

# Observing writing processes of struggling adult writers with collaborative writing

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**Abstract:** This study investigated how struggling adult writers solve a writing task and what they know about writing and themselves as writers. The writing process of the adult writers was examined by combining three elements: the observation of collaborative writing tasks, analyses of their written texts, and structured individual interviews that included both retrospective and prospective parts. This methodical approach provides productive tools to assess writing processes and writing knowledge of struggling adult writers. The triangulation of data from the different sources is visualized in a case study. Findings from the case study suggest both similarities and differences between struggling adult and younger writers. Concerning the writing process of both groups, planning and revision play a limited role. However, alongside these similar limitations in their writing process, struggling adult writers distinguish themselves from their young counterparts through their relatively extensive knowledge about themselves as writers.

**Keywords:** writing process, writing knowledge, collaborative writing, struggling adult writers



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## 1. Introduction

A great number of adults still have low literacy skills, as PIAAC, the Survey of Adult Skills, has recently shown (OECD, 2013). Unfortunately, PIAAC provides insight only into reading, numeracy, and problem solving skills – adult writing skills were not assessed.

The relatively scarce research that does exist on adult writing skills mainly investigates university students. Accordingly, it focuses on how adults with good writing competencies act when they are writing (Bourdin & Fayol, 2002; Chenoweth & Hayes, 2003; Quinlan, Loncke, Leijten, & Waes, 2012; Torrance, Thomas, & Robinson, 1994). Little is, however, known about the writing process of struggling adult writers. Those few studies that do investigate struggling adult writers focus on basic skills, especially orthography or grammar (Grotlüschen & Riekmann, 2012; Wengelin, 2007). Accordingly, we know little about struggling adult writers' higher order skills such as knowledge regarding writing and knowledge of themselves as writers. Earlier studies – such as Fagan (1988) – point out that these adult struggling writers have a misconception of writing, in that they limit writing to mechanical aspects.

Some research on writing interventions with struggling adult writers is presently emerging (Berry & Mason, 2010; MacArthur & Lembo, 2009). Yet, analogous to reading research, these interventions are based on studies with younger age groups. Extrapolating research from younger populations to adults “is largely speculative, especially in areas where there is little existing AE [=adult education] research” (Kruidenier, MacArthur, & Wrigley, 2010, p. 14), even if such a transfer may initially make sense. With respect to reading, Kruidenier et al. (2010, p. 14) emphasize that there are important differences between young and adult learners. Likewise, even though a number of studies have been conducted on young struggling writers (Amato & Watkins, 2011; Troia, 2006), it cannot simply be inferred that characteristics typical to them also hold for adult struggling writers. On the contrary, it has to be assumed that factors such as lifestyle, age, or formal educational settings affect learning in general and learning how to write in particular. According to Kruidenier et al. (2014, p. 14) factors that contribute to making adult learners a distinctive group include, first of all, their literary experiences which may be different from those of children and secondly, responsibilities of adult life that limit their ability to regularly attend literacy courses and to devote time to learning.

There are at least three sets of questions which need to be answered regarding struggling adult writers as a distinctive group. One question would be how to design literacy courses for adult learners to fit their lifestyles. However, before addressing this question of pedagogy, two other sets of preceding questions must first be addressed. These preceding questions are the focus of the present article:

1. How do struggling adult writers solve a writing task? And what writing knowledge do they have?
2. What are appropriate methods for examining the writing processes and writing knowledge of struggling adult writers?

The article is structured as follows: I begin (section 2) with the methodological question, arguing that the best way to observe the writing processes of struggling adult writers is a novel integration of methods that brings together: the observation of collaborative writing tasks, follow-up structured individual interviews with the writers, and analyses of their written texts. Additionally, I argue that this three-part approach can provide insights into the writing knowledge of struggling adult writers. I then (section 3) outline the larger context within which the sub-study which is the focus of this article was located, by relating it to a larger investigation into struggling adult writers in German-speaking Switzerland. This is followed (section 4) by a detailed presentation of the proposed three-part method, and an illustration of how it was used in a sub-study of dyads of struggling adult writers. I then (section 5) focus on a case study of one of these writing dyads to show how it sheds light on their writing process and writing knowledge. In section 6, I conclude that collaborative writing is a fruitful avenue for studying struggling adult writers, and advocate further research on how collaborative writing could foster the development of struggling adult writers.

## **2. Methodological Considerations: Using Collaborative Writing to Research Struggling Adult Writers**

Writing processes are traditionally observed a) prospectively with questionnaires or interviews, b) concurrently under thinking aloud conditions, or c) retrospectively with interviews, with each method having its own strengths and limitations.

- a) *Prospective interviews* – including hypothetical interviews, as in Zimmerman and Martinez Pons (1986) – hold the risk of experimental bias, which can develop by asking additional questions (Veenman, 2005, p. 79). What is more, using hypothetical situations in prospective interviews is rather challenging since this requires that interviewees have the skill to connect and apply such situations to their own experiences (Spörer & Brunstein, 2005, p. 45). Compared to a questionnaire which does not explicate a common point of reference for researchers and interviewees, hypothetical situations can however, create shared points of reference which interviewees and researchers can both refer to.
- b) *Thinking aloud* normally makes hierarchically higher order processes observable, but does not reveal highly automated processes (Veenman, 2005). An important question with respect to thinking aloud is whether this method impacts on such higher order writing processes. Janssen, Van Waes and Van

den Bergh (1996) show that the main influence is a time effect, insofar as pause duration is prolonged. Further effects include variances on planning levels. These variances also depend on the complexity of the writing task. Referring to thinking aloud, the authors conclude: protocols of writing tasks that necessitate problem solving are more informative than protocols of simple tasks that are protocols of knowledge telling and therefore less useful (Janssen et al., 1996, p. 249).

As Winne (2010, p. 271) emphasizes, thinking aloud data is approximately concurrent with the occurrence of cognitive activities, but it does not “instantiate an event ‘in action’”. Rather, if writers are thinking aloud, they are interpreting an event. So, thinking aloud implies that test subjects can think and write almost simultaneously while also describing and interpreting their cognitive activities. This requires considerable verbal skills, which may be an additional burden on struggling writers.

- c) *Retrospective interviews* are, whenever possible, usually conducted immediately after a situation has been observed. If the writing encompasses cognitive activities, it has to be taken into consideration that interviewees generally find them very difficult to remember. Analogous to thinking aloud, it can be assumed that this method requires quite good verbal skills, since remembering and verbalizing from memory require interpreting one’s own cognitive activities. Moreover, as Levy, Marek and Lea (1996) show, test subjects are often not capable of remembering the chronology of the processes adequately or of reconstructing thoughts uttered during the thinking aloud period.

Notwithstanding these limitations, Janssen et al. (1996) and Levy et al. (1996) maintain that, since all methods have their shortcomings, neither thinking aloud nor retrospective interviews should be abandoned. The same applies to prospective interviewing. One possible solution is to use a combination of these methods (Spörer & Brunstein, 2005). Yet, beyond providing a brief outline, this overview of ways to observe writing processes also shows that the different methods each place different demands on the test subjects; accordingly, a combination of these methods places more and therefore even higher demands on test subjects.

A careful assessment with regards to method and demands on the test subjects is all the more important if writing processes of struggling adult writers are to be recorded. Studying this group confronts researchers with specific multiple methodological difficulties:

1. They do not like to be observed directly or filmed while writing because they feel ashamed (Sturm, 2010).

2. Pretests reveal (Sturm, 2010) that they face difficulties in thinking aloud while writing. One possible reason is that they need their cognitive capacity for writing; another reason may be that they also feel ashamed to think aloud.
3. Since struggling adult writers do not often possess fully automated basic skills, such as handwriting or orthography, they will focus on hierarchically low processes (Wengelin, 2007). So, it is not clear if thinking aloud data will be informative enough.
4. Adults with low writing skills avoid writing situations (Sturm, 2010).
5. Analogous to studies with adolescents (Dockrell, Lindsay, & Connelly, 2009), it has to be assumed that some adults with low literacy skills likewise have insufficient verbal skills.

Therefore, in view of points 1) – 3), thinking aloud is not a viable method to examine the writing processes of struggling adult writers. Moreover, since struggling adult writers often have limited personal experience to draw from (point 4), prospective interviews that refer to a hypothetical situation will only provide little information on this group. Finally, insufficient verbal skills also call interviews in general into question. One way to address these difficulties is to use a multi-method approach that brings together data from a video observation of writers fulfilling collaborative writing tasks with structured individual interviews shortly after task completion and analysis of the written texts.

Collaborative settings could be part of an alternative method for studying struggling adult writers. Until now, collaborative writing has mostly been explored as a learning arrangement: it has a strong positive impact on text quality (Graham and Perin, 2007, report an effect size of  $d=.75$ , which is above average) and from a socio-constructivist view, collaborative writing also has a “motivational relevance for students” (Boscolo & Hidi, 2007, p. 9).

In collaborative writing, not only texts but also meanings are constructed together (Kostouli, 2009). Since collaborative writing tasks are social events (Lowry, Curtis, & Lowry, 2004; McAllister, 2005), there is a natural need to negotiate the ideas which should and should not be included in the text and how an idea should be formulated, etc. As this negotiation happens out aloud, parts of the writing process become more readily observable to researchers. Such out aloud negotiation about for example task demands, ordering ideas, or formulations ought to increase the observability especially of hierarchically higher order processes. Furthermore, both writers are responsible for the text they are writing collaboratively. From a motivational point of view, this could be beneficial for struggling adult writers participating in a study.

One question regarding the observation of collaborative writing is to what extent it enables insight into individual writing. While collaborative writing does influence the individual’s approach to writing, it can also be surmised that no complete reorganization of individual writing skills takes place. For example, if a test subject has significant orthographical difficulties, those will be displayed in collaborative writing too, albeit to a lesser extent. If test subjects do not normally engage in planning

activities, they will also shy away from actively contributing to such activities. The same holds true for complex writing tasks. However, this does not preclude them from participating in planning activities initiated by their partner.

Another question is how the data from the observation of the collaborative writing process can be analyzed. I will argue that observation of collaborative writing tasks alone allows limited inference regarding individual writing – for example, analyses of the distribution of the writing activities amongst paired writers may indeed give indications about the writing behaviors of individual writers too. I will also show below (see section 4.5) how the protocols of the collaborative writing task can be analyzed mainly on the basis of Breetvelt, van den Bergh and Rijlaarsdam (1994), even though these authors focus on individual writing processes.

