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**Efficacy Check of Writing Processes of Adult Writers and Using
Collaborative Writing as Writing Enhancement Tool**

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Abstract:

This research examined how and what struggling adult writers know about writing and themselves as authors when it comes to overcoming a writing difficulty. We used a three-pronged approach to learn more about the adult authors' writing processes: participant observation, text analysis, and structured one-on-one interviews with both retrospective and prospective parts. Adult writers who are struggling can benefit from this rigorous approach since it provides them with important tools for examining their writing processes and expertise. We may observe an example of data triangulation in action by examining a real-world case study. The results of this case study show that struggling adult authors and younger writers have certain things in common and some things in common. When it comes to the writing process, both groups have a limited role for planning and rewriting. For the most part, struggling adult authors have an advantage over their younger counterparts because they have a better grasp of their own talents as writers, in addition to a better grasp of their own identity as writers.

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

1. Introduction

More than half of the population lacks basic reading skills according to the most recent statistics from the Survey of Adult Abilities (PIAAC) (OECD, 2013). Writing skills in adults were not assessed as part of the study as a result of the PIAAC's lack of focus on these areas.

Most of the research on the subject of writing abilities in adults has been conducted among university students. Adults with advanced writing skills are of particular interest because of this (Bourdin & Fayol, 2002; Chenoweth & Hayes, 2003; Quinlan, Loncke, Leijten, & Waes, 2012; Torrance, Thomas, & Robinson, 1994). A lot of mystery surrounds adult authors who are having trouble getting their work published. There are just a few studies that look at the struggles of adult writers, and these studies tend to focus on the basics, such as spelling and syntax (Grotlüschen & Riekmann, 2012; Wengelin, 2007). Adult struggling writers' higher-order talents, such as their ability to recognise and appreciate the writing process or to recognise and appreciate themselves as authors, are unknown. According to previous study, many adult struggling writers feel writing is simply about mechanics and not about the creative process. This is a misconception.

Writing therapies for struggling adult authors are the subject of some recent study, which is now under publication (Berry & Mason, 2010; MacArthur & Lembo, 2009). It's comparable to reading research that these treatments are based on studies with younger age groups. Even though it seems natural, extending study findings from children and adolescents to adults "is largely speculative, especially in areas where there is little existing AE [=adult education] research" (Kruidenier, MacArthur, and Wrigley, 2010, p. 14). Kruidenier et al. (2010) point out that there are considerable differences in reading comprehension and fluency between young and adult learners. Adult and adolescent struggling authors have different traits, and it is not possible to assume that the characteristics that identify them are the same for both groups of writers (Amato & Watkins, 2011; Troia, 2006) One's way of life, age, and formal schooling setting all have an influence on learning in general as well as learning how to write in particular, and these factors must be taken into account when evaluating learning outcomes. Among the many reasons that make adult learners distinct from other students is that their literary experiences are likely to be different from those of children, and secondly and most

importantly, that their adult responsibilities prevent them from regularly attending literacy classes or devoting time to learning.

Three questions must be addressed in order to comprehend the difficulties faced by struggling adult writers as a group. ' One consideration would be how to design literacy classes for adults in a way that accommodates their busy schedules and diverse personal preferences and needs. It is required to address two other sets of issues prior to discussing pedagogy in this context. For the sake of this paper, let's consider the following issues:

- “What strategies do struggling adult writers use to complete a writing assignment? And what level of writing expertise do they possess?”
- “Secondly, what are the most acceptable ways for evaluating the writing processes and writing knowledge of struggling adult writers?”

The following is how the article will be structured: When it comes to observing struggling adult writers, I argue that a novel combination of methods, including the observation of collaborative writing tasks, follow-up structured individual interviews with writers, and analysis of their written texts, is most effective in observing their writing processes (section 2). In addition, I believe that this three-step technique can help adult authors who are struggling to have their work published. It's at this point, in Section 3, that I explain how this study was connected to a wider investigation on struggling adult authors in German-speaking Switzerland. Section 4 provides a detailed explanation of the three-part technique and an example of how it was put into practise in a sub-study of dyads of struggling adult authors. In the next part (section 5), I will use one of these writing couples as a case study to explain how their writing process and knowledge are illuminated. Researching troubled adult authors can benefit from collaborative writing, and I urge more study into how collaborative writing can assist these writers improve their writing.

Considerations for the Research Process:

Research on Adult Writers Who Struggle Using Collaborative Writing There are three traditional ways to study the writing process: prospectively through surveys or interviews, simultaneously under thinking aloud settings, or retrospectively through interviews. Each technique has advantages and downsides.

Experimental bias can emerge as a result of the inclusion of additional questions in prospective interviews, including hypothetical ones like those done by Zimmerman and Martinez Pons (1986). (Veenman, 2005, p. 79). When conducting interviews in the future, it is difficult to use hypothetical occurrences due to the fact that it demands the capacity of respondents to relate and apply such scenarios to their own personal experiences, which is not always achievable. When conducting interviews, researchers and interviewees alike may look to hypothetical events for common points of reference, as opposed to a questionnaire, which does not provide this information.

Think aloud does not reveal many highly automated processes, but it does show higher-order processes in other circumstances (Veenman, 2005). Consider whether or not this method has an effect on higher order writing processes while you're thinking aloud. There is a strong correlation between the prolonging of the pause and the amplitude of the temporal effect, as proven by Janssen, Van Waes, and Van den Bergh (1996). As a result, several layers of planning are necessary. The degree of difficulty of the writing project has an effect on these variances. A study on think-aloud exercises led the authors to this conclusion: protocols for writing activities that demand problem solving are more informative than protocols for simple tasks that are protocols of knowledge telling and are thus less beneficial; (Janssen et al., 1996, p. 249).

However, as Winne (2010) points out, the existence of thinking aloud data is only roughly contemporaneous with the incidence of cognitive activity. Instead, when authors express their opinions, they are interpreting a specific event. To put it another way, the ability to think and write concurrently as well as explain and analyse one's own cognitive processes is demonstrated through the practise of "thinking aloud." Even for authors who are already struggling, this requires an advanced vocabulary, which can be a substantial burden.

Unless it is impractical, most retrospective interviews are performed as quickly as possible following the viewing of a scenario. It is important to keep in mind that interviewees often have a hard time remembering what they were asked to write about them when it comes to cognitive activities. Given that recalling and verbalising from memory involves interpreting and verbalising your own cognitive functions, it may be deduced that this technique requires relatively strong vocal talents, akin to thinking out loud. This is a similar strategy. Levy,

Marek and Lea (1996) found that test-takers were frequently unable to remember or reconstruct what they had said during the thinking aloud session, despite their best attempts.

Janssen et al. (1996) and Levy et al. (1996) suggest that while all procedures have their shortcomings, neither thinking aloud nor retrospective interviews should be discarded because they both have merits. " The same is true for those who are interested in being interviewed. It's possible that combining these methods (Spörer and Brunstein, 2005) will be the key to your success. There are a number of different ways to observe writing processes; this review shows that each approach makes distinct demands on test subjects; as a result, a combination of these methods creates even more and hence higher expectations on test subjects.

As important as it is to document the writing processes of aspiring adult authors, a detailed assessment of the approach and expectations set on test subjects is required. Researchers have a particular set of methodological problems in the study of this population, including the following:

They do not want to be seen or recorded when they are writing because they are self-conscious about their appearance (Sturm, 2010).

In pretests, it is discovered that people have trouble thinking aloud while writing, as per Sturm (2010). One probable explanation is that they need their mental power to write, and another is that they are ashamed to contemplate aloud in front of others.

They will focus on procedures with a low hierarchical degree of complexity since struggling adult writers are unlikely to have fully automated fundamental talents like handwriting or orthography (Wengelin, 2007). So it is not apparent if the data gathered from thinking aloud will be enough for the study.

Avoiding writing settings as much as possible is a common occurrence for adults with weak writing abilities (Sturm, 2010).

Adults with low reading skills may also struggle verbally in specific contexts, as demonstrated by research done with teens (Dockrell, Lindsay, and Connelly, 2009). 6.

In light of points 1)–3), thinking aloud is not a suitable method for researching the writing processes of struggling adult authors. For the same reason that struggling adult authors often

have limited personal experience from which to draw (point 4), prospective interviews that refer to a hypothetical situation will only give the most restricted insight into these people. When interviewers are unable to communicate effectively, their credibility is questioned as a whole. This may be addressed by combining data from video observations of authors working on collaborative writing assignments with structured individual interviews done immediately after the task completion and an evaluation of the written texts generated.

As an alternate method of examining adult authors who are having difficulties, collaborative settings might be employed. Only briefly considered in the context of a learning arrangement, collaborative writing has significant positive impacts on text quality (Graham and Perin, 2007, report an effect size of $d=.75$, which is above average), and from a socio-constructivist perspective, collaborative writing also has "motivational relevance for students" (Boscolo&Hidi, 2007, p. 9).

Working together on a project creates not just texts but also meanings in collaborative writing (Kostouli, 2009). A discussion over what should and shouldn't be included in the text, as well as how a topic should be articulated is inevitable while working on a collaborative writing project (Lowry, Curtis and Lowry, 2004; McAllister, 2005). For researchers, the negotiating process is made more transparent when it is done in front of the group. This kind of open conversation about, for example task demands or arranging concepts or formulations should help increase the visibility of processes, particularly those at the top of a hierarchical hierarchy. In addition, both authors are equally responsible for the work they do as co-authors. Participation in a research like this might be especially motivating for adult authors who are having difficulty getting published.

It's been questioned if monitoring collaborative writing gives any insight into the participants' individual writing. Collaboration does have an effect on how an individual approaches writing, but it's safe to believe that the experience doesn't completely restructure that person's writing abilities. A test subject's orthographic difficulties will also be evident in collaborative writing, albeit to a lesser degree. Respondents may be reluctant to participate in planning activities if they are not used to doing so. The same holds true for time-consuming writing tasks. No one can prevent them from taking part in the planning process that their spouse has already begun.

One such question is how the data acquired through the monitoring of the collaborative writing process might be analysed in more depth. Individual writing habits can be gleaned from the distribution of writing activities amongst partnered authors, for example, but this information can only be drawn through the observation of collaborative writing tasks. Although these writers are primarily concerned with individual writing processes, I will illustrate in Section 4.5 how the protocols of a collaborative writing job may be examined primarily on the basis of Breetvelt, van den Bergh, and Rijlaarsdam (1994). Hopefully, this knowledge will be of assistance to you.

Individual writing processes and expertise in writing can be better understood by combining data from collaborative writing activities with data from structured one-on-one interviews. Retrospective and future sections are recommended for these interviews. Researchers can utilise a variety of data to assess whether or not participants use the same strategy while writing alone as they do when working with a partner, or whether or not they take a different method entirely. Using a collaborative writing exercise as the starting point for an investigation may help participants gain tangible experience and a pattern of writing behaviour that they may use as a reference point when considering hypothetical situations.

A historical context for the current study on collaborative writing is provided in the next section (section 3) by referencing the larger study that it is part of. After that, the cooperative writing project will be fully presented, followed by individual interviews (section 4).

3. Overall Study: Evaluating Literacy Courses

In Switzerland, the DachverbandLesen und Schreiben is the primary provider of literacy education for adults with low literacy abilities (Swiss umbrella organisation for reading and writing). Adult education institutions also provide these classes as part of their usual curriculum. Spelling and grammar are two of the most important aspects of communication that these service providers place a high value on. Writing instruction is primarily focused on the creation of finished products, which is in line with more conventional educational philosophies.

Literacy classes given by diverse providers were evaluated in this primary study's goal. Participants were asked, among other things, how well they could read and write. What drives them to do what they do? Moreover, how do these aspects change during the course of

the courses themselves? Teachers were also surveyed at the same time in order to gather further information regarding course layout.

Reading and writing self-concepts, their motives for taking a literacy course, their reading and writing behaviours at work and during leisure time, as well as the usage of a computer were analysed using a questionnaire.

In order to ascertain whether or not the students' reading and writing skills had improved considerably, the following measures were used:

As many stumbling blocks or terms that did not suit the text as possible were ordered to be crossed out by test takers (Metze, 2003). The exam has a time limit of three minutes. The number of correctly read phrases is counted in order to get an idea of how fast you read.

b) Based on the work of Malecki and Jewell (2003) and Benson and Campbell (2006), a test to measure fluency in German writing was created (2009). The test takers were given three minutes to describe their work in as much detail as feasible. In addition to the number of syllables and the proportion of right syllables, the test also looks at the number of words and the accuracy of the word sequences.

Comparative data from vocational students was also gathered by administering both evaluations to these students. Considering that the reading test's comparison data came mostly from elementary school students, and the writing exam was just being produced, this was critical information to have (Sturm, 2014). Students who are enrolled in traditional postsecondary education programmes, such as trade schools, offer an interesting point of comparison because one of the key aims of literacy classes is to prepare adult learners to participate in those programmes.

Adult literacy classes began with a reading and writing assessment (t1), and the assessments were repeated at the conclusion (t2). A period of three months elapses between the dates of t1 and t2. The size of the sub-sample research was based on the findings of the two tests performed at time point t1. Figure 1 depicts the data-gathering method for the main and sub-studies.

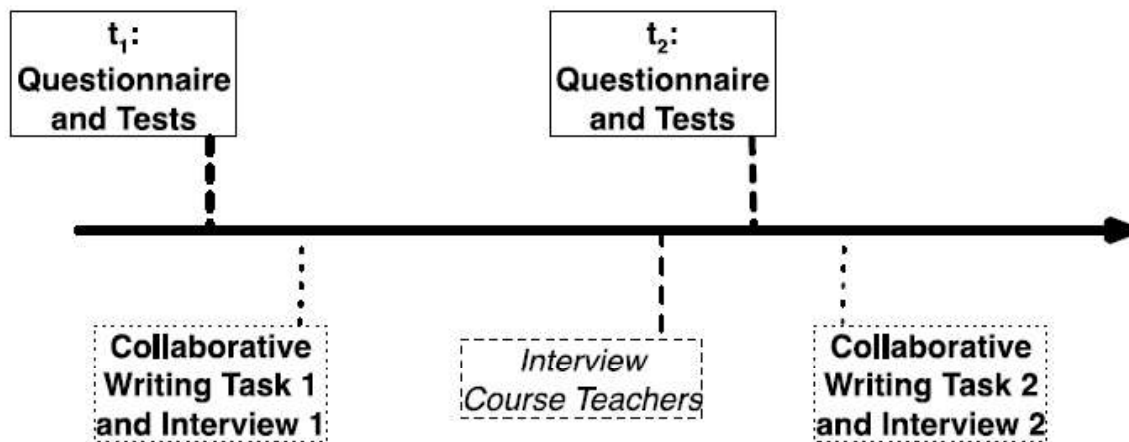


Figure 1: Data Collection in the Main and the Sub-Study.

3.1 Participants

The primary trial had 235 participants. Each of the five German-speaking areas of Switzerland provides a separate set of courses. As an umbrella organisation, RWA is made up of adult education institutions, public libraries, and the Swiss Army. More over half of the participants were fluent in German. Since 69 of the participants were Swiss Army troops, the male-to-female ratio is 75%. The participants ranged in age from 18 to 65, with the youngest at 18. The average age of students in the Swiss Army courses was 21.6 years, whereas the average age of students in the other courses was 44.4 years. Only 60 percent of the participants were able to be interviewed and analysed at t1 and t2 because of sickness, relocation, or discontinuation of the course.

