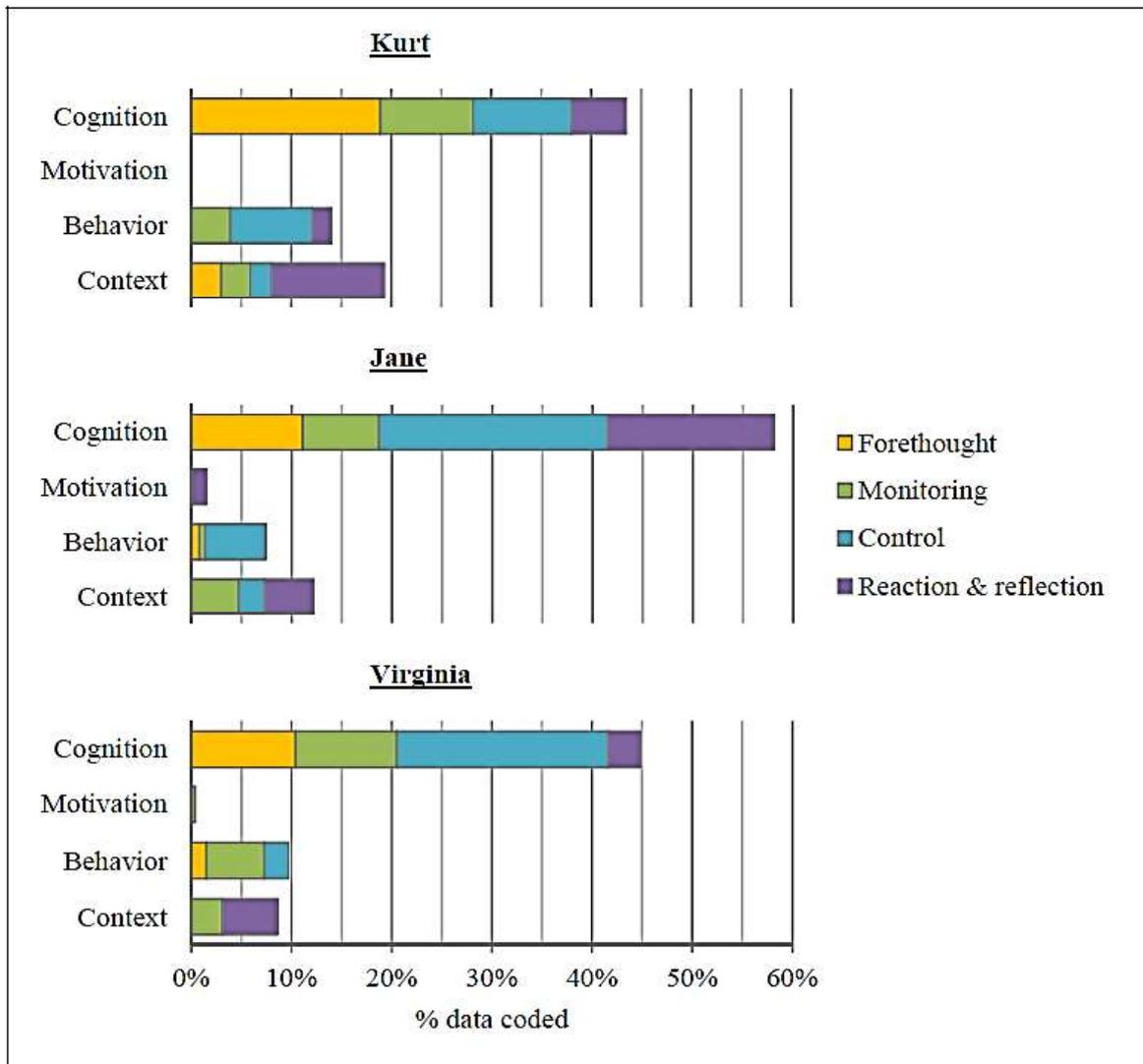


Figure 3. Phases of self-regulation in Interview 2. The percentages show what proportions of a particular area belonged to different phases.

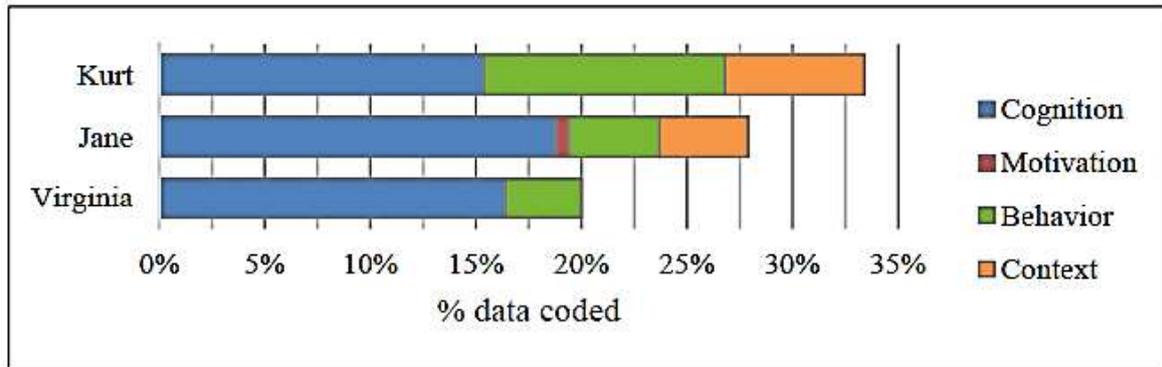


Figure 4. Participatory appropriation and areas of self-regulation in Interview 2. The percentages show what proportions of PA were coded as SR areas.