Further insight can be gained into individual writing processes and knowledge if data from the observation of the collaborative writing task is combined with structured individual interviews. These interviews should include retrospective and prospective parts. In this way, by drawing on the various data sources, it can be, at least, partially examined whether the test subjects apply a consistent approach across individual and collaborative writing, or if they indeed employ a completely different approach when writing on their own as opposed to when they are writing with a partner. It can furthermore be hypothesized that starting an investigation with a collaborative writing task gives participants a concrete experience with a pattern in their writing behavior to which they can refer to, which makes it easier for them to relate a hypothetical situation to their own writing experience.

In the next part (section 3), I contextualize the present study on collaborative writing by relating it to the larger study to which it was connected. A detailed presentation of the collaborative writing task, in combination with individual interviews will follow (section 4).

### **3. Overall Study: Evaluating Literacy Courses**

In Switzerland, literacy courses for adults with low literacy skills are mainly offered by the *Dachverband Lesen und Schreiben* (Swiss umbrella organization for reading and writing). In addition, further education institutions also offer such courses as one part of a conventional range of further education programs for adults. These providers share a strong focus on formal aspects, such as orthography and grammar. Overall, they follow rather traditional teaching concepts in that writing instruction is product-focused.

The goal of the main study was to scientifically evaluate different providers' literacy courses. Amongst other things, the following questions were asked: What are the reading and writing competencies of the participants of such courses? Which motivational characteristics do they dispose of? And how do such aspects change over the period of the courses? At the same time, teachers were questioned to find out more about course design.

A questionnaire was used to assess reading and writing self-concept, reasons for attending a literacy course, reading and writing activities during work and leisure time, as well as use of a computer, amongst other things.

The following tests were used to monitor if the participants achieved a significant increase in their reading and writing performance during the courses:

- a) Reading fluency (Metze, 2003): Test subjects had to cross out the stumbling blocks, the word that does not fit in the sentence, in as many sentences as possible. The test time is 3 minutes. This test measures the reading rate by the number of correct sentences.
- b) A test to record writing fluency for German was devised on the basis of Malecki and Jewell (2003), and Benson and Campbell (2009). The test subjects had to describe their professional activity in as much detail as possible within 3 minutes. The number of syllables, correct syllables, correct word sequences as well as the percentage of correct syllables and of correct word sequences are measured.

To obtain suitable comparative data, both tests were also conducted with vocational students. This was necessary, as most comparative data for the reading test originated almost exclusively from primary school students and because the writing test was newly developed (Sturm, 2014). Furthermore, vocational students constitute a good comparison, since a main goal of literacy courses is to enable adult learners to participate in conventional further education programs in which they use a coursebook analogous to study materials employed by vocational students.

In the literacy courses for adults, both the reading and writing tests were administered at the beginning ( $t_1$ ) and at the end of the literacy courses ( $t_2$ ). Roughly three months lie between  $t_1$  and  $t_2$ . The results of both tests at  $t_1$  were used for the selective sampling of the sub-study. Figure 1 shows the process of data collection in the main and the sub-study.

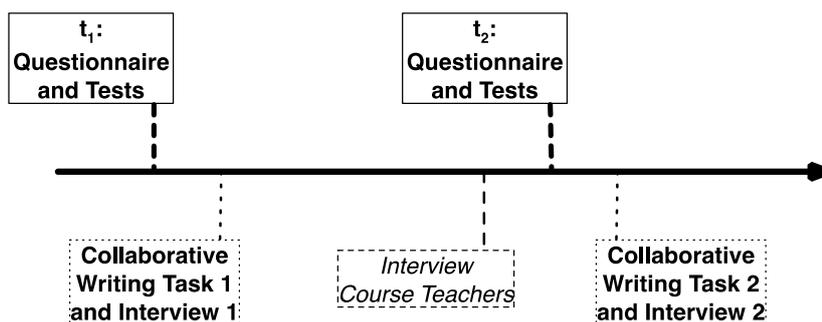


Figure 1: Data Collection in the Main and the Sub-Study.

### 3.1 Participants

The main study included 235 adult learners. They came from 28 literacy courses of 5 different providers in different German-speaking parts of Switzerland. Providers include adult education centers, the umbrella organization Reading and Writing for Adults, as well as the Swiss Army. (Swiss) German was the native language of 57% of the participants. Since 69 participants were in the Swiss Army, the percentage of men is a very high 75%. The mean age of the participants was 37.7 ( $SD = 14.22$ ), the youngest was 18, the oldest 65 years old. The mean age in the Swiss Army courses was 21.6; by contrast, in the other courses it was significantly higher at 44.4 years. Only 60% of the participants could be questioned and tested at  $t_1$  and  $t_2$ , due to illness, relocation or discontinuation of the course.<sup>1</sup>

### 3.2 Selected Results

One finding was that the reading performance of struggling adult learners was significantly below that of vocational students (Table 1) and that the adult learners also clearly lagged behind vocational students with regards to their writing performance.

**Table 1:** Means (Standard Deviations) and Effect Sizes for Adults Participating in Literacy Courses (=LAB) and for Comparison Group

	LAB ( $t_1$ ) ( $n=228$ resp. $n=161$ )	Vocational Students ( $n=361$ )	Effect Size (Cohen's $d$ )
<b>Reading Test:</b>			
Number of Correct Sentences / Min.	7 (3)	12.3 (3.3)	1.67
<b>Writing Test:</b>			
Number of Syllables in 3 Min.	67 (25)	87 (24)	.82
% Correct Syllables	92 (8)	98 (3)	1.32
% Correct Word Sequences	47 (23)	77 (15)	1.72

A second finding was that just over two thirds of participants were functionally illiterate. Functional illiteracy is generally defined as reading and writing performance below that of an average fourth-grade pupil (i.e., a pupil aged 9 or 10 years, who is in their 6<sup>th</sup> year of school) (Egloff, Grosche, Hubertus, & Rüsseler, 2011). The mean reading rate of an average fourth-grade pupil is 8.1 correct sentences. Of the adult course participants we tested, 69% did not achieve this level of functional literacy. Furthermore, 29% of the course participants we tested scored much lower – they did not reach the level of second-grade pupils either, which is 4.1 correct sentences.

A third finding was that from  $t_1$  to  $t_2$ , neither the reading nor the writing performance of adult learners increased (reading test:  $d=.16$ ; writing test:  $d=.03-.16$ ) (for details, see Sturm & Philipp (2013b)).

#### **4. A Multi-Method Approach to Study Struggling Adult Writing**

Against the backdrop of the findings from the overall study, a sub-study was conducted to establish how struggling adult writers solve a writing task, and what writing knowledge they have. As part of this sub-study, a novel use and combination of methods was developed which brought together three instruments: the videographed and direct observation of two collaborative writing tasks (4.2.), structured interviews (4.3), and analyses of participants' written texts.

##### **4.1 Participants**

As mentioned in section 3, the results of the reading and writing test were used for selective sampling in the sub-study. The variables used to select participants were lower/higher reading and lower/higher writing skills. One reason for the selection of lower and higher writing and reading skills was to build similar pairs. And reading was included, since authors rely on it to evaluate and revise the texts they have written. In order to build suitable dyads, recommendations of participants' teachers were also taken into account. The two participants had to be in the same literacy course and their teachers had to deem cooperation between them possible. This approach aimed to prevent the negative influence that other factors, such as dominance by one participant, could have on the collaborative writing process. Since teachers sometimes suggested combining the dyads differently or, in a few cases, learners did not want to participate in the sub-study, selective sampling in its fullest sense was impossible.

In total, 28 participants were selected from the main study and paired into 14 dyads. In the sub-study the mean reading performance at  $t_1$  of 68% ( $n=19$ ) participants was 6.4 sentences/min. This is below the functional literacy rate defined as that of fourth-grade pupils and corresponded to the main study. In the sub-study the mean writing performance was 65.6 syllables in 3 min., 90.2% of the syllables and 54.5% of the word sequences were correct. The mean age was 38.7; 12 participants were male, and 19 were native speakers of (Swiss) German.<sup>2</sup>

To avoid test exhaustion resulting from several data collections, the two collaborative writing tasks were roughly three months apart. This corresponded to the period for the reading and writing tests in the main study (Figure 1). Both collaborative tasks were conducted with the same pairs of writers. Only 8 of 14 dyads took part during both measuring points. If one person did not complete the course, had moved away, or was ill for a longer time, the entire dyad was omitted for the second writing task.

## 4.2 Developing Two Writing Tasks

The writing tasks that would be used to observe these dyads of struggling adult writers had to fulfill several requirements. To begin with, they had to be simple enough so that participants would be able to master them. Additionally, they had to be complex enough to trigger problem solving skills and for diverse writing processes to emerge. Finally, considering that struggling adult writers avoid writing, the tasks also had to be motivating. Hence, the following criteria for writing tasks were specified:

- a) The task had to be categorizable into a clear genre, whenever possible, a genre that had a bearing on the participants' everyday life and profession.
- b) The task had to have a clear communicative writing goal. In particular, the impression that the task might be better solved orally had to be prevented.
- c) The task had to be constructed in a way that required little topical knowledge so that the limitations to such knowledge would not adversely affect the writing process.

Two genre-specific writing tasks associated with two different contexts were developed. This made it possible to explore the extent to which participants show genre-specific writing processes and knowledge and could adapt writing to the context. Task 1 was to write a manual for an everyday setting. It had two goals:

**Task 1:** Imagine you assist in a youth club. The old coffee maker broke down because the adolescents did not use it carefully. You bought a new and very simple one that you donated to the club.

Write a manual in order to

- enable the adolescents to brew coffee and
- use the coffee maker carefully.

The coffee maker (incl. ground coffee powder, water, milk, and sugar) was provided for the participants to try out.

The second task was to write an argumentative letter in a professional context. The participants were told to imagine the following situation: They are working in a small business and are temporarily tasked with taking care of correspondence. Mr. Fässler, a (fake) customer, has left a complaint on the answering machine. He has found fault with three scratches on the newly laid parquet and is only willing to pay the invoice once the scratches have been removed. From the recording, it becomes clear that the customer is very disgruntled. The participants could listen and relisten to the customer's complaint in the form of an audio recording.<sup>3</sup> The writing assignment was as follows:

**Task 2:** After consulting with your boss, you are to inform the customer in writing that it is currently impossible to carry out a repair. At the same time, you are to convince him to accept a 5% discount instead of having the floor repaired.