3.2 Selected Results

Table 1 shows that the reading performance of adult learners who were struggling was significantly poorer than that of vocational students, and that adult learners were also significantly worse writers than vocational students.

A second finding was the functional illiteracy of slightly over two-thirds of the population. Functional illiteracy is defined by Egloff, Grosche, Hubertus, and Rüsseler (2011) as reading and writing skills below the level of an average fourth-grade student (i.e., a student aged 9 or 10 years in their 6th year of school). Each minute, an average fourth-grade kid can read 8.1 sentences that are correct. We discovered that 69% of participants in our adult literacy course

did not achieve this level of functional literacy after the course. Furthermore, we found that 29% of those who took the course and took our evaluation scored much lower than the second-grade level, which is 4.1 accurate sentences.

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)
Reading Test:			
Number of Correct Sentences / Min.	7 (3)	12.3 (3.3)	1.67
Writing Test:			
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

They also found that adult learners didn't increase in their reading or writing skills from time one to time two (d=.16 in both tests) (same for t1 and t2, but somewhat better for t3) (Sturm and Philipp, 2013b).

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

Researchers conducted a sub-study of their larger study to examine how struggling adult writers finish writing tasks and what writing expertise they have. Two collaborative writing exercises (4.2.), structured interviews (4.3.), and analysis of participants' written texts were used in this sub-study to design a unique methodological combination.

4.1 Participants

A sub-selective study sampling was conducted using the reading and writing test results stated in Section 3. Participants were selected based on their reading and writing abilities, which may be poor, high, or a mix of the two. Students with varying writing and reading abilities were selected for the purpose of forming pairs with comparable features. Also included was the act of reading, as authors rely on it to evaluate and modify their own work.

As per the advice of participants' teachers, appropriate pairs were matched together. Participation in a literacy course and teachers' belief that collaboration amongst participants is possible are prerequisites for participation in this study. For the purpose of avoiding the harmful effects of other factors, such as the dominance of a member, on the collaborative writing process, this technique was employed. Strictly speaking, no dyads could be picked for the research since professors would sometimes suggest an alternative pairing or because students would refuse to take part.

14 dyads were formed from 28 individuals from the main study, which were then matched together. Reading speed in the sub-study was 6.4 sentences per minute at t1 (n=19), which was 68% higher than the national average (n=1). Primary research found that this is lower than the functional literacy rate for fourth-grade kids, which was defined in the study as 80%. When it comes to writing, this sub-participants study's produced an average of 65.6 syllables in 3 minutes, with 90.2% of syllables and 54.5 percent of word sequences written properly. With 12 men and 19 native German speakers, the participants' average age was 38.7 years old. For the sake of avoiding test fatigue, the two collaborative writing sessions were set three months apart. According to the primary research, the reading and writing tests were given at this time (Figure 1). The same two writers were involved in both joint endeavours. Fewer than half of the 14 dyads took part in both measurements. There were no second writing assignments for dyads in which one member did not finish the course, moved away, or was unwell for an extended length of time.

4.2 Creating Two Different Writing Assignments

There were a number of criteria that had to be met before the writing assignments employed to monitor these two struggling adult authors could be judged genuine. When it came to the content, they had to be simple enough for people to absorb it. In order to encourage creative problem-solving and a wide range of writing styles, students must also face difficult but manageable problems. Because struggling adult writers prefer to avoid writing, the activities must be both fascinating and inspirational. Thus, the following criteria were created for writing assignments:

In order to have the most influence on the participants' professional and personal life, the event needed to fit neatly within a certain genre.

The work needed a defined writing objective in order to succeed. Avoiding the appearance that talking with the customer would help fix the problem was very important.

The assignment had to be constructed in such a manner that just a minimal amount of current knowledge was necessary, in order to prevent the limitations of such information from impairing the writing process.

Students were given two separate genre-specific writing assignments, one for each of the two circumstances. This allowed us to examine the extent to which participants demonstrated genre-specific writing processes and expertise, as well as the extent to which they were able to adapt their work to the environment. Writing a handbook for a daily environment was task one. It set out to accomplish two things:

Pretend you're a volunteer at a children's club for this first task. The teens who were using the coffee machine were to blame for its malfunction. You bought a new, very small one, and then gave it to the club.

Assist yourself by writing a manual.

providing the capacity to brew coffee and tea to teens

- Use the coffee maker with caution.

The coffee machine was available for use by the attendees (which included ground coffee powder, water, milk, and sugar).

Students had to prepare an argumentation letter for a professional audience for the second assignment. Participants were presented the following situation and taught to visualise it: For the time being, they work for a tiny company and have been given the task of handling mail. There has been a (false) complaint left on the answering machine by Mr. Fässler. He believes that the freshly placed parquet has three scratches that need to be corrected, and he is only prepared to pay the invoice if the scratches are eradicated. According to the audio, the client is displeased to say the least. The audio recording of the customer's complaint was played for the participants to hear and rehearse their responses. 3 For the writing task, I was given the following:

Second, you must notify the customer in writing that the repair is now impossible after discussing with your supervisor. If he insists on having the floor fixed at the same time, you'll need to talk him into accepting a 5 percent discount instead.

Both textual and auditory information was needed to solve the problems. Writing assignments for the participants were given to them in the form of pre-written questions. The written descriptions of the exercises were also read aloud to the participants throughout the session. Emails sent to participants in Task 2 were another example of supplementary written input. Participants were also given the option of receiving audio input (such as a message left on an answering machine) in the form of a recording. Through the use of this feature, participants were able to read and listen to the activities and materials as many times as they wanted. In addition, the approach itself is described in further detail in Section 4.4.

4.3 Structured Individual Interviews

After the two authors had completed their writing obligations, roughly ten minutes after they had done, organised individual interviews were conducted with each of them. Part A and Part B were the two halves of these interviews. See Table 2 for further information.

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

Tasks 1 and 2 were written in a different manner from Tasks 3 and 4. A group writing exercise and one-on-one interviews were too tiring for participants to complete in a timely manner. It was discovered that the complete Interview 1 (part A plus B minus the hypothetical circumstance) lasted an average of 59 minutes. 4

As a follow-up to Task 2, an imaginary scenario based on Zimmerman and Martinez Pons (1986) was incorporated into the interview to help bolster participants' writing knowledge. Interviewees were made aware of a situation that had been observed during data collection: During the first few minutes of a lecture, a course teacher encourages students to discuss their

thoughts and experiences from the previous week. According to one participant, the teacher's writing assignment did not appeal to her in the least. She had no idea what to write about. As part of the course requirements, students were expected to craft a story around their favourite dish. After that, the teacher encourages her to try again. When asked whether they had ever been in a situation when they weren't sure what to write about or how they would tackle such a situation in the future, participants admitted that they had. When asked what they do when they don't know what to write about, have an idea but can't get it down on paper, aren't happy with their material, or have lost inspiration in the middle of the writing process, they said that they do nothing.

In addition, they were asked what they would tell other students in the similar situation.

4.4 Procedure

The participants penned their thoughts on paper with a pen. When it came to writing, there were no limits. Using two distinct cameras, two different types of photographs were obtained in order to precisely analyse when and what the subjects wrote. It was necessary for the analyst to be able to exactly reconstruct the authoring process by using a camera that was focused directly at the writer's hand. For this experiment, scotch tape was utilised as a marker for the writing area, as the camera's position was established. The second camera recorded the entirety of the scene (medium close-up). Camera position was documented on tape during a brief introduction that participants were shown as part of. They were able to have a better grasp on the camera angles thanks to this. All the professors had claimed that they had never utilised collaborative writing in their classes previously, therefore this was done to show an example of it. Members of the study team portrayed the two adult authors who were arguing whether or not to include a notion in their writing in a video clip recorded from the perspective of the second camera. Some other footage shows a grownup drawing a chart of where they're going. This should be taken as an implied indication that particular text components, such as illustrations and other visual elements, can be used.

The reactive writing approach is presented in the video clip for collaborative writing: Writers that use the reactive writing technique do so without any forward planning or coordination, instead working on a text in real time, responding and changing to the contributions of their peers. p. 78 of Lowry and colleagues, 2004 While other collaborative writing techniques,

such as parallel writing, are less effective at communicating and collaborating, reactive writing encourages writers to negotiate and come to a more firm consensus. On the other hand, Lowry et al. (2004) note that coordination can be more difficult in the case of reactive writing (2004, p. 79).

The written assignment was provided to the participants after the video clip was shown to them. To use the coffee maker or to listen to a customer complaint on the tablet numerous times, they proceeded to do so after being informed that they were allowed. Participants worked on a writing project while being monitored from afar following the introduction. Using a second camera, the researchers were able to see and film the writing process despite being in a separate room. Before the meeting began, it was made clear to everyone that this would be the case. Rereading one's work after a brief pause from the writing process was encouraged since struggling writers tend to stop or finish a writing process prematurely as soon as a text is completed (Troia, 2006). They were explicitly told that they could change the language, but that they may also opt to keep it as is. Color-coded pens were used to make it simpler to discern between edits and additions to the original document.

As they prepared to interview each writer individually, two researchers met for 10 minutes to discuss their results and suggestions for improvement. They sought to limit the questions they would ask participants to those pertaining to the tasks of planning, translating, and evaluating/revising because these activities could be observed. As a result, the two researchers developed questions about parts of the writing process that were particularly remarkable for being unexpected. The following are some examples of the latter-day inquiries: What was the point of mentioning an image but never implementing it? Why did the two participants alternate writing?

Exploration and Analysis of Data 4.5

A detailed written record was created from all of the material. Transcriptions of all of the participants' speech were scrupulously done. Coffee maker activities, as well as reading and listening to the writing work (which included several replays of the client complaint audio recording), as well as all acts of transcribing, were to be documented. The entire dataset was coded and analysed using a version of MAXqda (Kuckartz, 2005). Breetvelt, van den Bergh and Rijlaarsdam (1994) identified eleven distinct cognitive activities, and these were used to

determine how to code and assess the writing process data. Although the categories were updated and some new categories were established to meet with the unique requirements of the tasks as well as the distinctive aspects of collaborative writing that separate it from solo writing, the categories remained the same.

a) Additional background information was supplied. This required fluency in English as well as knowledge of the relevant subject area. However, there was considerable disagreement concerning language issues in relation to Task 1's requirement to define important coffee machine information.

However, it was determined that there were two distinct stages in the process of generating ideas and articulating them: It happened because participants agreed on what to write but differed on how to write it. It was decided that in cases where the distinction between generating ideas and formulating was not clear-cut that the following coding rule was used: if the relevant idea had not been discussed before, the extract would be coded as generating ideas; if the relevant idea had been discussed before, the extract would be coded as formulating.

c) Categories relevant to the collaboration between the two authors were defined (partly based on Lowry et al., 2004). (partly based on Lowry et al., 2004). Responsibility, coordination, and other forms of assistance are all included in this category. For example, the writer may ask their partner to wait until the writer has done transcribing (wording is repeated or dictated, not for oneself but for the partner).

There were no pauses categorised in this study, unlike Breetvelt and colleagues (1994), because the pauses often overlapped with the participants' conversations. As a result, self-instructional remarks such as "First, I have to do this" weren't categorised because they were an integral component of their collaborative interplay with the two participants.

In addition to a detailed discussion of each category, the code manual provided instructive examples. A considerable difference between two groups that could not be differentiated necessitated the introduction of coding rules as indicated above in b). Table 3 offers a brief explanation of each category and a brief description of each category from the transcripts and statements from participants. It's important to note that participants are identified by their P and a number.

It is not feasible to create independent units that cannot be categorised using MAXqda. Thus, the categorising and naming of categories was a part of 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?

Transcriptions of the following protocols were made: Each line began with the participant's name and the number of the microphone they were using. Square brackets and the term "writes." were used to indicate writing actions. Parentheses and brackets were used to denote other behaviours, such as peering inside the coffee maker. The "/" suggested a sudden pause in speaking, whereas the ellipsis indicated an incomplete sentence.

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?

The first phase in coding was recognised as cohesive activities. Participants were not consulted before allocating codes for new cognitive activity. Because the participants were discussing how the coffee machine worked, the full phrase was categorised as background knowledge in Table 4.

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/ [...]

Cohesive cognitive activities were discovered, and two further categories were added to identify individual activities:

Each participant's speech and writing acts were coded after coding the cognitive activity (speaker A vs. B and writer A vs. B).

7 Aside from transcribing and rewriting, writing tasks are not further categorised for each participant. In the writing process, this allowed us to calculate how the two participants divided up the work.

An example of a process being spread out over several participants is shown in Table 5.

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/ [...]

It is possible, as shown in Table 6, that a speaker initiated many activities. In these cases, coded activity was confined to one utterance by a speaker. Thus, by employing this coding strategy, it is possible to separate the collaborative writing process from the level of involvement of the two writers (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 Transcribing	P16: And then [transcribes: and then]

In this example, the data was coded by the author and a university student using an elaborate coding manual he prepared. However, the second rater had just graduated from college and had no prior training in quantitative coding procedures or qualitative research methods. A transcript was coded in cooperation between him and the writer. Afterwards, he worked alone to code a second transcript. Group discussion and corrections were done on this. The next step was for each rater to independently code three transcripts. In all other situations, the transcripts were coded either by the author or a second rater. The author evaluated the transcripts that had been coded independently by the second rater.

The intercoder reliability for all three dyads is between 68% and 83%. As a result of this method, MAXqda can detect if the coded segments of both documents rated by rater A are equal in size and whether the same code is assigned to both documents. The content of two codes must be at least 70% identical in order to meet the requirements of this sub-study. Without the codes given above, the intercoder reliability for Dyad 8 (the topic of this paper) is 83 percent; with these codes, it is 91 percent. This article focuses on Dyad 8.

Each interview was given its own evaluation, without reference to the others (Sturm & Philipp, 2013a, 2013b). A hypothetical situation in interview 2's part B was analysed using the cognitive activities as well as knowledge of metacognitive processes (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 writings created by the participants were not coded; rather, they were evaluated holistically on a large scale. Certain aspects such as the piece's literary genre fit were also taken into consideration throughout the review process.

Each participant's recorded and written replies as well as the skills and writing expertise revealed in follow-up individual interviews were included in the analysis. Figure 2 depicts the method that was used:

The collaborative writing process was used as a starting point for the data study. 2. The code was used to create a summary of the coded writing process, as described in the preceding section. The coding procedure was supplemented by the recording of questions or remarks in memo form. Comments and concerns were made about the lack of proof of writing skills in the broadest sense. In this stage of the writing process, for example, why is it that the writers alternate writing? Talking about drawing but not really creating one is a waste of time.

As a follow-up to the first stage, data and texts from Part A of the interviews were used to reconstruct the previously coded writing processes. During this procedure, it was required to locate the relevant passages in both the interview and the text. As a result, elements of the interviews that directly address difficulties related to observations made throughout the writing process were uncovered and documented, too.

Comparable to theirs is the approach devised by the Kaplan, Lichtinger and Margulis group (2011). For Kelle (2007, p. 57), this form of triangulation doesn't validate anything; rather, it's an aid to understanding, clarifying, and explaining the extent of a problem or topic.

MAXqda is able to connect data from several sources. No further coding was done for paragraphs that were connected to an interview segment (see Figure 2), as was the case here. These connections are become clearer and more accessible via this approach. MAXqda does not allow the estimate of intercoder reliability in the case of these linkages.