In order to have a better start, my supervisor proposed that these two paragraphs be consolidated into one paragraph. [Supervisor] has been really helpful in helping me understand how this process works and how to improve my next essay, which has made it a lot simpler for me. (Kurt)

I have a problem with anything like merging [the secondary reading] into the close readings. Honestly, I'm not quite sure what you're saying to me. The Supervisor indicated that she prefers focused pieces, and I guess this is what I will do: take some of these principles and expand on them. (Virginia)

When it came to Kurt, it looked that he was particularly engaged in the process of developing a strategy for following up on the advice he had received.

(22) I'll finish my introduction and allegory parts, but I'll wait until I've finished the main body of the paper before doing so. (23). I'm thinking of combining these two concepts. As far as I can tell, it's more than just a cosmetic adjustment. (Kurt)

According to Kurt's data, more instances of SR/PA of behaviour (Figure 4) than in Virginia and Jane's data were found, which indicated help-seeking tactics with the goal of soliciting ad-hoc input from the supervisor were found.

The supervisors' questions and comments, together with the SR and PA data, appear to have aided students in thinking about how to create their texts, i.e. how to manage and analyse their cognitive processes while they worked. There is evidence that this engagement helped students "turning a corner," that is, to develop a distinct thesis subject and strategy. His

ability to keep track of and regulate his ideas was vital to Kurt, as he explains in his own words (23, 24):

After that, my employer told me that it may be pretty significant. In the future, this might be the principal focus of inquiry. (Kurt)

You may hear something like, "Well, this is good enough," or "This is what you are going for, so make this one as nice as you can." (24) [Supervisor] (20) (Kurt)

Jane's cognitive monitoring also includes a social component. Kurt and Virginia's epiphanies were influenced by their supervisors' questions, and Jane appears to have reached a similar conclusion. She now has a clear aim for the argumentation of her essay and attributes her revelation to the following supervisor-asked questions:

"What do you like about this novel?" he inquires. "What do you like about this novel?" [Supervisor] posed the proper question at the time, and I was prepared with a response. I'm interested in writing on this topic. (Jane)

[reporting on her boss's chat] [informal] "All right, now it's time to come up with a title for this thing." "Title?" is one such example. I'm not even sure how I'm going to approach this, but I've already come up with the title, or at least the most of it, before I started writing. Because you've set yourself a succession of small mental goals, or targets. After that, I scribbled down a list of the most significant words and phrases. Actually, they were some of the most important words I utilised in my dissertation. (Jane)

Virginia had just finished a theoretical phase and was now narrowing down her subject, which had become her major goal when reading the material and determining the framework of the piece.

(27) When it came to the subject at hand, I stuck with what I thought was the most suitable. Who knows? I may utilise some of it at some point. Now, I only include elements that are actually important to the topic, since [Supervisor] has asked questions such, "How will you organise the essay, how will you write about the two books?" As a result, I separated [Novel] into discrete sections and then eliminated portions that were not pertinent to the specific themes I was reading at the time.. (Virginia)

When students used their supervisor's feedback to evaluate their own work, they were able to pinpoint areas for growth and reinforce the value of their approach by pointing out the things that worked well:

As a result of feedback from my supervisor, (28) What a blessing it is that we were able to get this straight from the beginning, you know... That's what I mean when I say it wasn't right from the beginning. There have been several iterations of the concept, but it's wonderful to know that it works once you have a piece of writing to show for it. (Kurt)

Information on help-seeking and time management measures, which were categorised as SR/PA in interview 2, was also included in the data from interview 2. (29, 30). Keep an eye on the circumstances (course and test dates, conflicts across courses, deadlines) in other SR/PA situations (31) and

Afterwards, if I think I have enough, I'll talk to my supervisor and explain my issue, and [Supervisor] will either request a sample or we'll just talk about the matter." (Kurt)

(30) I'll wait till I receive some feedback and a new surge of inspiration before I post. I'm going to jot down what's on my mind. What [Virginia] had to say about my writing will be examined. (Jane)

My essays are due in two weeks or so, I suppose. Nervous, to say the least! However, I have a test to take after that. It's quite unlikely that they work on it simultaneously. (Virginia)

It's becoming clearer to me that the timetable... you're trying to compel us to produce a text so that we may work on it more leisurely in the future. (Kurt)

Third, we talk about how to reflect on the writing process and how to rethink academic writing.