Input for the tasks was in both written and aural form. Participants were given each writing task in the form of a fully written prompt. In addition, these written descriptions of the tasks were read out aloud to participants. Additional written input, such as the email in Task 2, was also given to participants in written form. In addition, audio input (such as the message on the answering machine) was given to participants as a recording that they could replay. This made it possible for participants to (re)read and/or (re)hear the tasks and input materials whenever they wanted. (For additional details on the procedure, see section 4.4 below.)

### 4.3 Structured Individual Interviews

About ten minutes after completion of the writing tasks, structured individual interviews were conducted separately with each of the two writers. These interviews contained two parts: A and B (see Table 2).

**Table 2:** Structured Individual Interviews with Two Parts

	Part A	Part B
Interview 1 following Task 1	Retrospective on the basis of the observed	– biography as a writer – concept of writing
Interview 2 following Task 2	collaborative writing process	– concept of writing – prospective: a hypothetical situation

Part B of the individual interviews following writing Tasks 1 and 2 differed. This is because the complete procedure – collaborative writing task plus individual interview – was too taxing for the participants. The average length of the whole Interview 1 was 59 minutes (part A plus B without the hypothetical situation), thus requiring that it be shortened.<sup>4</sup>

In order to improve the recording of participants' writing knowledge, a hypothetical situation on the basis of Zimmerman and Martinez Pons (1986) was incorporated into the interview following Task 2. Interviewees were reminded of a situation that had actually been observed in the context of data collection:

A course instructor starts a lesson with an invitation to participants to share how they feel, what they experienced in the previous week. One participant recounts that the writing task the teacher had set did not appeal to her. She just did not know what to write. The course participants were supposed to write a story about their favorite recipe. The teacher then encourages her to try it again.

Thereafter, study participants were asked whether they themselves had also experienced such a situation in the past in which they did not know what to write and how they would go about it when confronting such a situation. Additionally, they were queried about what they do:

- when they have no idea what to write,
- when they have an idea but encounter difficulties putting it into writing,

- when they are not satisfied with their text, and
- when they lose motivation to continue writing halfway through.

They were also asked what they would suggest to other course participants who have to solve the same task.

#### 4.4 Procedure

The participants wrote paper-and-pen texts. Writing time was not restricted. In order to exactly assess when and what they wrote, two cameras with different types of shots were used. The first camera was directed towards the writing hand, in order for the analyst to be able to precisely reconstruct the text production. As the position of the camera was fixed, the writing area within which the participants had to remain was indicated with scotch tape. The second camera recorded the entire scene (medium close-up). As part of the introduction, the participants were shown a brief video recording which indicated the camera position. This gave them a clear conception of the camera angles. Another reason for showing the video clip was to provide an example of collaborative writing, since all teachers had reported that they had never used collaborative writing in their courses. Using the perspective of the second camera, the video clip showed the two adult writers – played by members of the research team – discussing whether they should use an idea for their text. In a second scene, one of the two adults is writing and sketching a roadmap. This was intended to be interpreted as an implicit hint that specific elements of a text type, such as drawings, etc. can be used.

In the video clip, the strategy of *reactive writing* is applied to collaborative writing:

We define reactive writing as a strategy that occurs when writers create a document in real time, reacting and adjusting to each other's changes and additions [...] without significant preplanning and explicit coordination [...]. (Lowry et al., 2004, p. 78)

From a methodological perspective, one advantage of reactive writing is that it challenges the writers to negotiate and build consensus more strongly, whereas other collaborative writing strategies, such as parallel writing, are poorer in communication. However, Lowry et al. (2004, p. 79) point out that coordination in the case of reactive writing can be more difficult.

After the clip had been screened, the writing task was read out to the participants. They were informed that they could use the coffee maker or that they were allowed to re-listen multiple times to the audio recording of the customer complaint on the tablet. After the introduction, the participants solved the writing task under indirect observation. Two researchers were in a different room but observed the writing process simultaneously via the second camera and wrote down observations. The participants had been informed that this would be the case.

Since struggling writers tend to stop or finish a writing process prematurely as soon as a text has been produced (Troia, 2006), participants were asked to re-read their text

after a short break. They were explicitly told that revisions were permitted, but that they might also leave the text as it was. To better spot revisions in the text, pens of a different color were used.<sup>5</sup>

During the ten-minute break preceding the individual interviews with each of the writers, the two researchers consulted with each other. In particular, the aim of their consultation was to focus the questions they would pose to participants on aspects involving the central activities – planning, translating, and evaluating/revising – provided that they were observable. Additionally, the two researchers also formulated questions about striking because unexpected aspects of the writing process. Some examples of these latter questions included: Why was a drawing briefly mentioned but ultimately not implemented? Why did the two test subjects take turns writing?

#### 4.5 Data Analysis

All data was converted into a complete written record. All oral utterances were fully transcribed. Operations involving the coffee maker as well as reading and listening to the writing task (including multiple replays of the audio recording of the customer complaint) were written down, as were all acts of transcribing. The entire data was coded and analyzed using MAXqda (Kuckartz, 2005), version 2010. The data of the writing processes was coded and analyzed on the basis of Breetvelt, van den Bergh and Rijlaarsdam (1994), who distinguish eleven cognitive activities. However, to deal with the requirements of the tasks and the distinctive features of collaborative writing that differ from individual writing, the categories were adapted and some categories were added:

- a) Background knowledge was added. This included linguistic and topic knowledge. On the one hand, it was part and parcel of Task 1 to clarify relevant knowledge about the coffee maker; on the other hand, doubt about linguistic issues was sometimes discussed.
- b) Generating was split into two categories – generating of ideas and formulating. This was because participants at times agreed on what to write but disagreed on how to write it. Since the difference between generating of ideas and formulating was not always clear-cut, in cases of doubt the following coding rule was applied: if the relevant idea had not been previously mentioned, an extract would be coded as generating ideas; if the idea had been mentioned before, the extract would be coded as formulating.
- c) Categories regarding cooperation between the two writers were created (partly based on Lowry et al., 2004). These are responsibility (especially who is writing); coordination (e.g. the writer asks their partner to wait in order for the writer to finish transcribing); as well as forms of support (wording is repeated or dictated, not for oneself but for the partner).<sup>6</sup>

- d) Pauses were not coded (unlike Breetvelt et al., 1994), since they mostly overlapped with interactions between the two participants. Likewise, self-instructions like “First, I have to do this” were not coded either because such activities were an integral part of the collaborative interplay.

A detailed coding manual with a description and illustrating examples for each category was used. If a difference between two categories was not clear, coding rules were added as mentioned in b) above. Table 3 shows all categories used, with a short description and examples from the transcripts, including quotes from participants. (Participants are identified by P and a number.)

With MAXqda, it is not possible to create separate units without categorizing them. Therefore, the marking and naming of categories made up one step in the coding process.

**Table 3:** Categories, their Descriptions, and Examples from Transcripts

Category Name	Description	Examples from Transcripts
Writing Task	(Re)reading or (re)listening to the writing task	Explicit text in the transcript: [Both read the writing task, P11 quietly speaks along]
Writing Plan	Discussion about what to do, how to proceed	P13: First, we have to think about what we want to write.
Writing Goal	Formulating product or process goals (adopted from the task or self-devised)	P10: This will become some sort of keyword thing, right? I assume firstly, secondly, thirdly, right? No point in writing a long novel? P11: Yes, but it has to be a bit more elaborate, no?
Background Knowledge	Clarifying subject or linguistic background knowledge (incl. knowledge about genres)	P13: So, how does this work? P14: Um, [reaches for the bottom part of the coffee maker], so, it works like this, or, do you see this tap here?
Commenting	Reflecting on or evaluating their writing process, incl. statements on their skills; reflecting on or evaluating the writing task	P17: Well, you can write much better [pokes P18], for sure, it's really unbelievable.
Generating Ideas	Generating ideas or propositions	P11: Now we can say that there's no more coffee for the moment because it's broken.
Structuring	Selecting, ordering or outlining ideas	P17: [...] Operation. Point one. [...]
Formulating	A previously discussed idea is now conceptually	P15: straine/coffee grounds in here. P16: coffee s/ coffee strainer

	formulated in writing; search for expressions that fit	P15: coffee strainer
Transcribing	Write quietly, speaking along or parsing the sounds	Explicit statement in the transcript: [P8: writes and speaks along very quietly: instruction]
Reading Through	Reading the text written so far, fragments or sentences	Explicit statement in the transcript: P9: [reads] Since our boss is currently [...]
Evaluating	Evaluating ideas, content, formal aspects etc.	P8: Written as one word, correct? P7: Yes, I would.
Revising	Revising ideas, content, formal aspects etc.; that is something was rewritten, added, deleted or moved	Explicit statement in the transcript: P19: [inserts "e" before "f"]
Coordinating	Explicit instruction to the partner to wait, to explain something, to pass something (paper and the like)	[Both read through their text] P10: What do you possibly want to change here?
Supporting	Mutual support by repeating an idea or the wording, pointing to something the partner does not see etc.	P28: Yes, or put such a line here [takes the second pen and shows where]
Clarifying Responsibility	Clarifying who will transcribe or dictate or demonstrate something etc.	[Text lies between P13 and P14] P13: Do you want to read?

Protocols were transcribed as follows: Each line started with the number of the participant who was speaking. Writing acts were included in square brackets, introduced with "writes". Likewise, reading acts or other activities such as examining the coffee maker were marked in brackets. An abrupt stop in speaking was indicated with "/", an unfinished utterance with ellipsis.

The first step in coding was to identify cohesive activities. Hence, every time a new cognitive activity was initiated, a new code was assigned, initially without referring to the participants. Table 4 shows an example of such a cohesive activity: both participants were discussing how the coffee maker works, so the entire passage was coded as *background knowledge*.

**Table 4:** Identifying Cohesive Activities, Excerpt of a Coded Transcript (Dyad 8)

Cognitive Activity	Transcript (Excerpt)
Background Knowledge	P15: Is the water going to be filled in here? [Both examine the coffee maker] P16: Yes. P15: [incomprehensible] P16: On the bottom goes the wat/ - No, sh... [lifts the lid of the coffee maker] P15: No, on the top goes/ Yes/ [...]

Following the identification of cohesive cognitive activities, two additional categories were introduced that make it possible to determine the individual activities:

- e) After coding the cognitive activities, the speech and writing acts per participant were coded (speaker A vs. B and writer A vs. B).<sup>7</sup> The additional coding of writing acts per participant only applies to the categories transcribing and revising. This made it possible to calculate how the activities were distributed between the two participants during the writing process.