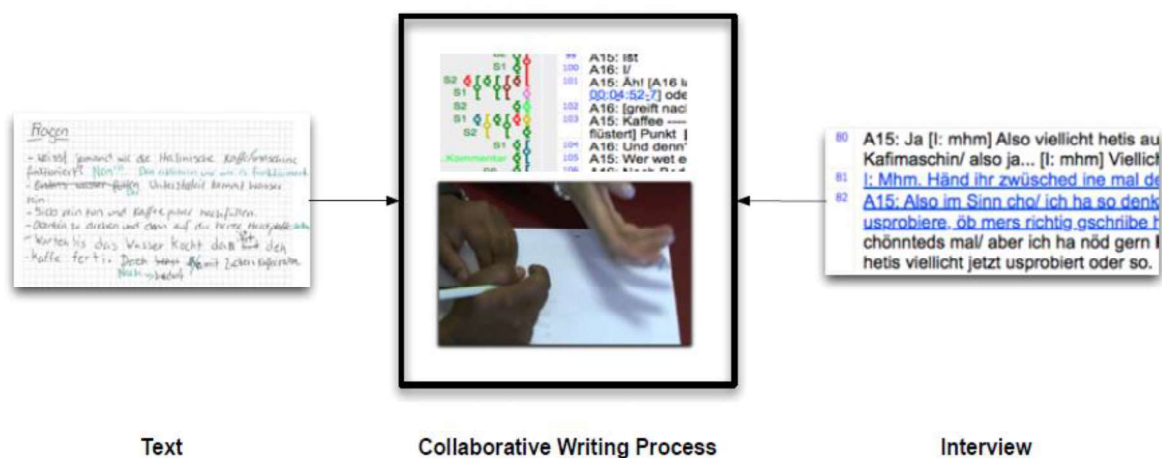


Figure 2: Complementary Triangulation of the Different Datasets.

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

A detailed description of Dyad 8 will be provided to show how the observation of collaborative writing, combined with a structured individual interview and the text written by the participants, can be used to gain valuable insights into the writing process and knowledge of struggling adult writers, as well as to provide insights into the participants' writing knowledge.

The bulk of dyads may be compared to Dyad 8. For both writing assignments, save in a few situations, the writing process was primarily focused on the transfer of knowledge. On top of all of that, the duo talked to one another. Finally, both authors completed their work using the reactive writing approach. Dyad 6 and 12 were the only pairs where the writing process was knowledge changing; and in just one instance (Task 1), was the writing process parallel (i.e.

participant A wrote a manual, participant B made a drawing to go with it) rather than reactive (i.e. participant A wrote the manual, participant B created a drawing to go with it).

At the time of the study, Dyad 8 was made up of two women (see Appendix A for their writing fluency materials).

A frequent attendee of the literacy course for the past four years, Helen is 35 years old. Born and raised in Switzerland, she became fluent in Swiss German as a youngster. It was obligatory schooling that she completed, which was her greatest degree of education. For a total of nine years, all children in Switzerland are required to attend school. At the time, she was employed as a restaurant assistant.

As a second-grader, she could only produce 3.67 accurate sentences per minute in her reading comprehension; in addition, her writing skills were severely hampered (48 syllables in 3 min., 79 percent correct syllables, and 25 percent correct word sequences).

Lucy, a 23-year-old participant in the literacy programme, had been attending for two years. While her native language was Romanian, her father taught her Swiss German, which she was able to speak fluently. Her apprenticeship in viticulture had paid off, and she was now working in the sector.

As a fourth-grader, she could read at the rate of 8 sentences per minute, but her writing skills were superior to those of Helen (78 syllables in 3 min., 100 percent correct syllables, and 68 percent correct word sequences).

For Writing Task 1, Helen and Lucy produced a high-level assessment of the text they submitted, as well as a high-level summary of the writing process they utilised. Task 2's writing requirements are summarised in Appendix C for your convenience.) There are detailed discussions of both writing operations' codings in Section 5.2 of this document. 5.3 and 5.4 give a comprehensive examination of two components related to Task 1 writing, in conjunction with the text and interview, respectively.

As a first impression, here are some key points to keep in mind:

Task 1 was completed by Helen and Lucy in around 9 minutes (7 min. for phase one plus, after a short break, 02:40 for phase two). They had a handbook with 43 words at the end of the first phase; the second phase produced a manual with 51 words. It took Dyad 8 the least

amount of time (81 minutes was completed by Dyad 15) to accomplish Task 1, but their text was not the shortest (Dyad 16 did it in the shortest amount of time with the shortest text of 22 words); Dyad 7 finished it with the largest text of 163 words. Every pair of partners worked together to create an instruction manual that met the guidelines set out by the writing assignment. Only one Dyad, 15, wrote a tale instead of an instruction manual. Task 2 took Helen and Lucy a bit longer, roughly 17 minutes. In its ultimate form, their letter included 68 words. Again, they were the ones that used up the least time. When Lucy was writing, Dyad 8 was able to stand out from the rest of the dyads because they were able to write more fluently. In contrast to the dialogues of other paired characters in the novel, Helen and Lucy rarely discussed word choice or spelling (for further detail, see section 5.2).

The next section goes into additional detail about Task 1. Table 7 summarises the writing process and relates to the portion of the text that was being drafted at the time of the summary's development (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.	– Firstly fill water 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 si-sis 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".	At reiqu Required din

Table 7 illustrates the process of passing on information through writing. Writing was the participants' first step, and they proceeded from there. Because they didn't address their notions in connection to the purpose of their work, which was implicitly stated in the first comma, their scope was even more restricted. Notable is the fact that, following the first part of phase 1, they changed writing responsibilities twice in a short amount of time.

In respect to the handbook, the following features stand out: Participant familiarity with the genre's function may be gauged based on their response to the first survey question. In spite of the fact that it provides all of the fundamentals of the procedure, the book does not give any specifics (for example, how much coffee powder or water should be used) or other information that readers could find interesting (e.g. the time it takes until the coffee is ready).

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.
Phase 2 after a short break		
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 explen 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.	

5.2 The Codings and First Questions

It is shown in Table 8 in comparison to other pairs, as well as the complete group of pairs during the time of the study (T1). When it comes to writing style, informational content, and total length, Dyad 5 and Dyad 8 were surprisingly comparable in terms of their knowledge-telling procedures. In contrast, Dyad 12's writing process is a famous example of writing that transforms knowledge. It was a collaborative effort, with each member of the dyad taking part in the brainstorming process and discussing the usual qualities of the manual genre. There were several useful hints in their handbook, which was very comprehensive. In addition to the written information, an image was supplied. The amount of codings in Dyad 8 was smaller than in Dyads 5 and 12 because the writing process was shorter in Dyad 8. More than half of Dyad 8's time was spent on transcription, revision, revising, and reading through. When Dyad 8 was compared to all other dyads at t1, it produced ideas at a rate that was around two times higher. Despite the fact that Dyad 8 completed nearly five times fewer conceptualising tasks than Dyad 7, it performed around one-third less transcribing operations. Because Dyad 8 wrote so quickly, this may be one probable explanation. Lucy and Helen were able to convert their notions into English with little reprocessing in Dyad 8, indicating a

distinct type of functional automaticity in this case. In the formulation, which uses a low level of coding characteristic of knowledge transfer, this is clearly demonstrated (McCutchen, 1988, S. 312). In contrast, Dyad 12 focused on the development of ideas, how to more accurately explain the components of the coffee machine, and how to approach the reader in the essay, respectively. When putting up activities for Dyad 5, the most challenging element was coming up with the vocabulary needed.

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

<i>Cognitive Activities</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	
Total	286	100	317	100	100	145	100	

Because Dyad 8 was previously familiar with the coffee machine, they didn't need as much clarification as Dyad 5, 12, or All Dyads. In addition, editing efforts in Dyad 8 were noticeably higher, maybe as a result of Lucy pointing out spelling errors to Helen (this is discussed in section 5.3, Excerpt 5). Finally, out of all the pairs, Dyad 8 received the greatest feedback on its strategy. In section 5.6, we'll take a closer look at how this is done.)

As shown in Table 8, the importance of collaborative writing assistance for all dyads is clear, but it is especially critical for those who struggle to write. Participant P9 dictated often in Dyad 5 so that P10 could concentrate on transcribing, for example. Dyad 12 also debated who should write more frequently, as seen in Table 8 during Task 1, and their task assignments changed multiple times. In the majority of pairs, participants took turns writing, either during one of the two writing tasks or throughout both. For example, participant A wrote during Task 1 and participant B wrote during Task 2, and so on and so forth. Participants A and B were the only two people in Dyad 7 who completed both writing assignments without interruption. The fact that Dyad 7 participant B's basic writing abilities were so lacking is one probable explanation (10 percent correct word sequences).

Unlike Table 8, Table 9 focuses on the specific activities that each member of a dyad participated in (see section 4.5). The total number of activities done by both participants may be more than the number of codes in a "collaborative" coherent cognitive activity since people may engage in an activity, such as producing ideas, many times (for example background knowledge or generating ideas). In a "collaborative" coherent cognitive activity, one participant's efforts may surpass the total number of codes (background knowledge and evaluating).

In both writing projects, Helen and Lucy had a similar impact on the outcome. In contrast, Lucy was more active in transcribing and revision implementation, whereas Helen was more involved in concept generation and evaluation. Although Helen had a far more difficult time with writing fundamentals than Lucy, she looked to be more active in higher-level processes throughout Task 1. The higher-level procedures were less of an issue for Helen in Task 2, maybe as a result of her familiarity with manuals rather than letters (see also section 5.4).

As shown in Table 9, in Task 2, Helen and Lucy spent more time discussing and analysing their written work than on lower-level tasks like brainstorming. Due to Task 2's greater difficulty, the quantity of higher-order actions reflects the task requirements rather than a gain in writing abilities throughout the three months between tasks 1 and 2.

It is not clear from Table 9 who initiated which action. Dig through the writing process data to find out who started what. Many times, it was Helen who came up with the ideas and Lucy

who documented them. This was immediately evident from the beginning of writing Task 1: the following excerpt comes from the transcription of the video recording:

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

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

<i>Cognitive Activities</i>	<i>Number of Codes</i>	Helen		Lucy	
		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	
Total	145 / 164	108 / 96	13 / 18	109 / 101	36 / 50
Total Words Text	51 / 68				
Task 1 / 2					

Helen: Well, first and foremost, did/did anyone see the coffee maker? (00:00:22-8). [both eyes are on the coffee utensils] Yes, yes, yes, yes, yes, yes, yes, yes, yes, yes, yes, yes, yes, yes, yes, yes, yes, yes [They're both staring at the coffee machine] — Oh, and we may also question, did someone also write, does anyone know how to make coff/ how to make coffee with this [points to the coffee maker]? - Do you have a coffee maker?

Lucy: [small counterclockwise spin of the notebook] Well. He, he, he, he, he, he, he, he, he, [simultaneously writes: Questions]

Helen's interpretation of the writing activity as a query in need of a response is first indicative of a common feature of kids with learning or writing challenges (Graham, 1990) (See section 5.4 for further information on this in relation to the interview data.) If Lucy had an idea, it was usually sparked by a passage she had jotted down:

D8, Task 1, lines 40–42) Excerpt 2: Generating Ideas Lucy: [slowly writes and speaks: strainer; 00:02:26-0] - As well as restocking coffee powder. -Lucy: [reading through] put strainer in [writes and speaks slowly: and refill coffee powder]. Helen: Th/ yeah -Lucy: [reading through] put strainer in [writes and speaks slowly: and refill coffee powder].

In general, distributions like these show that diverse responsibilities are played by participants in collaborative writing. Regardless of who is transcribing, the main chronology is more or less: producing ideas – transcribing – generating ideas in both situations.

This role assignment could be attributed to the collaborative writing context and the fact that Dyad 8 test subjects use the reactive writing method.

9 This implies that they must agree on who will transcribe. However, as Excerpt 2 demonstrates (see also Dyad 12 in Table 8), this does not imply that when B is transcribing, A always develops ideas or commands. Helen and Lucy's role distribution can also be traced back to their disparities in writing abilities. Starting with the questions, Why wasn't Helen transcribing (section 5.3), a more thorough data analysis is required. Why, in section 5.4, does she view the writing task as a question? The next two sections focus on Helen, how she solves a writing task, and what writing expertise she possesses in order to answer these questions. This focus on Helen promises to be especially useful in terms of adding to our knowledge of struggling adult writers, as she struggles more with writing than Lucy.

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

Helen responded to the interviewer's question on why Lucy started writing by saying that Lucy is a better writer than she is. Excerpt 3 demonstrates how she specifies:

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

I'm assuming she can think and write. And it's a bit tough for me to clarify something before writing.

As a result, Helen refers to herself as the thinker and Lucy as the writer multiple times throughout the discussion. Furthermore, she says that during the course, she and Lucy have frequently completed grammar assignments together – but never wrote collaboratively – and have always proceeded in the same manner.

Helen brought up the subject of thinking and writing several times in various contexts. How she refers to the videographed collaborative writing process and other writing experiences is crucial from a methodological standpoint. Excerpt 4 depicts Helen's description of the start of their writing process and her assessment of the writing process as a whole, only to add an experience that extends beyond the writing process. The word "always" alludes to the latter:

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

So, first and foremost, we inquired as to who knows how the coffee maker operates. Then – yep, we initially discovered it, yes/well, I thought it was very simple. Except for the one about writing. Thoughts constantly come faster than I can write them down. [...] The speed with which we think is faster than the speed with which we move our hands. I've already forgotten about it by the time I write this.

Helen did not choose to transcribe throughout the collaborative writing process (Task 1), but Lucy pushed her to do so. Helen couldn't remember which idea to jot down when she finally took over the pen, despite the fact that she had just suggested one herself moments before. Of course, external factors such as task coordination or her contact with Lucy can be blamed for her difficulties.

Helen's struggle with the interplay between thinking and writing was evident during the collaborative writing process (Task 1). Helen was a slow writer who frequently had to rectify her mistakes (Excerpt 5). Helen made more spelling and grammatical errors the more she wrote (this is also borne out by the results of the writing fluency test t1, cf. Appendix A). Lucy took over transcribing when she began to write incomprehensibly, such as "Arreiqu" instead of "As necessary."

Helen is writing and revising (D8, Task 1, lines 97–101) Excerpt 5: Helen is writing and revising (D8, Task 1, lines 97–101)

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

Then I/ sist [points to the word'sit'] Helen: Isn't it?

Lucy: I/Helen: Way to go! [Lucy and Helen both laugh] - The first. [Is] [crosses out sit and replaces it with isit; 00:04:49-8] No, I'm misspelling it once more. - It's [crosses out isit and replaces it with ist; 00:04:52-7] or it is. [is] [...]

The same may be said for Task 2: Lucy began writing, and Helen followed suit early in the fourth minute, but this time on her own initiative (maybe this can be attributed to the fact that she had already developed some familiarity with this activity during Task 1). Helen became fatigued, which revealed itself in spelling problems, and Lucy took over writing once more. Helen approached the subject of the terms thinking and writing in the retrospective phase of the interview concerning this writing exercise in the same way she did for Task 1.