At the end of the term, the interview data showed a strong correlation between the cognitive area and the "reaction/reflexion" phase of self-regulation, which was not surprising (see Figures 5 and 4 below and Tables S1-S3 in Appendix for the SR area+phase split). Interviews were done in the past tense because the essay had already been finished and submitted. They all seemed to be critiquing components of the BA programme, such as requirements, timelines and seminars they were expected to attend, in their final comments on context at the

end of term SR of context (reaction and reflection) was more frequently mentioned in Kurt and Jane's data (Figure 5) than in the data of Virginia.

This was the point in the writing process where students were reflecting on their thoughts and feelings about the work they had done so far, as well as any adjustments they had made to their original objectives for the essay. In both Jane and Virginia, they emphasised the necessity of picking unique materials that grabbed their personal interest, as well as generating an engaging topic:

I wanted to find something intriguing to write about, since I believe strongly in the need of developing a deep emotional connection to your work's subject matter. (Jane)

My subjects seemed to have magically come together or something like that when I eventually figured out what I was writing about. In the past, there were much too many distinct ideas, but now they've all been grouped together. (Virginia)

To maintain her sense of self-efficacy, Jane made the following self-reflective remarks about the importance of receiving outside assistance:

However, I'll hold off responding until I hear from [Supervisor]. Even if there are a lot of questions, I'm still undecided, you know? (Jane)

Jane's need for reassurance about her conduct might contribute to this. Other students experienced self-doubts throughout the course, but as Jane points out (35, 36), getting feedback was critical for her to ensure that her evaluation of her work was accurate. According to Jane's recollections of her time at the university, social interaction was critical to her capacity to maintain self-control, while discussion and criticism were crucial to helping her assess her work and come up with new ideas for future projects. For the sake of stating it out loud, someone says to you: "Yea, alright, I've seen this and, um, the ideas are nice, and do this and restructure like that or maybe change here or change there" (3) (36) According to my own experience, this is also true for me. It's critical, in my opinion, to get input from others on the tasks you're working on. Because of the interactions she had with the supervisor, Virginia was able to keep track of and better define her rhetorical sub-objectives as she was writing (note the use of the word "we" in this sentence).