The example in Table 5 shows how a cognitive activity can extend over a number of participants' turns.

**Table 5:** Excerpt of a Coded Transcript (Dyad 8): One Activity over Several Turns

Change of Speaker	Cognitive Activity	Transcript (Excerpt)
Speaker A	Background Knowledge	P15: Is the water going to be filled in here? [Both examine the coffee maker]
Speaker B		P16: Yes.
Speaker A		P15: [incomprehensible]
Speaker B		P16: On the bottom goes the wat/ - No, sh... [lifts the lid of the coffee maker]
Speaker A		P15: No, on the top goes/ Yes/ [...]

Sometimes a speaker initiated more than one activity, as Table 6 shows. In these cases the coded activity did not exceed an utterance by a speaker.

In sum, this coding procedure makes it possible to differentiate between the cooperative writing process on the one hand, and the involvement by the two participants on the other (for more detail, see 5.2.).

**Table 6:** Excerpt of a Coded Transcript (Dyad 8): Different Activities

Change of Speaker	Cognitive Activity	Transcript (Excerpt)
Speaker A	Reading Through	P16: [reads] Upper part = screw on
Speaker B		P15: = [reads along] screw on.
	Generating Ideas	And then on the hot stove [points at the hot stove].
Speaker A	Formulating	P16: And then
	Transcribing	[transcribes: and then]

One part of the data was coded by two raters (in this case, the author and a university student), using the elaborate coding manual written by the author. The second rater had just completed his Master degree, but was not familiar with qualitative research and coding. So he first coded a transcript together with the author. Then, he coded another transcript alone. This was discussed together and corrected where necessary. After that, both raters coded three transcripts independently. All other transcripts were either coded by the second rater or by the author. The transcripts that the second rater had coded alone were reviewed by the author.

The intercoder reliability of all three dyads lies between 68% and 83%. Following that approach, MAXqda can calculate directly whether the coded segments of both documents from rater A and rater B match with respect to size and, simultaneously, whether the same code was assigned. For purposes of this sub-study, it was stipulated that the content of two codes ought to conform by 70%. Dyad 8, which is the focus of this article, is on the segment level 83% (without the codes speaker/writer mentioned above; with these codes, the intercoder reliability is 91%).

The interviews were evaluated separately (Sturm & Philipp, 2013a, 2013b). The main categories for the analysis of the hypothetical situation (part B of interview 2) were the cognitive activities and, additionally, metacognitive knowledge (about oneself as a writer; about characteristics of a writing task and their effects on the solving of the writing task; about writing strategies, including conditional and procedural knowledge; self-regulation; and knowledge about supporting strategies, like seeking help from the course teacher).

The texts that the participants had written were not coded; instead, they were roughly assessed holistically. Furthermore, specific features were noted, such as whether the composed text belonged to the appropriate genre.

The analysis triangulated three datasets: the videographed observations of the participants when completing the collaborative writing task; their text; as well as the strategies and writing knowledge reported in the follow-up individual interviews. The approach was the following (Figure 2):



## 5. A Case Study: Helen and Lucy (Dyad 8)

In order to show how the observation of collaborative writing combined with a structured individual interview and the text written by the participants can be productively used to deliver insights into the writing process and the writing knowledge of struggling adult writers, Dyad 8 will be described in detail.

To some extent, Dyad 8 is representative of most dyads. This means that the writing process for both writing tasks was, bar some instances, essentially knowledge telling. In addition, the two dyad members interacted with each other. Finally, both writers applied the reactive writing strategy in both tasks. Two distinctions were detected amongst all dyads: the writing process was knowledge transforming in only two dyads (Dyad 6 and 12); and in only one instance (Dyad 16, Task 1), was the writing parallel (i.e. participant A wrote the manual, participant B created a drawing to go with it) rather than reactive.

Dyad 8 consisted of two women (see appendix A for their writing fluency texts at t):<sup>8</sup>

- Helen (35 years old) had been attending the literacy course for 4 years. Her first language was Swiss German. Her highest completed level of education was compulsory schooling. In Switzerland this starts at the age of seven and lasts for a period of nine years. She was working in a restaurant as an assistant. Her reading skills were below that of a second-grade pupil (3.67 correct sentences per min.); and here writing skills were also very low (48 syllables in 3 min., 79% correct syllables, and 25% correct word sequences).
- Lucy (23 years old) had been attending the literacy course for 2 years. Her first language was Romanian, but she spoke Swiss German fluently. She had finished a viniculture apprenticeship and was working in that profession. Her reading skills were similar to that of a fourth-grade pupil (8 sentences per min.); her writing skills were higher than those of Helen (78 syllables in 3 min., 100% correct syllables, and 68% correct word sequences).

In the next section (5.1) I provide a rough overview of the text Helen and Lucy produced in response to writing Task 1 as well as a summary of the writing process for Task 1. (For convenience, a summary of writing Task 2 is available in Appendix C.) In section 5.2 the codings of both writing processes is outlined. This will serve as a basis for sections 5.3 and 5.4, which offer a detailed examination of two parts of the writing process of Task 1, in combination with the text and the interview.

### 5.1 An Initial Rough Overview with Distinctive Features

Helen and Lucy required a little over 9 min. for Task 1 (7 min. for phase one plus, after a short break, 02:40 for phase two). Their manual encompassed 43 words at the end of the first phase; the final version, after the second phase was 51 words long. Dyad 8 used the shortest time of all on Task 1 (the longest was 81 min. (Dyad 15)), but their text was not the shortest (the shortest text was 22 words (Dyad 16)); the longest was

163 words (Dyad 7)). Almost all dyads wrote a manual as prescribed by the writing assignment. Only Dyad 15 produced a narrative rather than an instruction manual. For Task 2 Helen and Lucy needed more time, roughly 17 minutes. The final version of their letter encompassed 68 words. Again, they used the least time of all dyads. One reason is that Dyad 8 wrote more fluently than other dyads – at least when Lucy was writing. Accordingly, Helen and Lucy seldom discussed word choice or spelling (for more details on this, see section 5.2), at least compared to other dyads.

The following section analyzes Task 1 in more detail. Table 7 gives a summary of the writing process and matches it to the corresponding section of the text that was being formulated (Appendix B contains the original text, including a translation).

**Table 7:** Summary of the Writing Process Matched with Section of Written Text: Task 1, Dyad 8

Min.	Summary of the writing process	Section of written text
<i>Phase 1</i>		
0–1	L. asks H. if she has any objections to L. writing. H. does not object. L. asks how they should proceed. H. answers with a first suggestion, an idea that L. writes down.	Questions – does anyone know how the italian coffe maker works?
1–2	H. formulates the first core element of the manual, L. writes it, crosses it out and rewrites it, supplemented by an additional piece of information.	– <del>Firstly fill water</del> The lowest part gets water in.
2–3	H. generates another idea that L. picks up on; however, L. would like to word it somewhat differently. They are suddenly unsure how the coffee maker works, where the water needs to be poured in. They discuss it.	– Put strainer in and refill coffee powder.
3–4	They clarify their uncertainty, do not change their mind that water needs to be poured into the lower part. H. suggests new ideas that L. picks up on. L. suggests that H. writes as well. H. agrees.	– Screw on upper part and thn it on the hot stove.
4–5	L. explains that the water is now boiling, which causes H. to start writing. L. generates a further idea that H. does not discuss but writes down differently.	– Wait until the water is Boiling then <del>si-sis</del> is the – Coffe finishe
5–6	H. suggests an idea that L. does not react to. L. formulates a different idea. H. starts to write it down. L. watches H. write and asks her the meaning of “reiqu”. H. responds that she cannot write any longer, whereupon L. takes the pen out of her hand and rewrites “reiqu”.	<del>Ar reiqu</del> Required <del>din</del>

6-7	L. finishes writing down the idea. After that, they discuss whether or not they should inform the test supervisor that they have finished. L. gives the sign agreed upon, while H. starts reading through the text.	with sugar + coffe creamer.
<b>Phase 2 after a short break</b>		
0-1	Both start reading through the text. H. notices that something is missing, i.e. that the question they asked requires answering. She thus generates an idea. L. writes down only part of it.	Questions –do anyone know how the italian coffeé maker works? <i>No!!!</i>
1-2	H. insists on her idea, L. writes it down. Both continue reading some parts out loud. L. finds that one word is missing after “stove” (fourth bullet point) and fills it in. L. edits a few small things.	Than we explin how it works. [...] then <i>put</i> it on the hot stove.
2-3	L. edits one more small thing. They briefly discuss whether or not they have finished. L. gives the sign agreed upon.	

The writing process described in Table 7 is typical of knowledge telling. To begin with, the participants just started writing, working from one idea to the next. Furthermore, their focus was narrow because they did not discuss their ideas with respect to their writing goal, implicitly contained in the first indent. The fact that they twice switched responsibility for the task of writing, shortly after the first half in phase 1, is striking.

The following stands out regarding the manual: The introductory question signals participants’ knowledge of the function associated with the genre. While it does contain the core elements of the procedure, the text hardly mentions details (e.g. how much coffee powder or water needs to be used) or information that could be of interest to the reader (e.g. the time it takes until the coffee is ready).

## 5.2 The Codings and First Questions

Table 8 shows an overview of the codings for Dyad 8, compared to Dyad 5, Dyad 12 and all dyads together at  $t_1$ . Dyad 5 closely resembled Dyad 8: their writing process can also be described as knowledge telling and their text was very similar in style, informativeness, and length. In contrast, the writing process of Dyad 12 is a typical example of knowledge transforming writing. The dyad members planned, they discussed the typical features of the manual genre, and, when generating ideas, they referred explicitly to their readers. Their manual was very detailed, with several hints for readers. It included a drawing and the drawing was linked to the text.

The number of codings was lower for Dyad 8 than for Dyads 5 and 12, as the writing process of Dyad 8 lasted shorter. *Transcribing, evaluating, revising, and reading through* made up more than half (64,8%) of Dyad 8’s activities. Compared to all dyads at  $t_1$  combined, generating ideas was about twice as high in Dyad 8. However, Dyad 8

engaged in about five times fewer formulating activities and about a third fewer transcribing activities. One explanation is that Dyad 8 wrote rather fluently. But in the case of Dyad 8 it was a kind of functional automaticity as Lucy and Helen turned their ideas into language with minimal reprocessing. This is reflected in the low coding of formulating, which is very typical for knowledge telling (McCutchen, 1988, S. 312). In contrast Dyad 12 more intensely discussed how to formulate an idea, how to more exactly describe the components of the coffee maker, and how to address the reader. Formulating activities in Dyad 5 primarily concerned missing vocabulary.