Helen was asked what she would do if she understood what she wanted to write about but didn't know how to put it into words during the part of the interview where the participants were encouraged to envision writing a story or recounting an experience that they linked to a recipe (section 4.3). She desired a role allocation comparable to that observed in the collaborative writing process, as shown in Excerpt 6:

Writing Knowledge - Thinking and Writing (Excerpt 6) (Interview 2, D8, P15, line 174)
Then I'll ask: Could you just assist me for a few minutes? I'll tell you what to write, and you'll do it for me. Helen stated that she hadn't used this method in a long time when the interviewer delved a little deeper. From the interview, it was unclear to what extent this is a method she employs frequently. She did, however, discuss how her sisters and mother assist her in writing: they first ask her what she wants to write about and why she wants to write it (Excerpt 7). Excerpt 7 also represents the role assignment within the collaborative writing process in several ways:

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

[...] First, think, and then tell us what you want us to write [...]. To summarise, it is reasonable to suppose that Helen's cognitive load is not significantly increased by reactive writing in the experimental circumstance when compared to when she writes alone or with the assistance of persons other than Lucy. Helen's writing fluency text at t1 revealed comparable challenges with accuracy, as previously stated. She also claimed that she had gone through a similar surgery on several other occasions.

The topic of whether Helen's writing process was hampered by other basic cognitive skills in Tasks 1 and 2 cannot be answered in this study. Helen did mention a vague remembrance of a test she had taken in school during Interview 1. (Interview 1, D8, P15, line 252). She saw her failure on the test as a reason why she wouldn't be able to pursue vocational training.

Zoom 2: "Then We Explain How It Works": Helen's Interpretation of the Writing Assignment

Helen was the one who came up with the idea of starting the manual with the question: "Does anyone know how the Italian coffee maker operates?". After a short break, as she was reviewing the text, she realised that she, too, wanted to know the answer to this question. Then Helen requested that Lucy include the words "Then we explain how it works" after she began by simply writing "No!" Not only did Helen interpret the writing work as a question, but she also phrased the opening of the text itself as a question, as shown in Excerpt 8: "Not only did Helen interpret the writing task as a question, but she even phrases the start of the book itself as a question."

Excerpt 8: Understanding the Genre (Interview 1, D8, P15, line 32 ff.)

[...] Helen: [inaudible] So, one explains / explains - and the question was, how to explain this - and then we had/have stopped and moved on to the next step in the process. Nevertheless, we should have responded yes and then asked what you thought... correct? In fact, the entire paragraph can be read as a question because f was truly a question in the first place. [I say: mhm] Text of the question And then we / I realised that something wasn't quite right here. I believe there is some sort of void (00:05:00-4) where something is lacking. As previously noted, the coffee maker was made available to all dyads during their writing work, allowing them to rely less on prior knowledge of the subject matter. Helen and Lucy, on the other hand, did not utilise it to explain their topic knowledge, and they even avoided utilising it

when they were confused of where the water needed to be poured in. Excerpt 9 makes Helen's reasoning for her actions crystal clear:

Excerpt 9: Understanding the Genre (Interview 1, D8, P15, line 82)

The minute it got down to min/ I thought, either they [= the researchers] do it now, which I confirmed with Lucy, or they make coffee because they are trying to see whether we put it down correctly, which is what I assumed. Yes.

However, even though Helen perceived the writing task and the introduction of the book as a question, she nevertheless adhered to the writing aim of the text, which was to write a standard manual in some ways. The easiest way to determine the effectiveness of a guidebook is to follow it step by step. Despite the fact that they are written in an atypical manner, Excerpts 8 and 9 might be taken as a demonstration of genre expertise. When asked if she had ever written a handbook before, Helen reacted by alluding to an oral circumstance that she had encountered previously (Excerpt 10). In the same way, her explanation of that oral circumstance fulfilled the primary job of a guide. She also noted that topic expertise is required in order to be able to produce a handbook, whether it is in oral or written form, which she did not elaborate on.

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

In any case, my father is having some technical troubles with his cell phone, and he comes to me and asks me how it works, after which I demonstrate it. So, to sum it up, you always have to/I can do the same thing as well. Because I am familiar with how a mobile phone operates.

Her response to a question on what she would recommend to someone who was faced with a similar writing duty included an indirect reference to the "testing" of their material (Excerpt 11). This means that she did not place too much emphasis on form or mechanics at the expense of higher order aspects, as might be expected of a young, inexperienced author (Graham, Schwartz, & MacArthur, 1993). Although she demonstrated some knowledge of the genre, she did so in a limited way because she was unfamiliar with the characteristics of a written handbook.

Excerpt 11: The Process of Evaluating (Interview 1, D8, P15, line 102 ff.)

As far as I'm concerned, sure, please describe how you would go about doing it, and if it still doesn't work, we can attempt it together. - Alternatively, if I/If I read this through and think, "Well, no one understands that, start by reading it for yourself," I would say the following: "Yes, first and foremost, read it for yourself, because I would not comprehend this."

Following up with Helen on Task 2, she stated that the "testing" of texts was no longer a topic of discussion. Affirming that the letter she and Lucy had written had been "excellent," Helen responded affirmatively: "mmh, good" (Interview 2, D8, P15, line 90). However, when the interviewer inquired as to whether or not the letter would persuade the buyer, she exhibited substantial scepticism. She was particularly concerned about whether the consumer would accept a 5 percent reduction as a sufficient discount (Interview 2, D8, P15, line 92). She was also dissatisfied with the letter during the collaborative writing process, but she was unable to express her dissatisfaction verbally ("Something I do not like," D8, Task 2, line 119).

In keeping with their failure to test whether their text was good or not, Helen and Lucy failed to set a writing goal for their letter in Work 2, despite the fact that they completed a more thorough analysis of the task (Excerpt 12). It is interesting to note that both Task 2 and Task 1 were viewed as a manner of explanation.

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

Helen: We've received an email from our supervisor, and we must respond in writing. Because of this [points to the email]...

Lucy: Oh, we have [also points to the email] to explain that now, don't we, Lucy? Helen: That's correct.

It was difficult for Helen to complete Task 2 because she did not have a model to replicate (Interview 2, D8, P15, lines 64–68). During the interview, she did not demonstrate any extra expertise of the type of an argumentative letter (Excerpt 13).

Excerpt 13: Understanding the Genre (Interview 2, D8, P15, line 100) Interviewer: What, in your opinion, makes a good letter?

Helen: Well, just make sure the date is correct and that everything is in order. And, yeah, with as few faults as possible.

Helen recalled that she had completed a work identical to this one when attending "school," a phrase she frequently used to refer to the literacy course. In discussing that "school" assignment, she restricted herself, as she does in Excerpt 13, to the surface features of letters, such as the date, where to write the addressee and sender, and then the text itself, as she does in Excerpt 14. (Interview 2, D8, P15, line 76).

Therefore, the beginning point for the analysis was an occurrence that was initially seen during the collaborative writing process, and the knowledge of which was reinforced by the interview data, as previously stated (in sections 5.3 and 5.4). However, in the sections that follow (sections 5.5 and 5.6), data is gathered from follow-up interviews about features of the collaborative writing process that cannot be clearly linked to the collaborative writing process.

Differences in writing behaviour and gaps in interviewee answers - Methodological questions remain unanswered at 5.5.

Despite the fact that Dyad 8 writes with only a few aspects of planning, the foregoing study reveals that knowledge telling is the main technique while writing. The investigation of the writing process as a whole, when seen from this perspective, does not reveal anything surprising. However, when taken along with the interviews that followed Tasks 1 and 2, it becomes clear that Helen, in particular, possesses more writing knowledge (at least in terms of the genre of manuals as opposed to argumentative letters) than might be expected of a struggling writer. It would be possible to describe and comprehend some of the events in the writing process much more fully and effectively if they were linked to the interviews and the manuscripts. These are concerned with gaps in the participants' abilities to respond to some of the interviewers' questions, as well as the subject of whether these writers follow a different writing process if they write on their own rather than in groups of two.

Observations made during the current study indicated that participants can sometimes forget specific events that occurred during the collaborative writing process, which was a source of concern in the previous study. This is consistent with similar findings made by Janssen et al. (1996) in the case of individual writing. This is especially true for Helen, who, for example,

could not recall why she had failed to take note of Lucy's proposal during the second work, when Lucy had advised that they read the writing assignment a second time (Excerpt 14). Furthermore, Helen was only able to provide a cursory overview of the writing process for both Task 1 and Task 2. (see Excerpt 4 for Writing Task 1).

Excerpt 14: A chasm (Interview 2, D8, P15, line 51 ff.)

Interviewer: You'd already made significant strides forward with your letter. Lucy then had the impression that she wanted to hear the assignments again, particularly the one involving Mr Fässler on the phone. You were a little unsure about it, to be honest. What was the reason for this?

Helen: I believe so, but I'm not sure why. [laughing]

The same was true for Lucy, who could not recall, for example, why there had been a change in the role allocation throughout the second writing phase, as illustrated in Excerpt 15:

Excerpt 15: A chasm (Interview 2, D8, P16, line 42f.)

[...] The interviewer: Remember the rationale for the second shift in who is writing? Do you have a good memory? Lucy: It does happen. I'm not sure why this is happening. I / I am so äh / I do not know how to express I do not know, it just occurs. I / I am so äh / So, with a bit of writing, wham, bam, here it is.

Although Helen was sometimes extremely capable of providing information on the collaborative writing process and of using that information as a springboard to discuss other similar writing experiences, she had significant difficulty with questions that went beyond the writing task they had previously completed (Excerpt 16). She thought both texts were quite good, but she didn't give any explanations for why she thought that. She was also perplexed as to why she and her writing partner Lucy did not include a drawing to accompany the manual, despite the fact that she had previously stated that drawings were an important component of manuals in other places (Excerpt 17).

abridged version of excerpt 16: The Meaning and Importance of Writing (Interview 2, D8, P15, lines 143–146) Interviewer: What does the act of writing imply for you?

Helen: — I'm not sure what to say. — In a word, yes. Interviewer: What level of importance do you place on writing? Helen: It's not that significant.

The following is an excerpt from Excerpt 17: Self-Evaluation and Genre Knowledge (Interview 1, D8, P15, lines 91–98). Interviewer: What are your thoughts, and how did you fare on the task?

Helen: That's great.

Interviewer: And what makes you think you're good?

Helen: That's correct. — As a result of / - Yes, I just thought that was a good piece of writing. I'm not sure why this is happening. [laughing] Interviewer: A decent manual should include the following elements in your opinion.

Helen: And an excellent example of this would be a user manual that also includes a picture next to it so that one can see how it works.

Helen demonstrated just rudimentary strategic knowledge in response to the hypothetical situation in Part B of the second interview (Excerpt 18). She was unable to provide an actual technique that she would employ when faced with challenges in coming up with ideas when questioned about how she typically dealt with such difficulties. Instead, she responded by saying she would contact for assistance. She also provided methods for other processes, such as proposing and evaluating, that were comparable to hers. The fact that seeking assistance with writing was a very common writing style during this section of the interview is noteworthy. Helen eventually came to the conclusion that a good writer is also someone who can assist others in their writing ("And then I can approach her and ask her for aid," Interview 2, D8, P15, line 112).

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

Interviewer: If you are stuck for ideas on what to write about, what should you do? So, what do you do in that case?

Helen: Yes, if there is someone present, I can approach them and ask them. If I were to write about the course instructor, for example, what could I possible write? [...]

Interviewer: Let's suppose you already know what you want to write about. It is possible that you have a concept, but you are having difficulty putting it on writing. So, what do you do in that case?

Helen: Then I'm going to ask: Hey, could you please lend a hand for a moment? I may provide you with prompts, and you can write on my behalf.

In order to better understand the distinctions between solo and collaborative writing, participants were questioned during the interviews if they would have approached the writing task in the same way if they had been working alone. Helen said that if she had been writing alone, she would have proceeded in a different manner since she would have lacked patience (Excerpt 19). In particular, she stated that if she became aware that something was missing or inaccurate, she would cross out the entire sentence and start over from the beginning. This type of conduct could not be noticed during the collaborative writing process since Lucy took over the writing when Helen began to experience difficulty in the process.

The following is an excerpt from Excerpt 19: Another Solving Process (Interview 1, D8, P15, lines 43–52).

Interviewer: If you were forced to complete this assignment on your own, would you proceed in the same manner or would you do something different?

Helen: Then I'd more - I'd notice myself immediately noticing that something was missing. Although I have some difficulties writing, I have to stop and think about how I could write this and then - yes, it is not correct - and then I cross it out because I don't have much patience [laughs]. Yes.

Interviewer: What does it mean to you to be unable to wait for anything?

Helen: Yes, I'm willing to give up quickly. Ignoring the fact that I don't know the word results in the word being omitted, and later on, the text becomes/ f/ is no longer entirely correct. [...]

Interviewer: And then you decide whether to leave it as is or... Helen: Either that, or I'll cross everything out and start over.

Interviewer: Do you want me to use the entire text or just a single word? Helen: I'm talking about the entire text.

Lucy, like many others, admitted that she would have written differently if she had been working on her own project. She stated specifically that she would have written at her own pace if she had the opportunity (Interview 1, D8, P16, line 38). In fact, she stated a number of times that she was simply too fast for Helen to keep up with.

Both cases demonstrate that the collaborative environment has an impact on the writing behaviour of participants. In Helen's case, this was especially true to a significant extent. It appeared that the writing process was influenced primarily by the writers' relative abilities, which appeared to be the case. It is reasonable to assume that writers with lower abilities impose a greater burden on the writing process than those with higher abilities. Despite this, the setting as a whole provides valuable insights into the individual writing processes, which is a clear strength of the approach that is being presented in this chapter.

5.6 Impact of the Experimental Situation

It is important to remember that the approach provided here is an experimental circumstance, so proceed with caution. As previously stated in Section 2, adult struggling writers do not prefer to be viewed directly or recorded while they are writing because they feel embarrassed about their work (Sturm, 2010). As a result, it should be assumed that the inclusion of these aspects will have an impact on the writing process.

Both members of Dyad 8 were clearly aware of the experimental circumstance in which they were placed. In Task 1, as Lucy snatched the pen out of Helen's hand, Helen murmured, "They see everything that we write" (D8, Task 1, line 115). " Instead of maintaining a disguised awareness throughout the writing process, Lucy communicated directly with the camera, for example, by raising her beverage and toasting towards the camera. During Task 2, Lucy, in particular, made fun of the (false) customer's name (Mr. Frässler from fressen, which means to eat, rather than Mr. Fässler), which she repeated on multiple occasions. Such occurrences were likewise tagged as "comments" in the database.

A further in-depth examination of all comments reveals that, as shown in Table 3, the vast majority of dyad members remarked on their own writing in most circumstances. To put it another way, they examined and assessed their writing process, as well as making judgments on their writing abilities. The majority of the time, comments are expressed in a neutral manner. However, it appears that especially dyad members with very poor writing skills reacted in the same way Helen did, namely, by feeling embarrassed about their poor spelling skills or their rough handwriting (see Figure 1). (e.g. Dyad 4 or Dyad 5).

Following their interviews, both members of Dyad 8 appeared to be fatigued. In the end of the interview following the second writing exercise (Excerpt 20), Lucy openly stated that she was fine with it, but Helen simply responded that she had no problem with it.

Excerpt 20: The Experiment as a Repetitive Situation (Interview 2, D8, P16, lines 402–405).

Lastly, how was your interview experience? Interviewer: what do you think? Lucy: It's been exhausting. No [laughs out loud].

Interviewer: Can you tell me what was exhausting?

Lucy: No, one has to think about it. I mean, I'm slowly but steadily becoming exhausted. It had been a long day.

6. Discussion

The purpose of this study was to determine how struggling adult writers complete a writing task and what writing knowledge they had. Also investigated was the methodological question, specifically whether the multi-method approach used here (a combination of video recordings with interviews and textual analyses) was capable of capturing the answers to these two questions and whether it was feasible to conduct such an investigation.