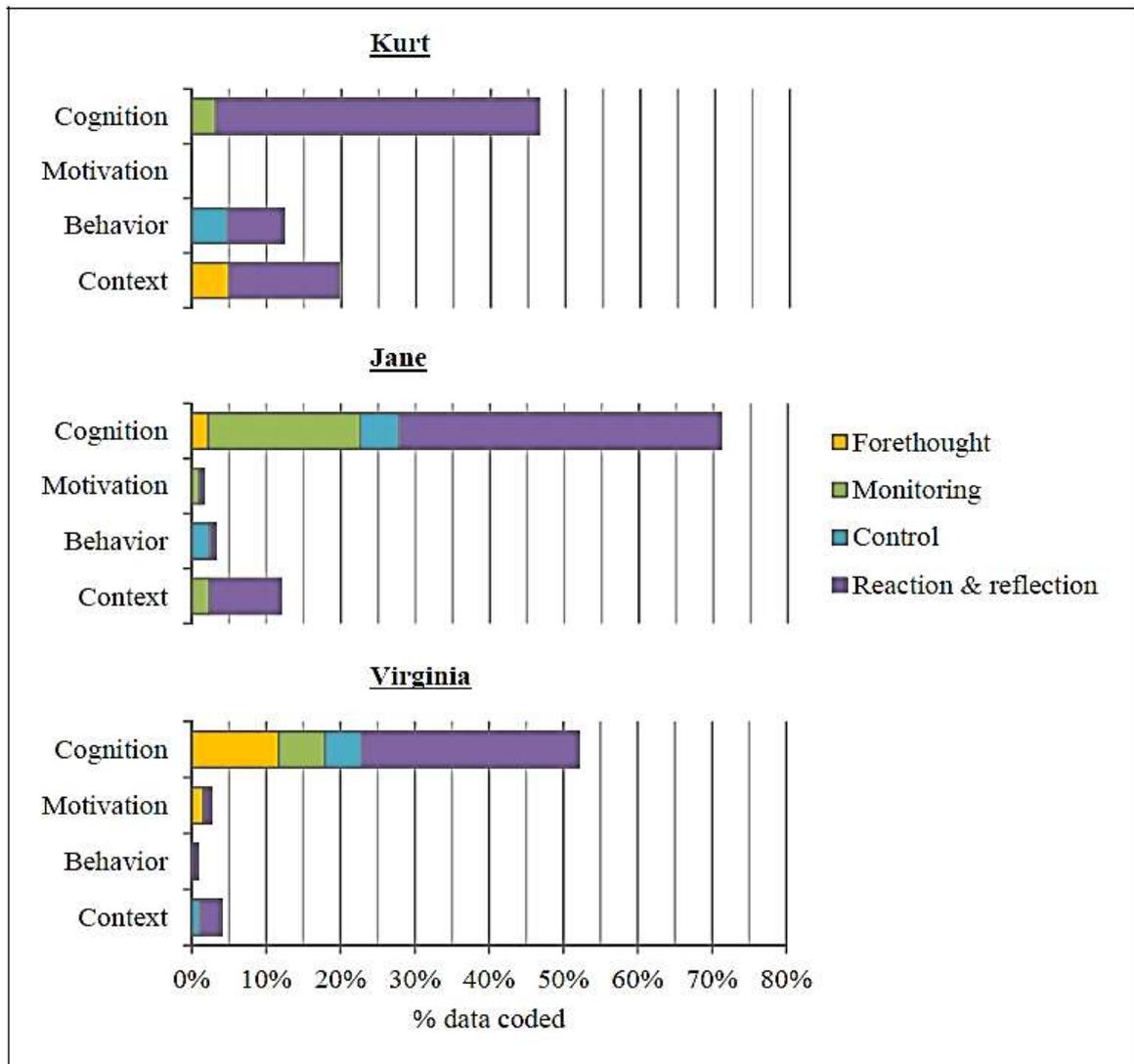


Figure 5. Phases of self-regulation in Interview 3. The percentages show what proportions of a particular area belonged to different phases.

When I utilised [topic] while reading the books, I realised that I couldn't properly explain it, so I created this part to make it more theoretical. Because I am unable to discriminate between what is significant and what isn't, the supervisor's remarks were quite helpful. Actually, I can't see it for myself, so it's more like it needs another person's help.. (Virginia)

Both Jane and Virginia's remarks above indicate how difficult it is for students to evaluate the quality of their own texts, and how crucial the supervisory discourse is in scaffolding this judgement, particularly when students are given with professional genres as models:

(39) As for whether or not I'll get to see it for myself, I'm not too sure. The only essays I've read that were much better than this one, so I'm not sure how wonderful it's supposed to be. Articles are the only form of media I consume, as they're more in-depth. (Virginia)

In Virginia's instance, for example, the SR of cognition data was occasionally labelled as "forethought," because she still had a few particular goals and last touches to complete before submitting her application to the university. Aside from that, she offered a few remarks labelled "Motivation: reaction/reflection" (see Figure 5).

Last but not least, all three students interviewed seemed to imply that their vision of the task, namely writing an academic essay in literary criticism, has been affected as a result of their experiences. During this time, they reflected on the nature of their work and the lessons they had learnt through writing their BA essay:

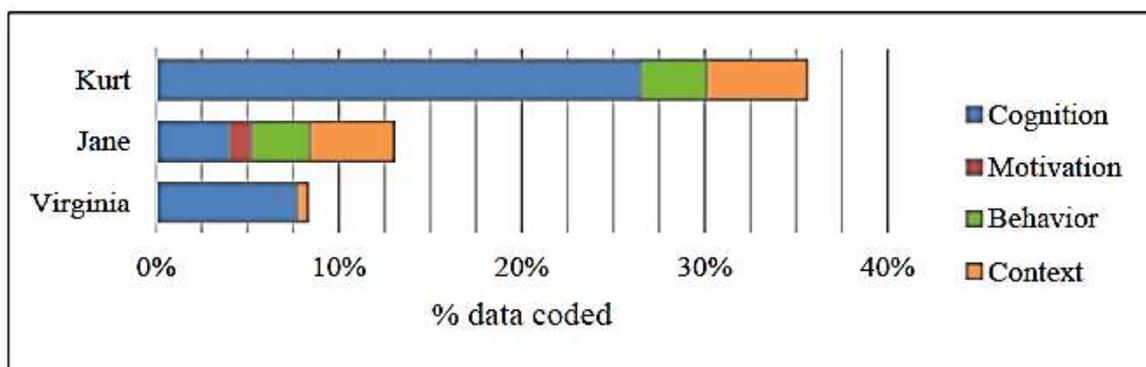


Figure 6. Participatory appropriation and areas of self-regulation in Interview 3. The percentages show what proportions of PA were coded as SR areas.

The themes you write about are ones you aren't familiar with. (40) Write your fresh essays after thinking to yourself, "So I can't really write anything interesting because I only know the superficial stuff," To put it another way, I have the idea that I am more knowledgeable or that I am better able to grasp things. (Virginia)

This was the first project of its like that I finished, and it taught me the need of repetition if you want to get good at something. In light of the above, I think I did a decent job, but I can't say that I've perfected the method. Even though it will be a lot easier for me to do this on my own, I'm sure that I'll still make some mistakes, right? (Kurt)

To be honest, my first impression was that it would be a lot like any other essay I'd written in the past. Mistakes were made, and I should have known better. Moreover, I had no prior experience in writing literary essays, but I figured the process would be similar to that of writing for a class, only more in-depth and requiring more critical reading and secondary literature... For me, it's almost as if you need to go back and rework it into something more substantial. To put it simply, this BA essay is different from any other essay. (Jane).