**Table 8:** Overview of Codings and Total Words for Writing Task 1, Dyad 5, 8 and 12, Compared with all Dyads

<i><b>Cognitive Activities</b></i>	D 5		D 12		All Dyads	D 8	
	Number of Codes	%	Number of Codes	%	%	Number of Codes	%
Transcribing	108	37,8	87	27,4	28,7	27	18,6
Evaluating	49	17,1	53	16,7	16,8	27	18,6
Formulating	32	11,2	28	8,8	10,3	4	2,8
Reading through	26	9,1	27	8,5	10,5	20	13,8
Background Knowledge	23	8,0	19	6,0	7,2	3	2,1
Commenting	17	5,9	23	7,3	6,5	18	12,4
Revising	7	2,4	26	8,2	5,5	20	13,8
Generating Ideas	13	4,5	20	6,3	6,7	18	12,4
Structuring	4	1,4	14	4,4	3,1	4	2,8
Writing Plan	2	0,7	11	3,5	3,0	3	2,1
Writing Task	3	1,0	4	1,3	1,2	1	0,7
Writing Goal	2	0,7	5	1,6	0,5	0	0
<b>Total</b>	<b>286</b>	<b>100</b>	<b>317</b>	<b>100</b>	<b>100</b>	<b>145</b>	<b>100</b>
<b>Total Words Text Task 1</b>	<b>49</b>		<b>156</b>			<b>51</b>	
<i><b>Cooperative Activities</b></i>							
Support	84	90,3	18	47,4	68,0	4	23,5
Coordinating	7	7,5	3	7,9	19,1	8	47,1
Responsibility	2	2,2	17	44,7	13,0	5	29,4
<b>Total</b>	<b>93</b>	<b>100</b>	<b>38</b>	<b>100</b>	<b>100</b>	<b>17</b>	<b>100</b>

Since Dyad 8 was quite familiar with the coffee maker, their need to clarify topic knowledge was smaller than for Dyad 5, 12 and All Dyads. Furthermore, Dyad 8 exhibited significantly higher revision activities, which could be due to the fact that Lucy pointed out spelling errors to Helen (this is discussed in section 5.3, Excerpt 5). Lastly, it is noticeable that of all dyads, Dyad 8 commented on their approach most often. (This will be discussed from a methodical perspective in section 5.6.)

With respect to cooperative activities, Table 8 reveals that support during the collaborative writing process was important for all dyads, but much more for dyads which did not write fluently. For example, in Dyad 5 participant P9 was dictating very often – mostly word by word – so that P10 could better focus on transcribing. In addition Table 8 shows that Dyad 12 more often discussed who should write; their role allocations also switched several times during Task 1. In most dyads, participants took turns, either within one task or spread across the two writing tasks; that is, participant A wrote in Task 1, and participant B in Task 2. Only in Dyad 7 was participant A writing the entire time, i.e. in both writing tasks. One possible explanation for this could be that participant B in Dyad 7 disposed over very low basic writing skills (10% correct word sequences).

Whereas Table 8 focuses on cohesive cooperative activities (see section 4.5), Table 9 gives greater detail on which members within a dyad were involved in which activities. Since the participants could join in an activity, such as generating ideas, several times (see section 4.5 and Tables 5 and 6), the activities of both participants combined can be higher in number than the number of codes of a “collaborative” cohesive cognitive activity (for example background knowledge or generating ideas). Likewise, the activities of one participant can exceed the number of codes of a “collaborative” cohesive cognitive activity (background knowledge and evaluating).

Helen and Lucy contributed to the solution of both writing tasks to a very similar degree. Helen, however, was more active in the generation of ideas and in the evaluation, while Lucy was more active in transcribing and implementing revisions. Overall, it appears that during Task 1, Helen was more involved in hierarchically higher processes than Lucy, even though Helen exhibited significantly more difficulties in the basic writing skills than Lucy. However, in Task 2 Helen was not as involved in hierarchically higher processes; maybe because she is more familiar with manuals than with letters (see also section 5.4).

Table 9 reveals that in the case of Task 2, Helen and Lucy engaged more in higher order activities like discussing how to proceed or analyze the writing task. However, since writing Task 2 in itself was more complex than Task 1 (the participants had to deal with an email by their superior and with the customer’s oral complaint on the answering machine), the number of higher order activities rather reflects the task requirements than an improvement of their writing skills in the three months between Task 1 and Task 2.

**Table 9:** Overview of Codings for Writing Task 1 / Task 2, Dyad 8

<i><b>Cognitive Activities</b></i>	Helen		Lucy		
	<i>Number of Codes</i>	Speaking	Writing	Speaking	Writing
Transcribing	27 / 35		9 / 12		18 / 22
Evaluating	27 / 22	31 / 20		22 / 17	
Revising	20 / 33	8 / 16	4 / 6	18 / 19	18 / 28
Reading through	20 / 17	14 / 11		13 / 13	
Generating Ideas	18 / 11	17 / 14		11 / 8	
Commenting	18 / 20	9 / 12		14 / 20	
Structuring	4 / 0	2 / 0		2 / 0	
Formulating	4 / 9	4 / 9		2 / 9	
Background Knowledge	3 / 3	10 / 2		8 / 1	
Writing Plan	3 / 7	3 / 6		1 / 7	
Writing Task	1 / 7	1 / 6		0 / 7	
Writing Goal	0 / 0	0 / 0		0 / 0	
<b>Total</b>	<b>145 / 164</b>	<b>108 / 96</b>	<b>13 / 18</b>	<b>109 / 101</b>	<b>36 / 50</b>
<b>Total Words Text</b>	<b>51 / 68</b>				
<b>Task 1 / 2</b>					

Table 9, however, still does not indicate who initiated which activity. To find out who initiated what necessitates a closer look at the data about the writing process. It was, in fact, Helen who often generated ideas or initiated the idea generation, followed by Lucy who transcribed the idea. This already became apparent at the beginning of writing Task 1 in the following excerpt from the transcription of the video recording:

**Excerpt 1:** Generating Ideas (D8, Task 1, line 17–18)

Helen: Well, - first, you did/ did somebody see the coffee maker (00:00:22-8). [both are looking at the coffee utensils] Um, yes, this we already saw, hehe - yes. [both are looking at the coffee maker] -- Ah yes, we could also ask, did someo/ well write, does anybody have a clue how to make coff/ how to make coffee [points at the coffee maker] with this? - With this coffee maker?

Lucy: [turns the notepad slightly counterclockwise] Well. Ques/ Title, Questions, he? [writes simultaneously: Questions]

That Helen especially interpreted the writing task as a question in need of an answer, initially indicates a typical characteristic of students with learning or writing difficulties (Graham, 1990) (For more on this, in connection with the interview data, see section

5.4). If Lucy generated an idea, it was often initiated by the passage she had written down:

**Excerpt 2:** Generating Ideas (D8, Task 1, line 40–42)

Lucy: [writes and speaks slowly: Put strainer in; 00:02:26-0] - And refill coffee powder.

Helen: Th/ yes -

Lucy: [reading through] put strainer in [writes and speaks slowly: and refill coffee powder].

In general, distributions like this suggest that the participants in the collaborative writing process take on different roles. Nevertheless, in both circumstances – independent of who is transcribing – the main chronology is more or less: generating ideas – transcribing – generating ideas.

This role allocation could initially be ascribed to the setting of collaborative writing and that the test subjects of Dyad 8 apply the *reactive writing* strategy.<sup>9</sup> This means they have to agree on who transcribes. Yet, as Excerpt 2 shows (see also Dyad 12 in Table 8), this does not automatically mean that A always generates ideas or dictates when B is transcribing.

The role allocation between Helen and Lucy could also be traced back to their different individual writing skills. A more profound data analysis is vital, starting with the questions, Why was Helen not transcribing (section 5.3)? And why does she interpret the writing task as a question (section 5.4)? To answer these questions, the next two sections zoom in on Helen, how she solves a writing task and what writing knowledge she has. As she struggles more with writing than Lucy, this focus on Helen promises to be especially fruitful in terms of adding to the knowledge we have about struggling adult writers.

### 5.3 Zoom 1: Why Was Helen Not Transcribing?

When the interviewer asked Helen why Lucy began writing, Helen answered that Lucy is better at writing than her. Excerpt 3 shows how she specifies that:

**Excerpt 3:** Thinking and Writing (Interview 1, D8, P15, line 26)

Well, she can think and write, I assume. And for me, it is a little difficult if you explain something and then write.

This leads Helen at several points over the course of the interview to refer to herself as the thinker and Lucy as the writer. Moreover, she adds that she and Lucy have often for example solved grammatical exercises together during the course – but they never wrote collaboratively – and, in doing so, proceeded the same way.

Thinking and writing are topics that Helen reiterated a number of times in different instances. From a methodological point of view, it is decisive how she refers to the videographed collaborative writing process and to other writing experiences. Excerpt 4

shows how Helen describes the beginning of their writing process and how she evaluates the writing process as a whole, only to add an experience that goes beyond this writing process. The latter is alluded to by the word “always”:

**Excerpt 4:** Thinking and Writing (Interview 1, D8, P15, line 10ff., author’s emphasis)

Well, first we asked, who knows how the coffee maker works. And then – yes, we first found out, yes/ well, I thought it was rather easy. Except the writing part. *Thoughts are always coming faster than I can write.* [...] Thinking goes faster than the movement of the hand. By the time I write, I have already forgotten it, really.

During the collaborative writing process (Task 1), Helen did not actively choose to transcribe but was encouraged to do so by Lucy. When Helen did take over the pen, she could not remember which idea to write down, even though she herself had suggested an idea just prior to switching into the role of the writer. Of course, this difficulty can be ascribed to external factors, such as task coordination or the interaction between her and Lucy.

That the interplay between thinking and writing was indeed difficult for Helen is clear during the collaborative writing process (Task 1). Helen wrote slowly and she often had to make corrections (Excerpt 5). The longer Helen wrote, the more spelling and grammatical errors she made (this is also borne out by the results of the writing fluency test  $t_1$ , cf. Appendix A). Once she started to write unintelligibly – “Ar reiqu” instead of “As required”, Lucy took over transcribing.