In reality, the findings demonstrate that the proposed combination of approaches, when applied to the analysis of collaborative writing, generates a plethora of useful information. Working with struggling adult writers through collaborative writing can be a fruitful instrument and an excellent beginning point for a conversation about their writing technique, themselves as authors, and their conception of what constitutes good writing. It provides struggling adult writers with a real writing experience that they can call on frequently in interviews and that they can connect with other personal writing experiences, which is

extremely valuable. At the same time, retrospective interviews can help researchers gain a better understanding of collaborative writing processes, even if participants are limited in their ability to reconstruct cognitive processes or describe the chronology in detail, as was the case with Levy et al. (1996).

This multi-method approach has also been proved to be effective for acquiring insights into the individual writing talents of struggling adult authors, as has been demonstrated. By contributing to existing research on fundamental writing skills such as spelling, the approach taken here advances our understanding of how individuals in this specific group of struggling writers deal with higher order writing skills such as genre knowledge, planning, and evaluating the effectiveness of texts. The two zoom-ins on Helen, as well as the other results about her in Section 5, provided compelling evidence of this. The fine-grained picture that emerged from the data also indicated that adult struggling authors share several characteristics with their younger counterparts who are also suffering (Dockrell, 2009; Graham, Schwartz, & MacArthur, 1993; Troia, 2006). When Helen is depicted as a struggling adult writer, she exhibits common characteristics such as inadequately developed fundamental writing skills, which have a significant impact on the writing process. Furthermore, as an illustration, her orientation in the writing process is local, which means that she does not tackle writing problems in relation to a writing aim or the work as a whole. This corresponds to the observation that she possesses just rudimentary strategic understanding.

Further details are provided on the features that distinguish struggling adult writers from their younger counterparts as a result of the research (Harris, Graham, Brindle, & Sandmel, 2009). Using Helen as an example, we can see an adult who understands herself well as a writer, in that she can pinpoint a fundamental obstacle in writing, such as the inability to think and write at the same time, with pinpoint accuracy. Furthermore, she views writing to be a communicative act, which is supported by the fact that she believes it is reasonable to test a written manual in relation to the reactions of readers. Most importantly, when it comes to manuals, she demonstrates an understanding of the genre, despite the fact that she relies largely on oral experience garnered from previous experiences. In the integration of three

data sources, namely the protocol of video observation, a written piece, and an interview, the features of young struggling writers that are atypical become obvious.

Despite these advantages, the current study nevertheless has certain disadvantages, which are as follows: In the first place, the sub-study is based on a limited sample of participants, and the results given are primarily drawn from a case study. Secondly, from the standpoint of methodological considerations, it should be remembered that the collaborative environment has an impact on the writing process. This is demonstrated by the fact that Helen does not cross out the entire manual, as she claims she would do if she were having spelling difficulties when writing on her own. This is not an option for her because her spouse is in charge of the transcription. While it is present, the collaborative context has a limited impact on participants' writing talents; it does not fully restructure them while they are present. Even when paired with a partner who possesses superior writing abilities, such as Lucy, Helen fails to write fluently and precisely, nor does she take the initiative to initiate activities such as setting a writing objective.

It is possible that data from different sources (watching of the collaborative writing process, follow-up interviews, and written texts) will not always fit together in a straightforward manner when using a multi-method approach, as demonstrated in this study. Some of the events that occurred throughout the collaborative writing process can be traced back to the original incident in follow-up interviews as well as in the written texts. However, extreme caution should be exercised when interpreting such texts. In order to avoid jumping to conclusions too quickly, these traces should always be studied in conjunction with events that occurred during the writing process or statements made during interviews that provide alternative explanations. This is required because participants' approaches to collaborative writing can differ from their approaches to writing in a setting where they are writing alone.

Future studies could also look into how struggling adult writers cope when they are forced to complete a writing activity on their own rather than with a group of others. More research is needed, in particular, to determine which wasteful or ineffective tactics they adopt to achieve their goals. It is also necessary to establish methods for systematising the analyses of all three data sources – the protocol of the video observation, the written texts, and the follow-up interviews – in order to make conclusions more easily transferable between cases.

It is necessary to point out the following points from the standpoint of instruction. Because the literacy courses did not result in a statistically significant improvement in writing skills within three months (Sturm & Philipp, 2013b), teachers should learn more about the writing processes and writing knowledge of their participants, as well as about effective writing instruction that does result in a statistically significant improvement in writing skills. It is possible that educators will require further training to better appreciate the characteristics and benefits of collaborative writing. Consider Helen as an example, and applying the generalisation to all participants: teachers must address specific weaknesses, particularly in genre knowledge and writing skills, in order to ensure success. The teachers must go beyond the typical product-focused writing teaching to achieve this goal. Instead, evidence-based writing practises, such as clearly teaching the writing process and modelling writing methods, must be used in order for writing skills to grow (MacArthur & Lembo, 2009). More research is needed to further strengthen this evidence base, as well as the writing instruction that is based on it, by taking into account specific characteristics of struggling adult writers, such as their knowledge of themselves as writers and their oral literacy experiences, among other factors.

During interviews with 12 instructors in adult literacy courses (one of whom was Helen's teacher), it was discovered that they did not use collaborative writing in their instruction (Sturm & Lindauer, 2014). It is important for teachers to understand how different cooperation tactics effect on the development of writing abilities. For example, Helen's teacher indicated that she aids adult learners by taking on the role of thinker while the learners take on the role of transcriber, or vice versa. As for Helen, it is unclear to what extent her teacher's approach indirectly influenced the way she solved Tasks 1 and 2 in the sub-study and to what degree Helen had already cultivated this form of role allocation with her mother and sisters, as shown by the interviews. When it comes to this, case studies can be really beneficial. They can demonstrate to teachers how, rather than helping adult struggling writers improve their writing ability, certain instructional techniques encourage them to engage in unfavourable writing behaviour or use an inefficient strategy when writing.

Because the participants in this study expressed a preference for working together to complete the writing task, future research could evaluate whether or not collaborative writing

can help struggling adult writers improve their writing abilities. Additionally, teachers could employ collaborative writing in literacy courses to acquire insight into the approaches taken by (struggling) adult learners to gain insight into their own teaching methods.

Notes 1. There was no difference between dropouts and those who completed the course in terms of their reading and writing abilities, or in terms of their motivational features (Sturm & Philipp, 2013b).

2. The majority of dialects are spoken in the German-speaking region of Switzerland. Swiss High German is used in formal contexts, and in particular while drafting documents. The High German spoken in Switzerland is remarkably similar to the High German spoken in Germany.

3. Several participants commented during the course of the observed writing process that it would be far better not to return the phone call of a dissatisfied client.

4. In other instances, the written work and individual interview took nearly three hours to complete (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 previous to receiving this challenge, but they had done so largely locally, rather than in terms of a global representation of the text. Only Dyad 6 elected not to re-read their material for Job 1 because they had already spent a significant amount of time – around 75 minutes – on completing the writing task in its entirety. In the first phase, Dyad 16 came to an abrupt halt because they had only written five keywords, which they expanded with one more in the second phase.

6. Lowry et al. (2004) use supporting activities as a generic phrase for researching, socialising, talking, negotiating, coordinating, monitoring, rewarding, punishing and recording. Their assumption is that every supporting activity is included in a cooperative writing process, and the occurrence of supporting activities is dependent on the writing assignment.

7. The coding of speaker A or B and writer A or B is in some sense mechanical since the transcripts previously recorded which participant was speaking or writing.

8. The use of fictitious names.

9. Another collaborative writing method was identified in only one of the dyads studied. Dyad 16 decided on parallel writing, with one member drafting the manual and the other creating a picture of the coffee maker. The participants in Dyad 16 did very little negotiating.

To begin, did anyone see the coffee maker? Helen (00:00:22-8). Coffee utensils are all that is on my mind right now. "Yes" is the correct answer. "Yes" is the correct answer. "Yes" is the correct answer. Neither of them is looking away from the coffee machine. — Do you know how to make coffee with this [shows the coffee maker]? Oh, and one more thing: did anybody else write that? - Is there a coffee machine in the house?

Lucy: the notepad is rotated counter-clockwise Well. "He," "He," "He," "He," "He," "He,"
While concurrently writing "Questions," he continues to type.

Children with learning or writing difficulties often see tasks as questions that need answers, and Helen's interpretation is an example of this. In Graham's (1990) words: For more detail on this, see Section 5.4, which deals with the interview data. The most common source of inspiration for Lucy's thoughts was a sentence she had scribbled down:

D8, Task 1, lines 40–42) Extract 2: Creating New Concepts Lucy: [slowly writes and speaks: strainer; 00:02:26-0] Restocking coffee powder is also on the list of tasks. -Lucy: [reading through] Put the filter in [writing and speaking slowly: and replace the coffee powder]. - Helen: That's right. Put the strainer in and replace the coffee powder, Lucy says, as she reads.

Distributions like this illustrate that participants in collaborative writing have a wide range of roles to perform. Whoever is transcribing will follow a similar pattern: creating ideas, transcribing, and then generating additional ideas.

The collaborative writing environment and the adoption of the reactive writing style by Dyad 8 test participants may be to blame for this role assignment.

9 To be clear, they must decide on a transcriber before they can begin the process. While it is true that when B is transcribed, A is more likely to come up with new ideas or orders, this does not mean that this is the case all the time. Because of their differing writing talents, Helen and Lucy's roles can also be explained. It is necessary to do a more extensive study of the data to answer the question, "Why wasn't Helen transcribing?" (section 5.3). To what end

does she refer to the writing exercise as a question in section 5.4? Following that, we'll take a closer look at Helen, her approach to problem-solving and the specific writing skills she possesses. As Helen is more of a struggler than Lucy, this study promises to be a valuable addition to our understanding of struggling adult authors.

What Happened to Helen's Transcribing Skills? What's the reason Helen wasn't transcribing?

This is what Helen said to the interviewer when she was asked to explain why Lucy began to write. She illustrates this in the third excerpt:

Writing and Thinking, Third Excerpt (Interview 1, D8, P15, line 26)

My assumption is that she can think and write. In addition, it's difficult for me to make a point explicit before putting pen to paper.

Thus, Helen refers to herself as the thinker and Lucy as the writer many times during the conversation. In addition, she claims that she and Lucy have regularly worked on grammar tasks together during the course, but they have never written jointly and have always followed the same procedure.

Several times, Helen brought up the topic of thinking and writing. In terms of methodology, how she describes the videotaped collaborative writing and other writing events is critical. excerpt 4 shows how Helen began their writing process and how she views the writing process in general, only to add an event that goes beyond the writing process. As a nod to this, the term "always" is used.

(Author's emphasis): Interview 1, D8, P15, line 10ff. Interview 1, D8, P15, lines 10ff., emphasis added by the author)

First and foremost, we questioned about the coffee maker's operating procedure. And when we first found it, well, it was straightforward to me, too. However, there is one exception: writing. Despite my best efforts, I am unable to keep up with all of the ideas that come to my mind. [...] Faster than we can move our hands, we can move our thoughts. By the time I get down to write this, I've already completely forgotten about it.

Lucy persuaded Helen to transcribe throughout the collaborative writing process (Task 1). Although she had just given a new concept, Helen couldn't remember which one to write

down when she eventually took up the pen. Of course, her troubles might be attributed to external circumstances like poor work coordination or her close relationship with Lucy.

During the collaborative writing process, Helen's struggle with the interaction between thinking and writing was clear (Task 1). For some reason, Helen was always having to go back over her work and fix her faults (Excerpt 5). The more Helen wrote, the more mistakes she made in spelling and grammar (this is also borne out by the results of the writing fluency test t1, cf. Appendix A). When Lucy began writing incomprehensibly, such as "Arreiqu" instead of "As necessary." she took over transcription.

(D8, Task 1, lines 97–101) Helen is drafting and rewriting
Extracted from D8, Task 1, lines 97–101, Helen is now drafting and rewriting.

And so on]; and so forth; and so forth; and so on. In Helen's case, [00:04:39-4], If you're looking for the plural form of any of the above words, then you've come to the right place. [00:04:41-2] [sat den] To put it another way (sixth bullet point) [writes:

That is why [he points to the word] I / sit Helen: Isn't that the case?

A big congrats to both of you, Lucy and Helen. They both burst out laughing. Ahead of time:
- The first. Sit has been replaced with [crossed out sit and replaced by an isit] I'm sorry, but I think I've spelled it incorrectly again. - "It" (00:04:52-7) has been crossed out and replaced by "ist." Alternatively, it might be. [is] [...]

Lucy started writing in the fourth minute of Task 2, and Helen followed suit, but this time on her own (maybe this can be attributed to the fact that she had already developed some familiarity with this activity during Task 1). Lucy was forced to take over writing duties when Helen's exhaustion led to spelling errors. When it came to the phrases "thinking" and "writing," Helen used the same method she had for Task 1 when discussing this writing exercise in the interview's retrospective phase.

During the stage of the interview when participants were invited to envisage writing a story or describing an event tied to a recipe, Helen was asked what she would do if she knew what she wanted to write about but didn't know how to put it into words (section 4.3). As demonstrated in Excerpt 6, she sought a role distribution similar to that seen in the collaborative writing process:

Writing Skills - The Art and Science of Writing (Excerpt 6) (Line 174 of Interview 2, D8, P15) Let me know if you can help me out for a few minutes. You'll write for me, and I'll tell you what to write. When the interviewer dug a bit deeper, Helen admitted that she hadn't utilised this strategy in a long time. It wasn't obvious from the interview how often she uses this technique. She did, however, talk about how her sisters and mother aid her in writing: they first ask her what she wants to write about and why she wants to write it (Excerpt 7). Additionally, Excerpt 7 depicts the collaborative writing process's role assignment in numerous ways:

The 7th Excerpt: Writing and Thought (Interview 2, D8, P15, line 192)

[...] Think about what you want us to write, and then tell us. To summarise, it is acceptable to assume that Helen's cognitive load is not considerably raised by reactive writing in the experimental setting as compared to when she writes alone or with the aid of individuals other than Lucy.. As previously mentioned, Helen's t1 writing fluency text exhibited similar difficulties with accuracy. According to her, this was not the first time she had undergone a similar procedure.

It is not possible to determine if Helen's ability to complete Tasks 1 and 2 was limited by a lack of some fundamental cognitive abilities. During the first interview, Helen mentioned that she had taken a test in school that she vaguely remembered. D8, P15, line 252 of Interview 1 (D8) In her mind, failing the test meant she couldn't go on to pursue more education or training in the field of her choice.

This is Helen's take on the writing assignment: "Then We Explain How It Works"

Initially, Helen came up with the notion of asking, "Does anyone know how the Italian coffee maker operates?" to open the manual. Her need to know the answer to this question became clear to her after a little pause in reading the text. "Then we explain how it works" was Helen's request after Lucy had simply written "No!" As illustrated in Excerpt 8, Helen not only saw the writing as a question, but she also worded the text's introduction as a question: "Not only did Helen interpret the writing task as a question, but she even phrases the start of the book itself as a question."

Excerpt 8: Genre and Literary Criticism (Interview 1, D8, P15, line 32 ff.)