SR/PA social interaction statistics show a relationship between this shift in perspective and the participation experience, as indicated by comments from students who claimed that their goals for writing and their assessment of the writing assignment were influenced by the participatory experience. Although Kurt was clearly driven and engaged in earnest, what he actually learned was about writing as disciplined activity, in which the supervisor played an essential role: a disciplinary activity.

This project was initially meant to be an essay. As previously said, I was unable to come up with a theme that excited me. After talking with my supervisor, I discovered an area of study that she was familiar with and believed would help me, and it piqued my interest enough to seek additional research in. I've learned a few things about this location. It was a good experience since I learned a lot about writing in general, including how to construct a thesis and an argument, and how to deliver one. (Kurt)

As Jane points out (see also paragraph 42 above), her goals and vision for the BA essay have altered since her writing experience: "I've reframed my goals and perception of the BA essay." says the author.

It would appear that the goal was to produce a high-quality BA essay of some sort (44). Write, for example, to pique the reader's interest and capture their attention. Even if the topic of my essay isn't something I'm especially interested in, my objective is to produce an essay that is interesting to read. There may be something in there that motivates the reader to check out the novel I'm currently working on. (Jane). Her work became less product-oriented and more process-oriented, much as Virginia's.

I had previously written four-thousand-word essays in [City] last semester, and I expected this one to be at least as long. In my opinion, though, it was more a question of my taking

matters into my own hands. Trying to describe it is difficult because I'm doing it all on my own. (Virginia)

This communicative approach to the writing work is also evident in her final self-evaluation, which is based on the criteria of personal interest and authenticity of the assignment to favourably judge her accomplishments.

(46) My initial impression was that it would be a disappointment. It appears to be a genuine essay. It's far more interesting to learn about something than to hear about it. There is a lot of entertainment value in just reading about everything that's going on in the world. As if it weren't my own idea. It's more like I've found the real deal. (Virginia)

For Kurt, the alteration in his writing experience, both cognitive and communicative, could not have been achieved without the social, dialogic, and nearly co-constructed process he developed with his supervisor, who appeared to operate as a "thinking guide"

To sum it up, I reach the next level and then the following stage and see that the results aren't all that great. After hearing from my supervisor, it becomes evident that these things aren't working correctly... In the beginning, your knowledge will be restricted and you will not be aware of your own inadequacies in the topic. (Kurt)

### **The Fifth Point of View**

It was the goal of this study to learn more about how three successful BA literature students self-regulated while writing their final BA essay and how social contact, especially with their supervisor, affected their SR approaches. We used Pintrich's (2000, 2004) self-reported experience framework as a coding heuristic and Rogoff's (1990) participatory appropriation concept to operationalize the social experience when coding data about social interactions in order to track students' self-reported experiences (SR) throughout the essay-writing term. Overall, we have sought to highlight the importance of social contact in aiding students' management of writing in both naturalistic and academic settings. As a result of this, the students are able to experience personal growth and development.

RQ 1 asks, "How do three successful BA literature essay writers self-regulate during the course of their essay writing?".

Because all three of our participants passed their BA essay with flying colours, it's safe to claim that they all showed themselves to be self-regulatory students. Using Pintrich's coding heuristic, we were able to identify differences in how different persons approached the text. For example, the percentages of data categorised as SR of cognition, behaviour, and motivation have changed between the three people at different points in time during the research. There was a lot of variation in the students' regulatory methods based on different contexts, such as the speed at which they could meet with a supervisor in their BA process and how much time they spent on behaviour and situation regulation during their first interview.

There was a great amount of effort put into the forethought phase (what we called innovation) and a significant degree of knowledge and interest in the core material that all three participants participated in. According to a recent study (Teng and Zhang, 2016), metacognitive techniques including concept preparation and goal-oriented monitoring and assessment were important SR prediction methods of writing scores. According to our findings, the results of that study are in line with ours. It was determined that all three students finished their BA essays on time and received an acceptable overall grade from their supervisors' colleagues, who were also professors in the programme. Using metacognitive monitoring and management, we found that all three participants spent a substantial amount of time developing their key concept, which came from a personal and distinct perspective. As Järvelä and Hadwin (2013) note, when students have mastery-oriented or learning objectives, regulation of emotion involves monitoring "conditions for sustained motivation and cognitive engagement toward achievement" which students did not report doing in their survey data.