**Excerpt 5:** Helen is Writing and Revising (D8, Task 1, line 97–101)

Helen: =Then [writes: n (over the 's' in 'das' [the]); 00:04:39-4] ist - den/ den [is - the] [writes: sit den; 00:04:41-2] [writes: - (sixth bullet point)]

Lucy: Then i/ sist [points to 'sit']

Helen: Ist

Lucy: I/

Helen: Ups! [Lucy laughs, Helen laughs too] - Ist. [Is] [crosses out: sit; writes: isit; 00:04:49-8] No, I am misspelling it again. - Ist [crosses out: isit; writes: ist; 00:04:52-7] or ist. [is] [...]

The same could be observed in Task 2: Lucy began writing and, likewise, early into the fourth minute, Helen took over writing, but this time on her own accord (maybe this can be attributed to the fact that she had already developed some familiarity with this activity during Task 1). A little later, Helen tired, which manifested itself in spelling difficulties, and Lucy took over writing again. In the retrospective part of the interview about this writing task, Helen breached the subject of the terms *thinking* and *writing* in the same manner as for Task 1.

During the part of the interview on the hypothetical writing situation – the participants were instructed to imagine writing a story or recount an experience that

they link to a recipe (section 4.3) – Helen was asked what she would do if she knew what to write about but not how to put it into writing. As Excerpt 6 illustrates, she again preferred a role allocation similar to that observed in the collaborative writing process:

**Excerpt 6:** Writing Knowledge – Thinking and Writing (Interview 2, D8, P15, line 174)

Then I am asking: Can you help me briefly? I can tell you what to write, and you write it down for me.

When the interviewer dug a little deeper, Helen responded that it had been a while since she had last applied this strategy. It did not become clear from the interview to what degree this is a strategy that she applies often. She did, however, talk about how her sisters and her mother help her write: they first ask her specifically what the topic is and why she wants to write it (Excerpt 7). Excerpt 7 also, in some ways, reflects the role allocation within the collaborative writing process:

**Excerpt 7:** Thinking and Writing (Interview 2, D8, P15, line 192)

[...] Think first, and then you can tell us what you want us to write [...].

To conclude, it can be assumed that the reactive writing in the experimental situation does not add substantially to Helen's cognitive load compared to when she is writing by herself or with help by others than Lucy. As explained Helen's writing fluency text at  $t_1$  indicated similar difficulties with accuracy. Furthermore, she mentioned that she had followed an analogous procedure on several other occasions.

The question if other basic cognitive skills constrained Helen in the writing process in Task 1 and 2 cannot be answered within this study. In Interview 1, Helen did express a vague memory of a test she had taken during school (Interview 1, D8, P15, line 252). She interpreted her failing the test as a reason why she could not enter vocational training.

#### 5.4 Zoom 2: "Then We Explain How It Works": How Helen Interpreted the Writing Task

It is Helen who suggested starting the manual with the question: "Does anyone know how the Italian coffee maker works?". After a break, as she was rereading the text, it is she, too, who wanted to have this question answered. When Lucy started by merely writing "No!", Helen insisted that she also writes: "Then we explain how it works". Not only did Helen interpret the writing task as a question; she even phrases the opening of the text itself as a question, as Excerpt 8 shows:

**Excerpt 8:** Genre Knowledge (Interview 1, D8, P15, line 32 ff.)

Helen: [...] So, one explains / - and the question was, how to explain this, and then we had/ have stopped and moved to the next. But, really, we should have said, yes, and what do you think... right? [Because f/ was really a question/ well, the entire text is a question,

really. [l: mhm] Question Text. And then we / I thought, huh, something's missing here. Some sort of gap, (00:05:00-4) where something is missing.

As mentioned, the coffee maker was provided for all dyads during their writing task, thereby reducing their reliance on pre-existing topic knowledge. However, Helen and Lucy did not use it to clarify their topic knowledge, they even refrained from using it when they were unsure as to where the water had to be poured in. Helen's rationale is made explicit in Excerpt 9:

**Excerpt 9:** Genre Knowledge (Interview 1, D8, P15, line 82)

When it came to min/ I thought, either they [= the researchers] do it now, I told Lucy, yes, they brew coffee because they are testing if we wrote it down correctly, that's what I thought. Yes.

Even if Helen interpreted the writing task and the opening of the text as a question, she still in some ways adhered to the writing goal of the text, that is, a typical manual. The effect of a manual is best tested by applying it step by step. Excerpt 8 and Excerpt 9 can be interpreted as a display of genre knowledge, even if in an unconventional fashion.

Asked if she had ever written a manual before, Helen responded by referring to an oral situation (Excerpt 10). Likewise, her description of that oral situation contained the main function of a manual. Moreover, she also to some extent mentioned that topic knowledge is needed in order to be able to produce a manual, be it in oral or written form.

**Excerpt 10:** Genre and Topic Knowledge (Interview 1, D8, P15, line 90 ff.)

Well, my father has some difficulties with his mobile phone, and then he asks me how it works, and then I demonstrate it. So, to just say, you always have to/ I can do that, too. Because I know how the mobile phone works.

She also indirectly referred to the "testing" of texts when asked what she would suggest to someone if they had to solve a similar writing task (Excerpt 11). This means, she did not stress form or mechanics at the expense of higher order aspects, as could be expected of young struggling writers (Graham, Schwartz, & MacArthur, 1993). Nevertheless, the genre knowledge that she did display was limited, since she was not familiar with the features of a written manual.

**Excerpt 11:** Evaluating (Interview 1, D8, P15, line 102 ff.)

Well - I would say, yes, just describe how you would do it, and if it still doesn't work, we can try it together. - Or if I/ If I read this through and say, well, no one understands that, start by readi/ well, I would say the following, yes, firstly, read it for yourself, well, I wouldn't understand this.

During the follow-up interview on Task 2, Helen no longer mentioned the “testing” of texts. Asked if she thought the letter she and Lucy had written was good, Helen answered affirmatively: “mmh, good” (Interview 2, D8, P15, line 90). But when the interviewer asked if the letter would convince the customer, she expressed significant doubt. In particular, she had misgivings about whether the customer would accept 5%, as a sufficient discount (Interview 2, D8, P15, line 92). During the collaborative writing process, she was also not happy with the letter but could not verbalize this (“Something I do not like”, D8, Task 2, line 119).

In line with this absence of testing whether their text was good or not, Helen and Lucy also did not develop a writing goal for their letter in Task 2, although they did analyze the task more thoroughly (Excerpt 12). It is striking that both interpreted Task 2 like Task 1 as a mode of explaining.

**Excerpt 12:** Analyzing Writing Task 2 (D8, Task 2, line 20–22)

Helen: Well, the boss has written us an email and now we have to write back. For that [points to the email] ...

Lucy: Ah, now we have [also points to the email] to explain that?

Helen: Yes.

Helen deemed Task 2 difficult because she lacked a model to copy (Interview 2, D8, P15, line 64–68). In the interview she displayed no additional genre knowledge of an argumentative letter (Excerpt 13).

**Excerpt 13:** Genre Knowledge (Interview 2, D8, P15, line 100)

Interviewer: What do you think is a good letter?

Helen: Well, just, the date and that everything is in the line. And yes, w/ if possible few errors.

Helen remembered that she had solved a similar task in “school”, a term she often used to refer to the literacy course. But, in talking about that “school” task, she limited herself as she does in Excerpt 13 to the surface features of letters, such as the date, where to write the addressee and sender, followed by the text (Interview 2, D8, P15, line 76).

So far (in sections 5.3 and 5.4), the starting point for the analysis was an event that was initially observed in the collaborative writing process, the understanding of which was enhanced by the interview data. In what follows (sections 5.5 and 5.6), however, data are drawn from the follow-up interviews regarding aspects which cannot directly be traced back to the collaborative writing process.

### 5.5 Gaps in Interviewees Replies and Differences in Writing Behavior – Open Questions of Methodology

The foregoing analysis confirms that knowledge telling is the dominant strategy when Dyad 8 writes, notwithstanding the few elements of planning. Seen from this angle, the analysis of the writing process on its own does not deliver any surprises. But the combination with the interviews following Task 1 and Task 2, shows Helen in particular to have more writing knowledge (at least with respect to the genre of manuals compared to argumentative letters) than could be expected from a struggling writer. Some events in the writing process could be explained in much more detail and interpreted better by linking them with the interviews and the texts. These concern gaps in the participants' ability to answer some of the interviewers' questions, and the issue whether these writers follow a different writing process if they write on their own rather than in pairs.

Regarding gaps in interviewee replies, observations in the present study confirmed that participants can sometimes not recall certain events from the collaborative writing process. This coincides with similar observations by Janssen et al. (1996) for individual writing. This goes for Helen in particular, who for instance, could not remember why she had not picked up on Lucy's recommendation during the second task, when Lucy had suggested that they read the writing assignment once more (Excerpt 14). Additionally, Helen was only able to superficially summarize the writing process for both Task 1 and 2 (see Excerpt 4 for Writing Task 1).

**Excerpt 14:** Gap (Interview 2, D8, P15, line 51 ff.)

Interviewer: You'd already advanced with your letter quite a bit. Lucy then felt that she wanted to hear the tasks once more, the task involving Mr Fässler on the telephone. You were not so sure about that. What was the reason?

Helen: Yes, but I don't know why. [laughs]

The same held for Lucy who could not remember, for instance, why there was a switch in the role allocation during the second writing process, as Excerpt 15 illustrates:

**Excerpt 15:** Gap (Interview 2, D8, P16, line 42f.)

Interviewer: [...] Do you remember the reason for the second change in who is writing?

Lucy: It happens. I do not know why. I / I am so äh / how to say ---- I do not know, it happens automatically. So w/ writing wham boom, here it is.

Although Helen was sometimes very capable of providing information on the collaborative writing process, and of using that as a foundation to talk about other similar writing experiences, she had considerable difficulty with questions that go beyond the writing task they had previously solved (Excerpt 16). She assessed both texts as quite good, but she failed to provide any reasons for this. She was also at a loss as to why she and her writing partner Lucy did not complement the manual with a drawing,

despite the fact that she listed drawings as an important characteristic of manuals elsewhere (Excerpt 17).

**Excerpt 16:** Meaning and Importance of Writing (Interview 2, D8, P15, line 143–146)

Interviewer: What does writing mean for you?

Helen: ---- I don't really know. --- Yes.

Interviewer: How important is writing for you?

Helen: Um, not so important.