[...] Helen: [inaudible] Thank you. How to convey this was the question, and thus we had/have halted to go on the next phase in the process. No matter what happens, we should have said yes and then asked what you thought... correct? It is possible to view the entire paragraph as a question since f was a question in the first place. [I utter the word mhm] The question's wording We / I then realised that something wasn't quite right in this situation. Somewhere (00:05:00-4) something is missing, in my opinion. Coffee was made accessible to all dyads during their writing activity, so they may rely less on prior knowledge of the topic. Helen and Lucy, on the other hand, avoided using it when they were unsure of where to pour the water since they didn't think it was necessary to do so. Helen's motive for her conduct is clearly obvious in Excerpt 9, which is as follows:

Excerpt 9: Genre and Literary Criticism (Interview 1, D8, P15, line 82)

A few minutes later, I realised that they [=the researchers] either do it now or brew coffee to test if we set it down correctly, which I believed was the most likely scenario. Yes.

However, despite the fact that Helen viewed the writing work and the opening of the book as a question, she stayed true to the writing goal of the text, which was to produce a standard handbook. The best method to see if a manual is useful is to actually use it. Excerpts 8 and 9 may be construed as a show of genre competence despite their unusual style. Helen's response to being asked if she had ever written a manual alludes to an oral event she had previously experienced (Excerpt 10). A guide's fundamental role was also accomplished by her description of that spoken scenario. She also mentioned that a handbook can only be written or spoken if the author has a thorough understanding of the subject matter.

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

There is no denying that my father turns to me for help when he is having technical difficulties with his cell phone; I show the process to him. You must/I can do the same thing, therefore that's all there is to it! For the simple fact that I've used a cell phone before.

According to her, the most important piece of advice that she could give someone who was in a similar situation would be to make sure that you thoroughly test your stuff (Excerpt 11). To put it another way, she didn't put too much attention on the form or mechanics, as one might

anticipate from a novice author (Graham, Schwartz, & MacArthur, 1993). The fact that she had no idea what to expect from a printed manual meant that her understanding of the genre was restricted.

Excerpt 11: The Evaluation Process (Interview 1, D8, P15, line 102 ff.)

Let me know how you would go about it and if it doesn't work, we can do it together and see if that works. - It's possible to read this and think, "Well, no one understands that, start by reading it for yourself," and I'd answer, "Yes, first and foremost, read it for yourself, because I would not comprehend this." because I wouldn't be able to understand this myself.

"testing" was no longer a topic of debate following Helen's comments on Task 2. With an enthusiastic "excellent," Helen reacted to Lucy's praise of the letter she and Lucy had written, calling it "mmh, good" (Interview 2, D8, P15, line 90). She displayed some scepticism, though, when asked if the letter would persuade the buyer. For her, the question was whether a 5 percent discount would be acceptable to the customer (Interview 2, D8, P15, line 92). During the collaborative writing process, she was also unsatisfied with the letter, but she was unable to properly communicate her unhappiness ("Something I do not like," D8, Task 2, line 119).

Even though they performed a more in-depth study of the problem, Helen and Lucy failed to create writing goals for their letter in Work 2, in line with their failure to assess whether or not their text was any good or not (Excerpt 12). In both Task 2 and Task 1, the explanation was seen as the primary purpose of the task.

Lines 20–22 of D8 Task 2 (D8 Task 2). Explanation of Writing Task 2 (Extract 12)

Helen: Our supervisor has sent us an email, and we must reply to it in writing. As a result of [shows email]...

That's [also pointing to the email] something we'll have to explain to Lucy, isn't it? Helen: You're absolutely accurate.

Task 2 was a challenge for Helen since she lacked a model to follow (Interview 2, D8, P15, lines 64–68). She didn't show any more experience in writing an argumentative letter throughout the interview (Excerpt 13).

Understanding the Genre (Excerpt 13) (Interview 2, D8, P15, line 100) Interviewer: What do you think constitutes an excellent letter, in your view?

Helen: Just double-check that the time and date are right. And, of course, with the fewest potential errors.

At "school," Helen usually used to describe the literacy course, she remembered completing an assignment similar to this one. It's clear that she focused on the letter's outside characteristics, such the date and where to put "to" and "from," and subsequently on the content within, in her discussion of that "school" assignment. Interview 2 (D8, P15, line 76).

Since the collaborative writing process was the first point of reference for the study, the interview data bolstered this understanding, as previously indicated (in sections 5.3 and 5.4). After this step (sections 5.5 and 5.6), data is collected via follow-up interviews regarding aspects of the collaborative writing process that cannot be directly related to the collaborative writing process..

Methodological problems remain unsolved at the halfway point of the study 5.5.

In spite of Dyad 8's limited use of planning, the research presented here shows that conveying information is the primary method employed while writing. As a whole, the research of the writing process does not disclose anything unexpected. If you combine Tasks 1 and 2, you'll see that Helen has more writing expertise (at least when it comes to manuals as opposed to argumentative letters) than you'd anticipate from someone who is just starting out. Some of the events in the writing process might be described and understood much better if they were linked to the interviews and manuscripts. It's unclear whether or not these writers use a different writing approach while working alone as opposed to in groups of two, as several of their responses to interview questions were ambiguous.

It was shown that participants in the present study might forget particular events that occurred throughout the collaborative writing process, which was an issue in the prior study. Similar conclusions have been reached in the case of individual writing by Janssen et al. This is especially true for Helen, who, for example, was unable to remember why she had ignored Lucy's suggestion to read the writing assignment a second time during the second work

(Excerpt 14). For both Task 1 and Task 2, Helen could only give a superficial summary of the writing process. (For further information on Writing Task 1, see Excerpt 4).

An enormous chasm (Interview 2, D8, P15, line 51 ff.)

Interviewer: With your letter, you had already made tremendous progress. After then, Lucy gave the sense that she wanted to hear the tasks again, especially the one with Mr Fässler on the phone. Lucy was right. To be honest, you were a little hesitant about it. It's not clear why this happened.

It's possible, but I'm not sure why. Helen [laughing]

Lucy couldn't remember, for example, why the role allocation had changed during the second writing session, as seen in Excerpt 15:

An enormous chasm (Interview 2, D8, P16, line 42f.)

[...] This is what I was told by the interviewer: There is a reason for the second shift in who is writing, remember? Is your memory strong? Lucy: It's happened before. I have no idea what's causing this. To put it simply, I'm so äh that I'm at a loss for words. There you have it. It's all here in the form of words.

If the topic of the collaborative writing process was brought up, Helen could use it as a springboard to talk about other comparable writing experiences, but she struggled with inquiries that went beyond the writing project they had just done (Excerpt 16). Both writings were considered good by her, but she could not provide any arguments as to why. Her writing partner, Lucy, omitted an illustration from the handbook, which puzzled her because she had previously emphasised that illustrations were an important aspect of guides elsewhere (Excerpt 17).

The Meaning and Importance of Writing (Interview 2, D8, P15, lines 143–146) is an abbreviated version of the passage. Interviewer: What does it mean to you to write?

Helen: I don't know what to say. — Yes, I would say so. Interviewer: How important is writing to you? Honestly, Helen, it doesn't matter that much.

Excerpt 17: Self-Evaluation and Genre Knowledge (Interview 1, D8, P15, lines 91–98) follows. Interviewer: What are your impressions, and how well did you do?

What a terrific idea.

Interviewer: Then why do you believe you're so good?

Helen: Right on target. — In response to / To be honest, I just thought it was a really well-written piece of work. I have no idea what's causing this. [laughing] Interviewer: In your view, a good handbook should have the following aspects.

Helen: Additionally, a user manual that contains an accompanying image would be a good illustration of this.

During the second interview, Helen displayed just minimal strategic understanding in the response to the hypothetical circumstance (Excerpt 18). When asked how she usually coped with issues in coming up with ideas, she was unable to identify a specific approach she would use. Instead, she said she'd get in touch with someone who could help. Other procedures like proposing and assessing also have approaches that were comparable to hers. There was a noticeable trend of people asking help with their writing in this phase of the interview. Finally, Helen came to the realisation that a competent writer is also one who can support others in their writing efforts ("And then I can approach her and ask her for aid," Interview 2, D8, P15, line 112).

Lines 171–174 of Interview 2, D8, P15; Interview 2, D8, P15, lines 171–174) from Excerpt 18:

Interviewer: What should you do if you can't come up with a topic for a piece of writing? What do you do if you find yourself in this situation?

Helen: Do I have the option of approaching a person in the room and asking them? What could I possibly write about the teacher if I were to do so? [...]

Interviewer: What if you already know what you want to write about and are looking for a topic? Putting your thoughts down on paper may be a challenge for you, but you may already have an idea. What do you do if you find yourself in this situation?

Helen: If you'd want to offer a hand, I'd be happy to oblige. You can write on my behalf if I give you some ideas.

While conducting interviews, researchers inquired about how the participants may approach an assignment if they were working alone to better understand the differences between solo and collaborative writing. Her lack of self-control and lack of time would have dictated a different approach had she been writing alone (Excerpt 19). She made it clear that if she found an error or omission, she would rip out the offending phrase and begin again from scratch. Since Lucy took over writing when Helen was having problems, this sort of behaviour went unnoticed during the collaborative writing process.

Extract 19: Another Solving Process (Interview 1, D8, P15, lines 43–52) is an extract from this section.

Interviewer: In the event that you were forced to complete this assignment on your own, how would you proceed?

Helen: Afterwards, I'd more - I'd realise that something was lacking instantly. However, despite my struggles with writing, I have to pause and consider how I may express this before - sure, that is incorrect - and then I cross it out because I lack patience [laughs]. Yes.

How would you describe the feeling of being unable to wait for anything?

Helen: Do I have the ability to give up quickly? Yes. Leaving out a word because I don't know what it means leads to the text becoming/ f/ which is no longer totally accurate. [...]

You have to make a decision at this point, whether you want to keep it or change it? That, or I'll start again from scratch. Helen: Either way, I'll do it.

Interviewer: Do you want me to use the complete text or just a single word? Helen: I'm referring to the full piece of writing.

If Lucy had been working on her own project, she, too, would have written differently. She said that if she had had the chance, she would have written at her own pace (Interview 1, D8, P16, line 38). In fact, she said more than once that Helen couldn't keep up with her since she was moving so quickly.

Both instances show that the writing habits of participants are influenced by the collaborative setting. This was notably true in Helen's situation, to a large extent. It appeared that the relative talents of the authors were the primary determinants of the writing process. In general, it's safe to infer that authors with poor writing skills put more strain on the writing

process than those with better writing skills. It's a virtue of this chapter's approach because the setting as a whole gives significant insights into the different writers' writing processes.

5.6 The Effects of the Experiment

It's critical to keep in mind that this is an experimental situation, so proceed with extreme care. Due to their embarrassment about their work, adult struggling writers do not want to be observed or videotaped while they are writing (Sturm, 2010). The addition of these elements will, it follows, have an effect on the writing process.

It was evident to both members of Dyad 8 that they were participating in an experiment, and both were aware of it. The moment Lucy pulled Helen's pen out of her hands in Task 1, Helen said, "They see everything that we write" (D8, Task 1, line 115). Instead of keeping a low profile throughout the writing process, Lucy made eye contact with the camera by lifting her beverage in a toasting gesture toward the camera. Lucia repeatedly made fun of the customer's name during Task 2: "Mr. Fräßler from fressen," which means "to eat," rather than "Mr. Fäßler," was one of her favourite pick-up lines. Comments were assigned to any such instances in the database.

Table 3 shows that, in most cases, the large majority of dyad members commented on their own writing, as indicated in a more thorough assessment of all comments. As a way of putting it, they looked at and evaluated the method they write as well as their own writing talents. The vast majority of comments are made in a non-confrontational way. While Helen's reaction was to be humiliated by her bad spelling or handwriting, it appears that many dyad members with weak writing abilities reacted in the same manner (see Figure 1). Dyad 4 or Dyad 5 are examples.

Both members of Dyad 8 appeared exhausted after their interviews. After the second writing exercise (Excerpt 20), Lucy freely declared that she was comfortable with it, and Helen simply answered that she had no problem with it. At the end of the interview.

An Experiment as Repetitive Situation (Interview 2, D8, P16, lines 402–405) is the subject of this excerpt (20).

Finally, how did your interview go? I'd want to know what you think. Lucy: It's been a drain on my energy. ... [laughs out loud] Not at all.

Interviewer: What did you find tiring about the experience?

Lucy: No, you have to think about it first. I mean, I'm starting to feel a little worn out. A long day was behind them.

Theorizing and Deliberation

An investigation of how adults who struggle with writing accomplish a task and the level of their writing skills was the goal of this study. Other concerns addressed in this inquiry were whether the multi-method approach (video recordings with interviews and textual analysis) was capable of capturing these two topics and if it was feasible for this investigation to be conducted.

According to the findings, the proposed combination of techniques, when applied to the study of collaborative writing, yields a wealth of helpful information. With struggling adults, collaborative writing may be a useful tool and a good starting point for discussion about their writing skill, identity as authors and notions of what constitutes good written work. They may use it regularly in interviews and connect with other personal writing experiences, which is incredibly beneficial for struggling adult writers. For researchers interested in studying collaborative writing processes, retrospective interviews can be a useful tool even if participants lack the ability to recall cognitive processes or accurately recount the timeline of events (1996).

Furthermore, it has been shown that this multi-method approach is effective in obtaining insights into the individual writing talents of struggling adult authors, as has been demonstrated. The approach taken here advances our understanding of how individuals in this specific group of struggling writers deal with higher-order writing skills such as genre knowledge, planning, and evaluating the effectiveness of texts by contributing to existing research on fundamental writing skills such as spelling. Section 5 results about Helen, including the two zoom-ins on her, provided compelling evidence of this fact. Adult struggling authors share many characteristics with their younger counterparts who are also struggling, according to the data (Dockrell, 2009; Graham, Schwartz, & MacArthur, 1993; Troia, 2006). Because of her insufficiently developed core writing abilities and her portrayal as a struggling adult writer, Helen has many similarities with other struggling adult writers. Furthermore, as an example, her writing orientation is local, which means that she does not

address writing issues in terms of a specific writing goal or the overall project. According to this, she only has a rudimentary understanding of strategy.

As a consequence of the investigation, more information is available on the characteristics that set struggling adult authors apart from their younger counterparts (Harris, Graham, Brindle, & Sandmel, 2009). The fact that she can pinpoint a fundamental writing obstacle, such as her inability to think and write at the same time, shows that Helen is an adult who has a good sense of her own abilities as a writer. Because she believes writing is a communication process, she feels it's appropriate to test a written handbook based on the reactions of readers. It is crucial that she shows a comprehension of manuals, even though she depends heavily on oral experience gained from earlier encounters. For example, when three data sources are merged into one, the characteristics of young struggling authors that are unusual are clearly visible.

Despite these advantages, the current study has a few drawbacks, which are as follows: An important caveat is that the results of this sub-study are mostly based on anecdotal evidence from one specific case. It is also important to realise that the collaborative atmosphere has an influence on the writing process from a methodological aspect. As Helen asserts, if she had difficulty spelling on her own, she would cross out the entire handbook. However, she doesn't do this here. Because her husband is in charge of the transcribing, she is out of luck. Collaboration has a limited influence on participants' writing abilities while they are present; it does not completely reorganise them. Although Helen is partnered with a partner who has better writing skills, such as Lucy, she still fails to write smoothly or accurately, and she also does not take the initiative to begin activities such as creating a writing goal.