Research has established a correlation between the foresight phase (goal setting and planning) and the quality of the writing generated by our participants (Breetvelt et al., 1994; Ong, 2014; Van den Bergh & Rijlaarsdam, 2001). A great amount of effort was put into the acquisition and reflection of their prior information, metacognitive activation of prior writing experiences, and the establishment of particular argumentation goals during their involvement in this study. Goals that are "specific, proximate, and difficult" are more successful than goals that are "broad" according to the literature on SRL (Zimmerman &

Cleary, 2009). (p. 250). As they moved through their reading of primary and secondary sources, students reported engaging in "hierarchical feedback loops" (p. 250), where smaller objectives serve as a means to the ultimate end of accomplishing larger ones. Recursive re-evaluation and re-definition of writing goals were also mentioned by students. Students: (the essay). For students' metacognitive monitoring of the accomplishment of highly desired results, these secondary objectives act as checkpoints (Järvelä&Hadwin, 2013) that allow them to strategically plan their future steps. RQ2 will go into deeper depth on this subject.

For this study, we were able to capture the "temporal unfolding" (Hadwin and colleagues, 2018, page p. 18) and highlight important stages in the writing process thanks to the collection of longitudinal data. Second interview participants looked to have reached a turning point in their thinking, having chosen a key subject or concern.. Therefore, students reported writing, editing and generally trying to build the optimal argumentation structure with input from primary and secondary materials at this stage of the process. Metacognitive monitoring and control were used to describe a wide variety of these attempts to monitor and control one's own thinking. They were able to discuss a variety of cognitive strategies to move forward, such as the use of keywords, questions, rehearsals of content knowledge, and integration of secondary material with their supervisors (as we will discuss in RQ2), as well as their goals (and the discussions they had with their supervisors). Furthermore, this study supports Hadwin et al. (2018) description of regulation as adaptive, which states that regulation is a conscious and purposeful behaviour in the face of adversity, with an aim to achieve particular goals. We also found that despite their frustration with and inability to do so alone, participants saw the value in critically reflecting on, discussing, and validating their work with a supervisor or a peer (SR of behaviour), confirming Teng and Zhang's (2016) observation that seeking and taking advantage of social support is an important part of the creative process.

Despite the fact that these students were likely effective self-regulated writers, their remarks frequently suggested that their writing regulation was intimately linked to their social interaction experiences, which we conceptualised as participatory appropriation (PA). We examined this aspect of the issue in answer to our second research question.

Second, what role does participatory appropriation (primarily through interaction with a supervisor) play in explaining and affecting these students' self-regulation of writing? 5.2

This new writing challenge would not have been possible without our students' active participation in the selection process. Using the PA idea, we were able to find instances in our data when students successfully characterised and engaged in supervisory discussion and indicated how this discourse led to new questions and goals (i.e., how they "transformed" this dialogue into new regulatory strategies). In this regard, the extent of the SR/PA overlap in the interview data is not as essential as what the students say about it and the emphasis they place on this debate in terms of writing regulation. If data were given only in terms of Pintrich's theoretical framework, its transformational value would not have been represented. SR/PA data illustrate this interaction's qualitative relevance for the students' writing SR. As a starting point, here are a few instances of commonalities and differences:

During the planning stage, PA played a crucial role in aiding students in re-formulating their objectives in a way that was relevant to their academic fields of focus. Because it helped students think strategically about how to achieve these goals, supervisory discourse also provided them with suggestions for particular tasks and procedures (Zimmerman & Cleary, 2009, p. 250). The permeable character of humanities genres and their reliance on argumentation make "knowledge transformation" (Bereiter & Scardamalia, 1987) problematic for the beginner writer in literary studies, as we noted in our introduction (Shaw, 2009). Kurt and Virginia's data included a lot of planning and activation of topic knowledge, among other things, in the first interview that we conducted, which we referred to as "innovation" (re-telling). In order to uncover an angle, conceptually organise Kurt's text, and determine specific aims for his text, the majority of Kurt's data were summaries of his contacts with his supervisor (SR/PA) (for example, the need for contextualization). Similar to this, the supervisor's questions gave Jane and Virginia with a solid strategic foundation on which to build their essay.

2) We categorised the data as SR/PA. shed light on how students' cognitive monitoring and regulation of their own writing performance was helped by interaction in the form of supervisory talks. "SRL is gradually appropriated through interaction," is how our participants have described these debates, which are more than just examples of teacher-

directed management (Hadwin&Oshige, 2011, p. 247). Even in fictitious settings, pupils utilised supervisory words as cognitive regulation techniques, as indicated by the numerous instances in which pupils recalled supervisory discussions to monitor their thoughts and to use the supervisor's words as a cognitive regulation strategy (as in Kurt). They all reported several instances of behaviour regulation (help-seeking tactics) that indicated the importance of the interaction with their supervisor in initiating and engaging in new cycles of planning, monitoring, and assessment of their work. Jane was the most vocal. Because of this, PA benefited SR's "cyclical adaption" while it was evolving (Hadwin et al., 2018, p. 85). Student quotes with the SR/PA code include additional emphasis on appropriation because our data show that students not only recount but also reason about their conversations with the supervisor, linking them to significant shifts in goals and transforming them into new concepts for regulating writing.