**Excerpt 17:** Self-Evaluation and Genre Knowledge (Interview 1, D8, P15, line 91–98)

Interviewer: What do you think, how did you do on the task?

Helen: Good.

Interviewer: And why do you say good?

Helen: Yes. -- Because / - Yes, I just thought it was good. I don't know why. [laughs]

Interviewer: In your opinion, what does a good manual consist of?

Helen: Yes, what/ a good one is a manual that also has a picture next to it so that one sees how it works.

With respect to the hypothetical situation in Part B of the second interview, Helen displayed only limited strategic knowledge (Excerpt 18). Thus, when asked about how she usually dealt with difficulties in generating ideas, she was unable to name a real strategy that she herself would use. Instead, she replied that she would call for help. She also proposed similar solutions for other activities, such as formulating or evaluating. It is indeed noticeable that seeking help was a quite dominant writing strategy in this part of the interview. This eventually culminated in Helen concluding that a good writer is also someone who can help others write (“And then I can approach her and ask her for help”, Interview 2, D8, P15, line 112).

**Excerpt 18:** Strategy Knowledge (Interview 2, D8, P15, line 171–174)

Interviewer: What do you do if you have no idea what you could write about? What do you do then?

Helen: Yes, if somebody is there, I can ask them. For example the course teacher, yes, what could I possibly write here? [...]

Interviewer: Now, let us assume you know what you want to write. You have an idea, but you have difficulties putting it onto paper. What do you do then?

Helen: Then I am asking: Hey you, can you help me briefly? I can prompt you and you write on my behalf.

Regarding differences between individual and collaborative writing, participants were asked during the interviews if they would have proceeded in the same manner, had they been solving the writing task alone. Helen answered that she would have proceeded differently as she would have lacked patience if she were writing alone (Excerpt 19). In particular, she said that she would cross out the entire text and start

anew if she became aware that something was missing or incorrect. Such behavior could not be observed in the collaborative writing process, since Lucy took over writing when Helen expressed mounting difficulties.

**Excerpt 19:** Another Solving Process (Interview 1, D8, P15, line 43–52)

Interviewer: If you had to do this task alone, would you go about it in the same way, would you do something differently?

Helen: Then I'd more - immediately notice myself that something is missing. But, well, I have some difficulties writing and then I have to - think how could I write this and then - yes, it is not correct, and then I cross it o/ well, I do not have so much patience [laughs]. Yes.

Interviewer: What does it mean to you, to have no patience?

Helen: Yes, I give up quickly. If/if I don't know the word, then - it is somehow omitted - and later, the text becomes/ f/ is not entirely correct anymore. [...]

Interviewer: And then you leave it as is, or ...

Helen: Yes, or I cross out all of it and start again.

Interviewer: With the entire text or with just the word?

Helen: With the entire text.

To some extent Lucy too answered that she would have written differently if she had been writing on her own. Specifically, she reported that she would have written at her own pace (Interview 1, D8, P16, line 38). In fact, she repeated a number of times that she really was too fast for Helen.

Both cases show that the collaborative setting does influence participants' writing behavior. In the case of Helen, this was significantly so. It seemed that it is particularly the relative abilities of the writers that impact on the writing process. It can be assumed that writers with lower abilities constrain the writing process more substantially. Nevertheless the setting as a whole does also provide valuable insights into the individual writing processes, which is a clear forte of the presented approach.

## 5.6 Impact of the Experimental Situation

It needs to be taken into account that the approach presented here is an experimental situation. As mentioned in section 2, adult struggling writers do not like to be observed directly or filmed while writing because they feel ashamed (Sturm, 2010). So it has to be expected that the presence of these elements affect the writing process.

Both members of Dyad 8 indeed displayed awareness of the experimental situation. When Lucy took the pen out of Helen's hand during Task 1, Helen whispered: "They see everything that, what we write" (D8, Task 1, line 115)". In contrast to this concealed awareness, Lucy interacted directly with the camera during the writing process, for instance, by raising her beverage and toasting towards the camera. During Task 2 Lucy especially on several occasions mocked the name of the (faked) customer

(*Mr. Frässler* from *fressen*, that is *to eat*, instead of *Mr. Fässler*). Such incidents were also coded as “comments”.

Closer consideration of all comments reveals that in most cases dyad members commented on their own writing as noted in Table 3 above. That is, they reflected on, or evaluated, their writing process and made statements on their writing skills. In most cases comments are formulated quite neutrally. However, it seems that especially dyad members with very low writing skills reacted like Helen in that they were ashamed of their spelling skills or of their scratchy handwriting (e.g. Dyad 4 or Dyad 5).

Both members of Dyad 8 seemed exhausted after their interviews. Lucy explicitly mentioned this at the end of the interview following the second writing task (Excerpt 20), while Helen just responded that it was okay for her.

**Excerpt 20:** The Experiment as an Exhausting Situation (Interview 2, D8, P16, line 402–405)

Interviewer: Last question: how was the interview? for you?

Lucy: Exhausting. No [laughs loudly]

Interviewer: What was exhausting?

Lucy: No, - one has to think. I mean, I am slo/ slowly getting tired. It was a long day.

## 6. Discussion

This study addressed the question how struggling adult writers solve a writing task and which writing knowledge they have. Furthermore, it also sought to examine the methodological question, namely to what extent the multi-method approach employed here (a combination of video recordings with interviews and analyses of written texts) can capture the answers to these two questions.

The findings show that the proposed combination of methods applied to the analyses of collaborative writing does in fact produce rich data. Collaborative writing is indeed a fruitful instrument and starting point to speak to struggling adult writers about their writing approach, themselves as a writer, and their concept of good writing. It offers struggling adult writers a concrete writing experience that they can draw from repeatedly in interviews and that they can connect with other personal writing experiences. At the same time, retrospective interviews can contribute to a better understanding of the collaborative writing processes, even if, analogous to Levy et al. (1996), participants are limited in their ability to reconstruct thought processes or describe the chronology in detail.

Furthermore it has been shown that this multi-method approach is also appropriate for gaining insights into the individual writing skills of struggling adult writers. By adding to existing research on the basic skills of writing such as spelling, the approach taken here enriches our understanding of how individuals in this specific group of struggling writers deal with higher order writing skills such as genre knowledge,

planning, and testing texts for their effect. This was clearly illustrated by the two zoom-ins on Helen and the other findings on her in section 5.

The fine-grained picture that emerged from the data also confirmed that adult struggling writers share some commonalities with younger struggling writers (Dockrell, 2009; Graham, Schwartz, & MacArthur, 1993; Troia, 2006). The image of Helen as a struggling adult writer includes typical features such as insufficiently developed basic writing skills which strongly influence the writing process. Furthermore, by way of example, her orientation in the writing process is local, that is, she does not solve writing problems with reference to a writing goal or to the text as a whole. This matches the observation that she possesses limited strategic knowledge.

The findings also offer greater detail on characteristics that distinguish struggling adult writers from their younger counterparts (Harris, Graham, Brindle, & Sandmel, 2009). Taking Helen as an example, we can observe an adult who knows herself well as a writer, in that she can put her finger precisely on a fundamental difficulty in terms of writing, such as thinking and writing simultaneously. Furthermore, she deems writing a communicative act, which is substantiated by the fact that she considers it sensible to test a written manual in connection with readers' reactions. Last but not least, with respect to manuals she displays genre knowledge, even if she mostly resorts to experience gained in oral situations. These characteristics that are atypical for young struggling writers only become apparent through the combination of the three data sources, that is, protocol of the video observation, the written text, and the interview.

These strengths notwithstanding, the present study also has its limitations: First, the sub-study is based on a small sample and the results presented are mostly drawn from a case study.

Second, from a methodological point of view, it should be borne in mind that the collaborative setting influences the writing process. An example for this is the fact that Helen does not cross out the full manual, as she says she would do if she struggled with spelling when writing on her own. This option is precluded because her partner takes over the transcribing. While present, the impact of the collaborative setting is, however, limited; it does not completely reorganize participants' writing skills. Even when a partner has better writing skills, as Lucy does, Helen still does not write fluently and accurately, nor does she initiate activities such as developing a writing goal.

Using a multi-method approach means data from the different sources (observation of the collaborative writing process, follow-up interviews, and in the written texts) may not always fit with each other in a simple manner. Sometimes, traces of an event from the collaborative writing process can be detected in follow-up interviews, and in the written texts. Yet, caution is called for when interpreting such passages. In order not to draw premature conclusions, these traces should always be considered in connection to events from the writing process or statements in interviews that also offer other possible explanations. This is necessary because participants sometimes use a different approach to collaborative writing compared to a situation in which they write alone.

Future research should also investigate how struggling adult writers proceed when they have to solve a writing task alone rather than with others. In particular, more research is required on which inefficient or noneffective strategies they employ. Furthermore, ways must be developed to systematize the analyses of all three data sources – protocol of the video observation, the written texts, and the follow-up interviews –, to facilitate findings across cases as well.

From the perspective of instruction, the following has to be pointed out. As the literacy courses produced no significant improvement in writing skills within three months (Sturm & Philipp, 2013b), teachers need to know more about the writing processes and writing knowledge of their participants as well as about effective writing instruction that does improve learners' skills. Additionally, instructors may need an enhanced understanding of the features and benefits of collaborative writing. Taking Helen as an example, and generalizing to all participants, instructors need to address specific gaps, in particular with respect to genre knowledge and writing strategies. This requires that teachers go beyond traditional product-focused writing instruction. Instead, for writing skills to improve, it is imperative that evidence-based writing practices are used, such as explicitly teaching writing process and modeling writing strategies (MacArthur & Lembo, 2009). In order to further enhance such an evidence base and the writing instruction that is founded on it, more research is needed that takes into account specific characteristics of struggling adult writers such as their knowledge about themselves as writers and their oral literacy experiences.

Interviews with 12 instructors in adult literacy courses (one of them Helen's teacher), revealed that they do not use collaborative writing in their teaching (Sturm & Lindauer, 2014). Where teachers do use some variants of collaboration, for example Helen's teacher who reported that she supports adult learners by taking on the role of the thinker while the learners take the role of the transcriber, or vice versa, they need to understand clearly how different collaboration strategies impact on the development of writing skills. In the case of Helen, the question arises to what extent her teacher's approach indirectly influenced the way in which Helen solved Task 1 and 2 in the sub-study and to what extent Helen had herself already cultivated this kind of role allocation with her mother and sisters, as the interviews suggest. Case studies can play an important role in this regard. They can demonstrate to teachers how, rather than improve their writing performance, certain instructional practices support an unfavorable writing behavior or an ineffective strategy in adult struggling writers.