A multi-method approach, as proven in this study, may result in data that does not necessarily fit together in a straight line while viewing the collaborative writing process, doing follow-up interviews, and creating texts. Follow-up interviews and the written texts of the collaborative writing project reveal some of the events that occurred during the process of writing back to the original incident. Interpreting such documents, however, should be done with utmost care. These traces should always be evaluated in combination with events that occurred throughout the writing process or remarks made during interviews that give alternate explanations to

prevent leaping to conclusions too hastily. Participants may approach collaborative writing in a different way than they would if they were writing alone, therefore this is necessary.

Additionally, researchers could investigate how adult writers who are having difficulty completing writing assignments in groups fare when left to complete them on their own. Finding out the strategies they use that are wasteful or unsuccessful is an area that requires additional investigation. Systematizing the analysis of all three data sources – protocol for video observation, written texts, and follow-up interviews – is also required to make conclusions more easily transferable between cases.

From a teaching perspective, the following points need to be made clear. Teachers should learn more about their students' writing processes and writing knowledge, as well as about effective writing instruction that results in a statistically significant improvement in writing skills, because the literacy courses did not result in a statistically significant improvement in writing skills within three months. Collaborative writing has unique traits and rewards that may require additional training for educators. Using Helen as an example, and generalising to all students, teachers must address specific inadequacies, notably in genre knowledge and writing abilities, in order to assure success.. To do this, teachers will need to move beyond the conventional product-focused writing lessons. As a result, evidence-based writing practises, such as teaching the writing process and demonstrating writing techniques, must be implemented in order for writing abilities to increase (MacArthur & Lembo, 2009). Writing education for struggling adults should take into consideration special qualities of adult writers such as their awareness of their own identity as writers and their prior oral literacy experiences in order to improve this evidence foundation even further.

It was revealed that none of the adult literacy instructors interviewed (including Helen's teacher) used collaborative writing as a teaching strategy (Sturm & Lindauer, 2014). Educators should know how different forms of collaboration affect students' ability to write. Adult learners benefit from their teacher taking on the role of thinker, while the students take on the job of transcriber. While the method used by Helen's instructor may have affected her performance on Tasks 1 and 2 in the sub-study, it's not apparent if this role allocation with her mother and sisters was already ingrained in Helen's psyche prior to the research. This is an area where case studies may be quite useful. It is possible for teachers to see how

particular teaching strategies encourage adult struggling writers to engage in unfavourable writing behaviour or to utilise an inefficient writing strategy.

Collaborative writing might be tested in future studies to see whether it can assist struggling adult writers improve their writing skills. Moreover, teachers might use collaborative writing in literacy courses to obtain insight into the tactics adopted by (struggling) adult learners in order to gain insight into their own teaching methods, as well.

Neither the students' reading and writing skills nor their motivating characteristics differed between dropouts and those who finished the course (Sturm & Philipp, 2013b).

As a whole, Switzerland has more dialects than any other country. In formal situations, Swiss High German is employed, especially when writing documents. Switzerland's High German is nearly identical to Germany's High German.

While writing a report, some participants said it would be best not to return a call from a disgruntled customer.

It took nearly three hours to complete the written work and one-on-one interview in some cases (Dyad 6 spent roughly 75 min. on the Task 1; after a 10-minute break, one interview lasted an additional 75 min.).

Although all pairs had read their texts again before to this assignment, they had done so primarily in terms of their own local interpretations, rather than as a global depiction. Because they had previously spent 75 minutes on the writing job, only Dyad 6 decided not to re-read their work for Job 1, which was a substantial amount of time. Due to just having typed five keywords in the first phase, Dyad 16 came to an abrupt end in the second phase.

Researching, socialising, chatting, bargaining, organising, monitoring, awarding, punishing, and documenting are all examples of supporting activities. Since every supporting activity is based on the writing assignment, they assume that all supporting activities are included in a cooperative writing process.

It's more or less a mechanical process because the transcripts already documented who was talking and writing when.

Fictional names are also used.

Only one of the dyads tested used a different collaborative writing strategy. One member of dyad 16 wrote the handbook while the other drew a picture of the coffee machine in concurrently. In Dyad 16, there was hardly little bargaining.

To begin, did anyone see the coffee maker? Helen (00:00:22-8). Coffee utensils are all that is on my mind right now. "Yes" is the correct answer. "Yes" is the correct answer. "Yes" is the correct answer. Neither of them is looking away from the coffee machine. — Do you know how to make coffee with this [shows the coffee maker]? Oh, and one more thing: did anybody else write that? - Is there a coffee machine in the house?

Lucy: the notepad is rotated counter-clockwise Well. "He," "He," "He," "He," "He," "He," While concurrently writing "Questions," he continues to type.

Children with learning or writing difficulties often see tasks as questions that need answers, and Helen's interpretation is an example of this. In Graham's (1990) words: For more detail on this, see Section 5.4, which deals with the interview data. The most common source of inspiration for Lucy's thoughts was a sentence she had scribbled down:

D8, Task 1, lines 40–42) Extract 2: Creating New Concepts Lucy: [slowly writes and speaks: strainer; 00:02:26-0] Restocking coffee powder is also on the list of tasks. -Lucy: [reading through] Put the filter in [writing and speaking slowly: and replace the coffee powder]. - Helen: That's right. Put the strainer in and replace the coffee powder, Lucy says, as she reads.

Distributions like this illustrate that participants in collaborative writing have a wide range of roles to perform. Whoever is transcribing will follow a similar pattern: creating ideas, transcribing, and then generating additional ideas.

The collaborative writing environment and the adoption of the reactive writing style by Dyad 8 test participants may be to blame for this role assignment.

9 To be clear, they must decide on a transcriber before they can begin the process. While it is true that when B is transcribed, A is more likely to come up with new ideas or orders, this does not mean that this is the case all the time. Because of their differing writing talents, Helen and Lucy's roles can also be explained. It is necessary to do a more extensive study of the data to answer the question, "Why wasn't Helen transcribing?" (section 5.3). To what end does she refer to the writing exercise as a question in section 5.4? Following that, we'll take a

closer look at Helen, her approach to problem-solving and the specific writing skills she possesses. As Helen is more of a struggler than Lucy, this study promises to be a valuable addition to our understanding of struggling adult authors.

What Happened to Helen's Transcribing Skills? What's the reason Helen wasn't transcribing?

This is what Helen said to the interviewer when she was asked to explain why Lucy began to write. She illustrates this in the third excerpt:

Writing and Thinking, Third Excerpt (Interview 1, D8, P15, line 26)

My assumption is that she can think and write. In addition, it's difficult for me to make a point explicit before putting pen to paper.

Thus, Helen refers to herself as the thinker and Lucy as the writer many times during the conversation. In addition, she claims that she and Lucy have regularly worked on grammar tasks together during the course, but they have never written jointly and have always followed the same procedure.

Several times, Helen brought up the topic of thinking and writing. In terms of methodology, how she describes the videotaped collaborative writing and other writing events is critical. excerpt 4 shows how Helen began their writing process and how she views the writing process in general, only to add an event that goes beyond the writing process. As a nod to this, the term "always" is used.

(Author's emphasis): Interview 1, D8, P15, line 10ff. Interview 1, D8, P15, lines 10ff., emphasis added by the author)

First and foremost, we questioned about the coffee maker's operating procedure. And when we first found it, well, it was straightforward to me, too. However, there is one exception: writing. Despite my best efforts, I am unable to keep up with all of the ideas that come to my mind. [...] Faster than we can move our hands, we can move our thoughts. By the time I get down to write this, I've already completely forgotten about it.

Lucy persuaded Helen to transcribe throughout the collaborative writing process (Task 1). Although she had just given a new concept, Helen couldn't remember which one to write down when she eventually took up the pen. Of course, her troubles might be attributed to external circumstances like poor work coordination or her close relationship with Lucy.

During the collaborative writing process, Helen's struggle with the interaction between thinking and writing was clear (Task 1). For some reason, Helen was always having to go back over her work and fix her faults (Excerpt 5). The more Helen wrote, the more mistakes she made in spelling and grammar (this is also borne out by the results of the writing fluency test t1, cf. Appendix A). When Lucy began writing incomprehensibly, such as "Arreiqu" instead of "As necessary." she took over transcription.

(D8, Task 1, lines 97–101) Helen is drafting and rewriting
Extracted from D8, Task 1, lines 97–101, Helen is now drafting and rewriting.

And so on]; and so forth; and so forth; and so on. In Helen's case, [00:04:39-4], If you're looking for the plural form of any of the above words, then you've come to the right place. [00:04:41-2] [sat den] To put it another way (sixth bullet point) [writes:

That is why [he points to the word] I / sit Helen: Isn't that the case?

A big congrats to both of you, Lucy and Helen. They both burst out laughing. Ahead of time:
- The first. Sit has been replaced with [crossed out sit and replaced by an isit] I'm sorry, but I think I've spelled it incorrectly again. - "It" (00:04:52-7) has been crossed out and replaced by "ist." Alternatively, it might be. [is] [...]

Lucy started writing in the fourth minute of Task 2, and Helen followed suit, but this time on her own (maybe this can be attributed to the fact that she had already developed some familiarity with this activity during Task 1). Lucy was forced to take over writing duties when Helen's exhaustion led to spelling errors. When it came to the phrases "thinking" and "writing," Helen used the same method she had for Task 1 when discussing this writing exercise in the interview's retrospective phase.

During the stage of the interview when participants were invited to envisage writing a story or describing an event tied to a recipe, Helen was asked what she would do if she knew what she wanted to write about but didn't know how to put it into words (section 4.3). As demonstrated in Excerpt 6, she sought a role distribution similar to that seen in the collaborative writing process:

Writing Skills - The Art and Science of Writing (Excerpt 6) (Line 174 of Interview 2, D8, P15) Let me know if you can help me out for a few minutes. You'll write for me, and I'll tell

you what to write. When the interviewer dug a bit deeper, Helen admitted that she hadn't utilised this strategy in a long time. It wasn't obvious from the interview how often she uses this technique. She did, however, talk about how her sisters and mother aid her in writing: they first ask her what she wants to write about and why she wants to write it (Excerpt 7). Additionally, Excerpt 7 depicts the collaborative writing process's role assignment in numerous ways:

The 7th Excerpt: Writing and Thought (Interview 2, D8, P15, line 192)

[...] Think about what you want us to write, and then tell us. To summarise, it is acceptable to assume that Helen's cognitive load is not considerably raised by reactive writing in the experimental setting as compared to when she writes alone or with the aid of individuals other than Lucy.. As previously mentioned, Helen's t1 writing fluency text exhibited similar difficulties with accuracy. According to her, this was not the first time she had undergone a similar procedure.

It is not possible to determine if Helen's ability to complete Tasks 1 and 2 was limited by a lack of some fundamental cognitive abilities. During the first interview, Helen mentioned that she had taken a test in school that she vaguely remembered. D8, P15, line 252 of Interview 1 (D8) In her mind, failing the test meant she couldn't go on to pursue more education or training in the field of her choice.

This is Helen's take on the writing assignment: "Then We Explain How It Works"

Initially, Helen came up with the notion of asking, "Does anyone know how the Italian coffee maker operates?" to open the manual. Her need to know the answer to this question became clear to her after a little pause in reading the text. "Then we explain how it works" was Helen's request after Lucy had simply written "No!" As illustrated in Excerpt 8, Helen not only saw the writing as a question, but she also worded the text's introduction as a question: "Not only did Helen interpret the writing task as a question, but she even phrases the start of the book itself as a question."

Excerpt 8: Genre and Literary Criticism (Interview 1, D8, P15, line 32 ff.)

[...] Helen: [inaudible] Thank you. How to convey this was the question, and thus we had/have halted to go on the next phase in the process. No matter what happens, we should

have said yes and then asked what you thought... correct? It is possible to view the entire paragraph as a question since f was a question in the first place. [I utter the word mhm] The question's wording We / I then realised that something wasn't quite right in this situation. Somewhere (00:05:00-4) something is missing, in my opinion. Coffee was made accessible to all dyads during their writing activity, so they may rely less on prior knowledge of the topic. Helen and Lucy, on the other hand, avoided using it when they were unsure of where to pour the water since they didn't think it was necessary to do so. Helen's motive for her conduct is clearly obvious in Excerpt 9, which is as follows:

Excerpt 9: Genre and Literary Criticism (Interview 1, D8, P15, line 82)

A few minutes later, I realised that they [=the researchers] either do it now or brew coffee to test if we set it down correctly, which I believed was the most likely scenario. Yes.

However, despite the fact that Helen viewed the writing work and the opening of the book as a question, she stayed true to the writing goal of the text, which was to produce a standard handbook. The best method to see if a manual is useful is to actually use it. Excerpts 8 and 9 may be construed as a show of genre competence despite their unusual style. Helen's response to being asked if she had ever written a manual alludes to an oral event she had previously experienced (Excerpt 10). A guide's fundamental role was also accomplished by her description of that spoken scenario. She also mentioned that a handbook can only be written or spoken if the author has a thorough understanding of the subject matter.

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

There is no denying that my father turns to me for help when he is having technical difficulties with his cell phone; I show the process to him. You must/I can do the same thing, therefore that's all there is to it! For the simple fact that I've used a cell phone before.

According to her, the most important piece of advice that she could give someone who was in a similar situation would be to make sure that you thoroughly test your stuff (Excerpt 11). To put it another way, she didn't put too much attention on the form or mechanics, as one might anticipate from a novice author (Graham, Schwartz, & MacArthur, 1993). The fact that she

had no idea what to expect from a printed manual meant that her understanding of the genre was restricted.

Excerpt 11: The Evaluation Process (Interview 1, D8, P15, line 102 ff.)

Let me know how you would go about it and if it doesn't work, we can do it together and see if that works. - It's possible to read this and think, "Well, no one understands that, start by reading it for yourself," and I'd answer, "Yes, first and foremost, read it for yourself, because I would not comprehend this." because I wouldn't be able to understand this myself.

"testing" was no longer a topic of debate following Helen's comments on Task 2. With an enthusiastic "excellent," Helen reacted to Lucy's praise of the letter she and Lucy had written, calling it "mmh, good" (Interview 2, D8, P15, line 90). She displayed some scepticism, though, when asked if the letter would persuade the buyer. For her, the question was whether a 5 percent discount would be acceptable to the customer (Interview 2, D8, P15, line 92). During the collaborative writing process, she was also unsatisfied with the letter, but she was unable to properly communicate her unhappiness ("Something I do not like," D8, Task 2, line 119).

Even though they performed a more in-depth study of the problem, Helen and Lucy failed to create writing goals for their letter in Work 2, in line with their failure to assess whether or not their text was any good or not (Excerpt 12). In both Task 2 and Task 1, the explanation was seen as the primary purpose of the task.

Lines 20–22 of D8 Task 2 (D8 Task 2). Explanation of Writing Task 2 (Extract 12)

Helen: Our supervisor has sent us an email, and we must reply to it in writing. As a result of [shows email]...

That's [also pointing to the email] something we'll have to explain to Lucy, isn't it? Helen: You're absolutely accurate.

Task 2 was a challenge for Helen since she lacked a model to follow (Interview 2, D8, P15, lines 64–68). She didn't show any more experience in writing an argumentative letter throughout the interview (Excerpt 13).

Understanding the Genre (Excerpt 13) (Interview 2, D8, P15, line 100) Interviewer: What do you think constitutes an excellent letter, in your view?

Helen: Just double-check that the time and date are right. And, of course, with the fewest potential errors.

At "school," Helen usually used to describe the literacy course, she remembered completing an assignment similar to this one. It's clear that she focused on the letter's outside characteristics, such the date and where to put "to" and "from," and subsequently on the content within, in her discussion of that "school" assignment. Interview 2 (D8, P15, line 76).