As a result of PA's emphasis on appropriation, students' ability to control their work was linked to their interactions with their supervisors. Sociocultural studies on teacher-student or supervisor-student contact, particularly in academic university contexts (e.g., Björkman, 2017; Dysthe, 2002; Eriksson & Mäkitalo, 2015), as well as other findings in the field of enculturation, show that this conclusion is consistent. As a co-regulation case, the supervisory discourse looked to be more than just a chance to internalise regulatory techniques in advance of creating rules. Using this method allowed the students to understand the difficulties of academic writing such as the need to demonstrate a clear academic identity in their writing, the need to develop a unique and personal point of view, and the shift towards viewing the text as a work in progress, which was reported by the students themselves (Castelló et al., 2013).

Taking these factors into account, our findings showed two more traits worth mentioning. All three participants had changed their views about academic writing and what a BA essay entailed at the end of the essay-writing session. According to an example from the final interviews, the method, strategies, and aims of writing an essay for a BA degree were discussed in length. One of the most interesting things about Kurt's quotes is that they provide a fresh look at writing as a disciplinary practise and the crucial role that the supervisor plays in this learning process. In this sense, the reconceptualization of writing

activity seen by Nicolás-Conesa and colleagues (2014) is tied to what Pintrich (2000) argues in terms of a shift in goal orientation: from performance to mastery, which is explored by Pintrich (2000). (2000). See pages. 474-479 for further information. In terms of Schunk and Zimmerman (1998)'s four-level development model, this shift in students' motivation for writing regulation from social to personal sources might also be defined (Zimmerman & Kitsantas, 1999). It was the supervisors' role as socialisation agents to help students understand what academic literary criticism quality markers are: originality, freshness, a personal connection to the ideas proposed, and the ability to connect personal insights with the larger theoretical and critical conversation in literature.

The study's relative lack of comments expressly tied to the control of motivational processes was one of its most noteworthy features. Only a few students expressed a need to manage their motivation consistently during the course of the semester, and they were focused on certain aspects of text creation. It was observed in section 5.1 that all three participants showed an intense interest in their core topic and in good cognitive control, suggesting that they may be able to keep their motivation going in the long run. In this aspect, it is probable that the participatory nature of the experience had a significant impact. Pintrich (2003, p. 672) summarises many of the educational approaches proposed to encourage motivation as "providing clear and accurate feedback," "sustaining their ability to take charge," and "providing opportunities to exercise some choice and control." Meaningful connection has the potential to support motivation and metacognitive accuracy, as we can see from previous research (Pieschl, 2009). When we found a strong correlation between the PA and SR domains of students' cognition, we may assume that the supervisory conversations they were exposed to gave them the necessary tools to structure their thoughts, analyse and evaluate their ideas, and keep the spark of discovery burning. While it's "[i]t is evident that there is a reciprocal and recursive relationship between motivation and cognition, but there is a need for further research on this topic." that motivation and cognition are linked in a cyclical way, Pintrich (2003, page 679) asserts that more research is needed in this area.

## 6. Ending thoughts

Students' SR was captured in a variety of ways while writing a BA essay using Pintrich's (2000, 2004) framework. An established framework had to be used in order to ensure that SR could be discovered and traced in the data, which was gathered over a long period of time and by three separate individuals. Participants' social experiences, particularly their conversations with their supervisor, had a significant influence in the development of their writing regulation as shown by Rogoff's idea of participatory appropriation (Rogoff, 1990). Although our method has limitations, we must be conscious of these limitations. However, despite our efforts to analyse the link between self-regulation and social interaction, our study is still focused on individual students and relies on self-reported data from interviews. Since it doesn't cover both co-regulation and sociocultural interaction, it can't be classified as either. Using PA, which emphasises appropriation and individual change, the study also tackles many of the difficulties that researchers have while doing research. Students' self-regulation of writing (SR) can be studied in a variety of ways that go beyond cognition, including: identifying episodes of SR in response to challenges; exploring the emergence of SR in connection with dialogue and self-regulation; and providing qualitative and subjective data that reveal students' evolving self-regulation (Hadwin et al., 2018). Regulatory issues were also examined from a temporal and naturalistic viewpoint, in which students and supervisors are involved in a high-risk, real-world activity (the BA essay).

During the interview, we discovered an additional limitation: our data collecting method may have served as a metacognitive scaffold, helping participants reflect about their texts and crystallise some of their PA experiences. Similarly to the four participants in Wong's (2005) study, our students expressed gratitude for the way our in-depth interviews helped them become more aware of and introspective about their writing. Instead of providing criticism or ideas to the participants, we used a stimulated-recall strategy to enable them talk about their work; this shows that tutorial strategies like as coaching or any other verbalization to scaffold metacognition and SR of writing might be advantageous (Serra & Metcalfe, 2009).