Since the participants in this study emphasized that they appreciated solving the writing task collaboratively, future research could examine to what extent collaborative writing can increase the writing competencies of struggling adult writers. Additionally, teachers too could use collaborative writing in literacy courses to gain insight into the approach of (struggling) adult learners.

## Notes

1. The dropouts and those who did finish the course differed neither in their reading and writing performances, nor in their motivational characteristics (Sturm & Philipp, 2013b).
2. In the German-speaking part of Switzerland, people mostly use dialect. In formal situations and particularly in writing, Swiss High German is used. Swiss High German is very similar to the High German used in Germany.
3. During the course of the observed writing process many participants remarked that it would be much better not to return the call of such a disgruntled customer.
4. In some cases writing task and individual interview lasted nearly three hours (Dyad 6 spent roughly 75 min. on the Task 1; after a 10-minute break, one interview lasted an additional 75 min.).
5. All dyads had re-read their texts prior to this prompt but mostly locally, that is, not with respect to a global representation of the text. Only Dyad 6 decided not to re-read their text for Task 1 because they had already spent a lot of time – roughly 75 min. – on solving the writing task. Dyad 16 stopped prematurely because they wrote only five keywords, which they expanded with one more in the second phase.
6. Lowry et al. (2004) use *supporting activities* as a generic term for researching, socializing, communicating, negotiating, coordinating, monitoring, rewarding, punishing and recording. They do not assume that every supporting activity is involved in a cooperative writing process, moreover the occurrence of supporting activities depends on the writing task.
7. The coding of speaker A or B and writer A or B is in some sense mechanical since the transcripts already recorded which participant was speaking or writing.
8. Pseudonyms used.
9. Only in one dyad was another collaborative writing strategy observed. Dyad 16 chose parallel writing: one wrote the manual and the other made a drawing of the coffee maker. The participants of Dyad 16 hardly negotiated.

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**Appendix A: Writing Fluency at t<sub>1</sub>, Dyad 8***Writing Fluency at t<sub>1</sub>, Helen (Dyad 8)*

Ich schaffe am Bffe. Dann mache  
 ich die getrene Larant. Für die im sevriss  
 dan holen die getrenche. Zum serviren  
 für die gste. Das m sich nicht im seich  
 sind das ist

I work on bffe. Than I make redy the drenks. For those in sevriss then get the drenks. For  
 servie for the gsts. Therby m themselves are not into shite that is

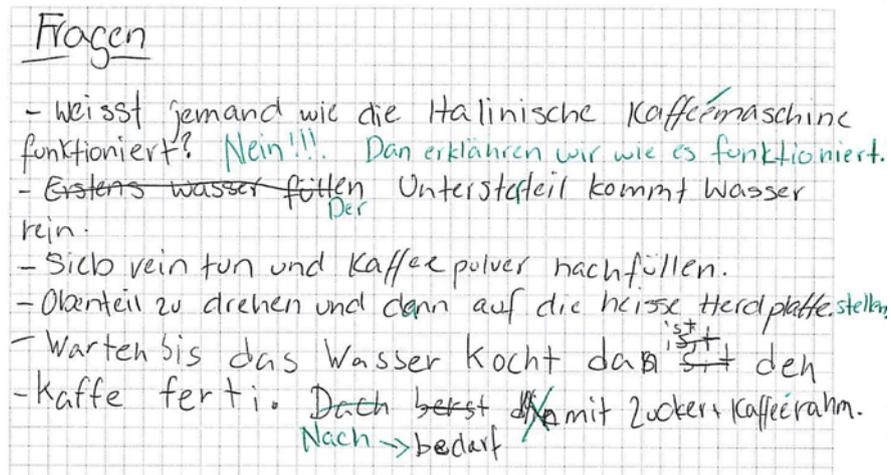
*Writing Fluency at t<sub>1</sub>, Lucy (Dyad 8)*

Mein Zukunft ist weiterhin draussen zu  
 schaffen, und ich bin nicht der Mensch  
 wo drinnen bleibt. Ich arbeite im Rebberg,  
 und hat mit den Pflanze zu tun. Im Frühling  
 tun wir jungreben jäten und pflegen, Reben  
 einschlaufen zwischen die Drähten. Im Sommer  
 kommt ein Vogelnetz drauf gegen Vögel.  
 Sonst fressen die Vögel Trauben. Im Herbst  
 ist den Erntzeit, heiss

My future is still working outdoors, and I am not the person that stays indoors. I am  
 working in the vineyard, and has to do with the plant. In spring we plant and nurse  
 seedling vines, feed vines between the wires. In summer a bird net comes on top  
 against birds. Otherwise the birds eat grapes. In autumn is the harvest, hot

## Appendix B: Text Dyad 8 Task 1

## Text Dyad 8 Task 1



## Questions

- does anyone know how the italian coffee maker works? **No!!!** **Then we explain how it works.**
- ~~Firstly fill water~~ **The** lowest part gets water in.
- Put strainer in and refill coffee powder.
- Screw on upper part and **then put** it on the hot stove.
- Wait until the water is Boiling then **is** is the
- Coffee finished. ~~As~~ ~~required~~ ~~with~~ **Required** ~~with~~ with sugar + coffee creamer.

Key: black = phase 1; green = phase 2

## Appendix C: Text and Summary of the Writing Process, Dyad 8, Task 2

## Text Dyad 8 Task 2

Herr Fässler

Herr Fässler wir entschuldigen uns für der Vorfall,  
aber der <sup>Chief</sup> ist Krank geschrieben und kann deswegen  
nicht vorbeikommen. ~~aber~~ er hat uns gesagt  
was mir ihnen 5% <sup>geben</sup> können. Wenn der ~~Chief~~ <sup>Chief</sup>  
~~Chief~~ kommt sagen wir <sup>ihnen</sup> den Bescheid. Der Chief sagte  
er <sup>kommt</sup> ~~kommt morgen~~ <sup>er wieder gesund ist.</sup> zum so bald wie möglich.  
Wir ~~ten~~ wünschen Ihnen einen schönen Tag und

mit Freundlichen  
Grüssen  
vom ~~Team~~ Müller AG

*• Für diesen Vorfall können wir Ihnen die 5% geben.*

Mister Fässler

Mister Fässler we Apologize for the incident, but the chief is on Sick leave and therefore can't come by. ~~H~~But he has told us what we can give you 5%. When the ~~efechef~~ chief is coming we will then tell you. The chief said he ~~comes~~ comes tomorrow by as soon as possible he is Well again. We † wish you a beautiful day and with Kind regards from ~~team~~ Müller AG

\* For this incident we † can give you the 5 %.

Key: black = phase 1; green = phase 2

Min.	Summary of the Writing Process Task 2	Text produced
<b>Phase 1</b>		
0–2	Both are reading the email. Both are listening to the audio clip of the answering machine.	
2–3	L. takes the pencil without discussing who should be the writer. L. and H. discuss what to write. H. says that their boss has written them an email and that they now have to write back. L. asks if they have to explain what the email says. H. says yes.	Mister Fässler
3–4	L. generates the first part of an idea, H. takes over. L. writes.	Mister Fässler we Apologize for the incident, but the chieff is on Sick leave and therefore can't come by.
4–5	H. asks if she should also write. L. agrees. H. writes <i>haber</i> , L. watches H. write and points to <i>h</i> . H. says <i>aber</i> [but], L. insists, there is a small <i>h</i> . H. rewrites <i>h</i> with <i>H</i> . H. formulates and writes the next sentence.	<del>H</del> But [Haber] he has told us whatt we can give yuo [ih → inen] 5 P %.
5–6	L. generates two new ideas they discuss. Both agree that these ideas are good. When H. writes <i>Cfe</i> , L. says that <i>h</i> is missing. H. crosses out <i>Cfe</i> and writes <i>Chfe</i> . L. laughs.	When [wen] the <del>chfe</del>
6–7	H. wants that L. writes again and says that she has never had to write <i>Chef</i> . L. crosses out <i>Chfe</i> and writes <i>Cheff</i> , but is unsure, if it is correct, adds <i>e</i> , crosses out <i>Cheffe</i> , writes <i>Cheff</i> and the rest of the sentence.	<del>cheffe</del> chieff is coming we will then tell you.
7–8	L. writes, H. says that <i>tomorrow</i> is not correct since the boss is ill. They discuss how long it will take till the boss is well. L. crosses out <i>tomorrow</i> and writes as soon as possible. L. starts to think what to write, but H. says <i>with kind regards</i> . L. generates and writes another idea.	The chieff said he <del>comes</del> comes <del>tomorrow</del> by as soon as possible. I wish you a beautiful day.
8–10	L. writes <i>with Kind regards</i> , H. adds <i>from our team</i> , L. writes <i>from the team</i> . After that, they again listen to the clip.	with Kind regards, from the team
10–11	After listening, H. says, their letter is in order. L. reads through the letter, adds <i>cheff</i> , revises <i>Haber</i> to <i>aber</i> [but]	... but the <i>cheff</i> is on Sick leave ...
11–12	H. wants <i>can</i> to be added, L. adds it, L. also adds <i>you</i> and revises <i>comes</i> to <i>comes</i> . Both agree that their letter is written politely.	... whatt we <i>can</i> give ... ... we will tell <i>yuo</i> .
<b>Phase 2 after a short break</b>		
0–1	H. wants to rewrite the letter, without explaining. L.	

refuses this vehemently. H. says that something is not in order with the letter. L. points to the sentence *But he has told us ...* H. insists that they themselves have to do it because their superior is not there, but he only said that they have to write an email. L. crosses out *But he has told us*

- |     |   |  |
|-----|---|--|
| 1–2 | They discuss how to write it. L. proposes to write <i>he has instructed to</i> . First, H. does not agree, but can not formulate what she thinks would be better. Finally, H. agrees. |  |
| 2–3 | H. and L. discuss how to formulate it, finally L. starts to write.  | For this incident we can   |
| 3–4 | L. writes further. L. reads through the letter, revises as <i>possible</i> .  | give you 5%<br>... as soon <del>as possible</del> he is<br>Well again. |
| 4–5 | H. reads through, points to <i>I</i> in the sentence <i>I wish you</i> , L. revises it to <i>We wish you ...</i> Both agree that now the letter is good.                              | ‡ We wish you ...  |
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