Since the collaborative writing process was the first point of reference for the study, the interview data bolstered this understanding, as previously indicated (in sections 5.3 and 5.4). After this step (sections 5.5 and 5.6), data is collected via follow-up interviews regarding aspects of the collaborative writing process that cannot be directly related to the collaborative writing process..

Methodological problems remain unsolved at the halfway point of the study 5.5.

In spite of Dyad 8's limited use of planning, the research presented here shows that conveying information is the primary method employed while writing. As a whole, the research of the writing process does not disclose anything unexpected. If you combine Tasks 1 and 2, you'll see that Helen has more writing expertise (at least when it comes to manuals as opposed to argumentative letters) than you'd anticipate from someone who is just starting out. Some of the events in the writing process might be described and understood much better if they were linked to the interviews and manuscripts. It's unclear whether or not these writers use a different writing approach while working alone as opposed to in groups of two, as several of their responses to interview questions were ambiguous.

It was shown that participants in the present study might forget particular events that occurred throughout the collaborative writing process, which was an issue in the prior study. Similar conclusions have been reached in the case of individual writing by Janssen et al. This is especially true for Helen, who, for example, was unable to remember why she had ignored Lucy's suggestion to read the writing assignment a second time during the second work (Excerpt 14). For both Task 1 and Task 2, Helen could only give a superficial summary of the writing process. (For further information on Writing Task 1, see Excerpt 4).

An enormous chasm (Interview 2, D8, P15, line 51 ff.)

Interviewer: With your letter, you had already made tremendous progress. After then, Lucy gave the sense that she wanted to hear the tasks again, especially the one with Mr Fässler on the phone. Lucy was right. To be honest, you were a little hesitant about it. It's not clear why this happened.

It's possible, but I'm not sure why. Helen [laughing]

Lucy couldn't remember, for example, why the role allocation had changed during the second writing session, as seen in Excerpt 15:

An enormous chasm (Interview 2, D8, P16, line 42f.)

[...] This is what I was told by the interviewer: There is a reason for the second shift in who is writing, remember? Is your memory strong? Lucy: It's happened before. I have no idea what's causing this. To put it simply, I'm so äh that I'm at a loss for words. There you have it. It's all here in the form of words.

If the topic of the collaborative writing process was brought up, Helen could use it as a springboard to talk about other comparable writing experiences, but she struggled with inquiries that went beyond the writing project they had just done (Excerpt 16). Both writings were considered good by her, but she could not provide any arguments as to why. Her writing partner, Lucy, omitted an illustration from the handbook, which puzzled her because she had previously emphasised that illustrations were an important aspect of guides elsewhere (Excerpt 17).

The Meaning and Importance of Writing (Interview 2, D8, P15, lines 143–146) is an abbreviated version of the passage. Interviewer: What does it mean to you to write?

Helen: I don't know what to say. — Yes, I would say so. Interviewer: How important is writing to you? Honestly, Helen, it doesn't matter that much.

Excerpt 17: Self-Evaluation and Genre Knowledge (Interview 1, D8, P15, lines 91–98) follows. Interviewer: What are your impressions, and how well did you do?

What a terrific idea.

Interviewer: Then why do you believe you're so good?

Helen: Right on target. — In response to / To be honest, I just thought it was a really well-written piece of work. I have no idea what's causing this. [laughing] Interviewer: In your view, a good handbook should have the following aspects.

Helen: Additionally, a user manual that contains an accompanying image would be a good illustration of this.

During the second interview, Helen displayed just minimal strategic understanding in the response to the hypothetical circumstance (Excerpt 18). When asked how she usually coped with issues in coming up with ideas, she was unable to identify a specific approach she would use. Instead, she said she'd get in touch with someone who could help. Other procedures like proposing and assessing also have approaches that were comparable to hers. There was a noticeable trend of people asking help with their writing in this phase of the interview. Finally, Helen came to the realisation that a competent writer is also one who can support others in their writing efforts ("And then I can approach her and ask her for aid," Interview 2, D8, P15, line 112).

Lines 171–174 of Interview 2, D8, P15; Interview 2, D8, P15, lines 171–174) from Excerpt 18:

Interviewer: What should you do if you can't come up with a topic for a piece of writing? What do you do if you find yourself in this situation?

Helen: Do I have the option of approaching a person in the room and asking them? What could I possibly write about the teacher if I were to do so? [...]

Interviewer: What if you already know what you want to write about and are looking for a topic? Putting your thoughts down on paper may be a challenge for you, but you may already have an idea. What do you do if you find yourself in this situation?

Helen: If you'd want to offer a hand, I'd be happy to oblige. You can write on my behalf if I give you some ideas.

While conducting interviews, researchers inquired about how the participants may approach an assignment if they were working alone to better understand the differences between solo and collaborative writing. Her lack of self-control and lack of time would have dictated a different approach had she been writing alone (Excerpt 19). She made it clear that if she

found an error or omission, she would rip out the offending phrase and begin again from scratch. Since Lucy took over writing when Helen was having problems, this sort of behaviour went unnoticed during the collaborative writing process.

Extract 19: Another Solving Process (Interview 1, D8, P15, lines 43–52) is an extract from this section.

Interviewer: In the event that you were forced to complete this assignment on your own, how would you proceed?

Helen: Afterwards, I'd more - I'd realise that something was lacking instantly. However, despite my struggles with writing, I have to pause and consider how I may express this before - sure, that is incorrect - and then I cross it out because I lack patience [laughs]. Yes.

How would you describe the feeling of being unable to wait for anything?

Helen: Do I have the ability to give up quickly? Yes. Leaving out a word because I don't know what it means leads to the text becoming/ f/ which is no longer totally accurate. [...]

You have to make a decision at this point, whether you want to keep it or change it? That, or I'll start again from scratch. Helen: Either way, I'll do it.

Interviewer: Do you want me to use the complete text or just a single word? Helen: I'm referring to the full piece of writing.

If Lucy had been working on her own project, she, too, would have written differently. She said that if she had had the chance, she would have written at her own pace (Interview 1, D8, P16, line 38). In fact, she said more than once that Helen couldn't keep up with her since she was moving so quickly.

Both instances show that the writing habits of participants are influenced by the collaborative setting. This was notably true in Helen's situation, to a large extent. It appeared that the relative talents of the authors were the primary determinants of the writing process. In general, it's safe to infer that authors with poor writing skills put more strain on the writing process than those with better writing skills. It's a virtue of this chapter's approach because the setting as a whole gives significant insights into the different writers' writing processes.

5.6 The Effects of the Experiment

It's critical to keep in mind that this is an experimental situation, so proceed with extreme care. Due to their embarrassment about their work, adult struggling writers do not want to be observed or videotaped while they are writing (Sturm, 2010). The addition of these elements will, it follows, have an effect on the writing process.

It was evident to both members of Dyad 8 that they were participating in an experiment, and both were aware of it. The moment Lucy pulled Helen's pen out of her hands in Task 1, Helen said, "They see everything that we write" (D8, Task 1, line 115). Instead of keeping a low profile throughout the writing process, Lucy made eye contact with the camera by lifting her beverage in a toasting gesture toward the camera. Lucia repeatedly made fun of the customer's name during Task 2: "Mr. Fräßler from fressen," which means "to eat," rather than "Mr. Fäßler," was one of her favourite pick-up lines. Comments were assigned to any such instances in the database.

Table 3 shows that, in most cases, the large majority of dyad members commented on their own writing, as indicated in a more thorough assessment of all comments. As a way of putting it, they looked at and evaluated the method they write as well as their own writing talents. The vast majority of comments are made in a non-confrontational way. While Helen's reaction was to be humiliated by her bad spelling or handwriting, it appears that many dyad members with weak writing abilities reacted in the same manner (see Figure 1). Dyad 4 or Dyad 5 are examples.

Both members of Dyad 8 appeared exhausted after their interviews. After the second writing exercise (Excerpt 20), Lucy freely declared that she was comfortable with it, and Helen simply answered that she had no problem with it. At the end of the interview.

An Experiment as Repetitive Situation (Interview 2, D8, P16, lines 402–405) is the subject of this excerpt (20).

Finally, how did your interview go? I'd want to know what you think. Lucy: It's been a drain on my energy. ... [laughs out loud] Not at all.

Interviewer: What did you find tiring about the experience?

Lucy: No, you have to think about it first. I mean, I'm starting to feel a little worn out. A long day was behind them.

Theorizing and Deliberation

An investigation of how adults who struggle with writing accomplish a task and the level of their writing skills was the goal of this study. Other concerns addressed in this inquiry were whether the multi-method approach (video recordings with interviews and textual analysis) was capable of capturing these two topics and if it was feasible for this investigation to be conducted.

According to the findings, the proposed combination of techniques, when applied to the study of collaborative writing, yields a wealth of helpful information. With struggling adults, collaborative writing may be a useful tool and a good starting point for discussion about their writing skill, identity as authors and notions of what constitutes good written work. They may use it regularly in interviews and connect with other personal writing experiences, which is incredibly beneficial for struggling adult writers. For researchers interested in studying collaborative writing processes, retrospective interviews can be a useful tool even if participants lack the ability to recall cognitive processes or accurately recount the timeline of events (1996).

Furthermore, it has been shown that this multi-method approach is effective in obtaining insights into the individual writing talents of struggling adult authors, as has been demonstrated. The approach taken here advances our understanding of how individuals in this specific group of struggling writers deal with higher-order writing skills such as genre knowledge, planning, and evaluating the effectiveness of texts by contributing to existing research on fundamental writing skills such as spelling. Section 5 results about Helen, including the two zoom-ins on her, provided compelling evidence of this fact. Adult struggling authors share many characteristics with their younger counterparts who are also struggling, according to the data (Dockrell, 2009; Graham, Schwartz, & MacArthur, 1993; Troia, 2006). Because of her insufficiently developed core writing abilities and her portrayal as a struggling adult writer, Helen has many similarities with other struggling adult writers. Furthermore, as an example, her writing orientation is local, which means that she does not

address writing issues in terms of a specific writing goal or the overall project. According to this, she only has a rudimentary understanding of strategy.

As a consequence of the investigation, more information is available on the characteristics that set struggling adult authors apart from their younger counterparts (Harris, Graham, Brindle, & Sandmel, 2009). The fact that she can pinpoint a fundamental writing obstacle, such as her inability to think and write at the same time, shows that Helen is an adult who has a good sense of her own abilities as a writer. Because she believes writing is a communication process, she feels it's appropriate to test a written handbook based on the reactions of readers. It is crucial that she shows a comprehension of manuals, even though she depends heavily on oral experience gained from earlier encounters. For example, when three data sources are merged into one, the characteristics of young struggling authors that are unusual are clearly visible.

Despite these advantages, the current study has a few drawbacks, which are as follows: An important caveat is that the results of this sub-study are mostly based on anecdotal evidence from one specific case. It is also important to realise that the collaborative atmosphere has an influence on the writing process from a methodological aspect. As Helen asserts, if she had difficulty spelling on her own, she would cross out the entire handbook. However, she doesn't do this here. Because her husband is in charge of the transcribing, she is out of luck. Collaboration has a limited influence on participants' writing abilities while they are present; it does not completely reorganise them. Although Helen is partnered with a partner who has better writing skills, such as Lucy, she still fails to write smoothly or accurately, and she also does not take the initiative to begin activities such as creating a writing goal.

A multi-method approach, as proven in this study, may result in data that does not necessarily fit together in a straight line while viewing the collaborative writing process, doing follow-up interviews, and creating texts. Follow-up interviews and the written texts of the collaborative writing project reveal some of the events that occurred during the process of writing back to the original incident. Interpreting such documents, however, should be done with utmost care. These traces should always be evaluated in combination with events that occurred throughout the writing process or remarks made during interviews that give alternate explanations to

prevent leaping to conclusions too hastily. Participants may approach collaborative writing in a different way than they would if they were writing alone, therefore this is necessary.

Additionally, researchers could investigate how adult writers who are having difficulty completing writing assignments in groups fare when left to complete them on their own. Finding out the strategies they use that are wasteful or unsuccessful is an area that requires additional investigation. Systematizing the analysis of all three data sources – protocol for video observation, written texts, and follow-up interviews – is also required to make conclusions more easily transferable between cases.

From a teaching perspective, the following points need to be made clear. Teachers should learn more about their students' writing processes and writing knowledge, as well as about effective writing instruction that results in a statistically significant improvement in writing skills, because the literacy courses did not result in a statistically significant improvement in writing skills within three months. Collaborative writing has unique traits and rewards that may require additional training for educators. Using Helen as an example, and generalising to all students, teachers must address specific inadequacies, notably in genre knowledge and writing abilities, in order to assure success.. To do this, teachers will need to move beyond the conventional product-focused writing lessons. As a result, evidence-based writing practises, such as teaching the writing process and demonstrating writing techniques, must be implemented in order for writing abilities to increase (MacArthur & Lembo, 2009). Writing education for struggling adults should take into consideration special qualities of adult writers such as their awareness of their own identity as writers and their prior oral literacy experiences in order to improve this evidence foundation even further.

It was revealed that none of the adult literacy instructors interviewed (including Helen's teacher) used collaborative writing as a teaching strategy (Sturm & Lindauer, 2014). Educators should know how different forms of collaboration affect students' ability to write. Adult learners benefit from their teacher taking on the role of thinker, while the students take on the job of transcriber. While the method used by Helen's instructor may have affected her performance on Tasks 1 and 2 in the sub-study, it's not apparent if this role allocation with her mother and sisters was already ingrained in Helen's psyche prior to the research. This is an area where case studies may be quite useful. It is possible for teachers to see how

particular teaching strategies encourage adult struggling writers to engage in unfavourable writing behaviour or to utilise an inefficient writing strategy.

Collaborative writing might be tested in future studies to see whether it can assist struggling adult writers improve their writing skills. Moreover, teachers might use collaborative writing in literacy courses to obtain insight into the tactics adopted by (struggling) adult learners in order to gain insight into their own teaching methods, as well.

Neither the students' reading and writing skills nor their motivating characteristics differed between dropouts and those who finished the course (Sturm & Philipp, 2013b).

As a whole, Switzerland has more dialects than any other country. In formal situations, Swiss High German is employed, especially when writing documents. Switzerland's High German is nearly identical to Germany's High German.

While writing a report, some participants said it would be best not to return a call from a disgruntled customer.

It took nearly three hours to complete the written work and one-on-one interview in some cases (Dyad 6 spent roughly 75 min. on the Task 1; after a 10-minute break, one interview lasted an additional 75 min.).

Although all pairs had read their texts again before to this assignment, they had done so primarily in terms of their own local interpretations, rather than as a global depiction. Because they had previously spent 75 minutes on the writing job, only Dyad 6 decided not to re-read their work for Job 1, which was a substantial amount of time. Due to just having typed five keywords in the first phase, Dyad 16 came to an abrupt end in the second phase.

Researching, socialising, chatting, bargaining, organising, monitoring, awarding, punishing, and documenting are all examples of supporting activities. Since every supporting activity is based on the writing assignment, they assume that all supporting activities are included in a cooperative writing process.

It's more or less a mechanical process because the transcripts already documented who was talking and writing when.

Fictional names are also used.

Only one of the dyads tested used a different collaborative writing strategy. One member of dyad 16 wrote the handbook while the other drew a picture of the coffee machine in concurrently. In Dyad 16, there was hardly little bargaining.

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