Research in this area focused on how writing regulations were implemented outside of an individual's direct control. We found that students' acquisition of important cognitive and metacognitive skills, such as disciplinary knowledge and ways of thinking that meet situated

writing expectations, was helped by social contact with their instructors, despite the fact that cognitive and metacognitive aspects predominate in the data on participants' SRs of writing. When students engage in meaningful connections, the social environment impacts the development of cognitive and metacognitive writing regulating mechanisms, as well as the availability and conditions. According to this study and others from a sociocultural viewpoint, the development of self-regulation in advanced disciplinary writing is best understood when interpersonal dynamics are taken into account (Dysthe, 2002). Disciplinary culture "ways of thinking and acting" were transmitted to employees by supervisors in this case (Rogoff & Angelillo, 2002, p. 222). Finally, Kurt's closing words convey both the transformation and the role performed by his supervisor. My supervisor gave me criticism, and it became clear to me what was not working... and you look back and you did a fantastic job." When you first start off, you'll have a limited understanding of the topic, and you won't be conscious of your own inadequacies (Kurt)

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## **Appendix A: Interview Protocol**

Ask background info (topic, supervisor comments etc.)

(with text in front)

Look carefully at your text (might take a moment or two). How do you feel about it?

Could you tell us, overall, where did you concentrate most of your efforts on?

Could you tell us what aspects of your text you think need more work? Why?

What do you think you need to do next? (why)

Final comments?

Table S1. Overview of Kurt's Participatory appropriation & Self-regulation: Phases (relative %)

		Cognition				Motivation				Behavior				Context			
		F	M	C	R	F	M	C	R	F	M	C	R	F	M	C	R
Int 1	%	36.8	27.0	37.8	7.6	100	0	0	0	0	0	100	0	15.8	60.5	60.5	23.7
	nr	(6)	(5)	(6)	(3)	(1)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(1)	(1)	(1)	(1)
Int 2	%	50.6	13.6	7.8	27.9	0	0	0	0	0	34.2	64.9	0	0	43.9	31.8	25.8
	nr	(3)	(1)	(1)	(2)	(0)	(0)	(0)	(0)	(0)	(2)	(5)	(0)	(0)	(1)	(1)	(1)
Int 3	%	0	0	0	100	0	0	0	0	0	0	100	0	0	0	0	100
	nr	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(1)	(0)	(0)	(0)	(0)	(1)

F: Forethought and planning. M: Monitoring. C: Control. R: Reaction and reflection. *Note.* Percentages indicate what proportion of a particular area (e.g. Cognition) within Participatory appropriation was coded as a particular phase (e.g. Forethought) in the data source (e.g. Interview 1). Numbers in parentheses indicate how many instances of the code were identified.

Table S2. Overview of Jane's Participatory appropriation & Self-regulation: Phases (relative %)

		Cognition				Motivation				Behavior				Context			
		F	M	C	R	F	M	C	R	F	M	C	R	F	M	C	R
Int 1	%	0	55.0	0	45.0	0	0	0	0	0	0	100.0	0	0	100.0	0	0
	nr	(0)	(1)	(0)	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(1)	(0)	(0)	(4)	(0)	(0)
Int 2	%	17.1	12.7	53.2	27.8	0	0	0	0	0	0	100.0	0	0	59.5	35.7	38.1
	nr	(4)	(2)	(8)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(1)	(1)	(1)
Int 3	%	0	15.0	27.5	55.0	0	0	0	0	0	0	75.0	25.0	0	0	0	100.0
	nr	(0)	(1)	(1)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(1)	(0)	(0)	(0)	(3)

F: Forethought and planning. M: Monitoring. C: Control. R: Reaction and reflection. *Note.* Percentages indicate what proportion of a particular area (e.g. Cognition) within Participatory appropriation was coded as a particular phase (e.g. Forethought) in the data source (e.g. Interview 1). Numbers in parentheses indicate how many instances of the code were identified.

Table S3. Overview of Virginia's Participatory appropriation & Self-regulation: Phases (relative %)

		Cognition				Motivation				Behavior				Context			
		F	M	C	R	F	M	C	R	F	M	C	R	F	M	C	R
Int 1	%	51.7	8.7	39.5	0	0	0	0	0	0	30.3	69.7	0	0	0	0	0
	nr	(3)	(1)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(1)	(3)	(0)	(0)	(0)	(0)	(0)
Int 2	%	31.1	28.7	40.2	0	0	0	0	0	33.3	19.6	46.8	0	0	0	0	0
	nr	(6)	(6)	(5)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(2)	(0)	(0)	(0)	(0)	(0)
Int 3	%	0	40.2	35.5	24.3	0	0	0	0	0	0	0	0	0	0	100.0	0
	nr	(0)	(2)	(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(1)	(0)

F: Forethought and planning. M: Monitoring. C: Control. R: Reaction and reflection. *Note.* Percentages indicate what proportion of a particular area (e.g. Cognition) within Participatory appropriation was coded as a particular phase (e.g. Forethought) in the data source (e.g. Interview 1). Numbers in parentheses indicate how many instances of the code were identified.