CAN WRITING BE TAUGHT WITHOUT ACTUALLY WRITING?

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It is no longer uncommon for dyslexic students to make their way through higher educa-tion–at least in Denmark.[1] However, this is still a demanding path to choose. The School for the Dyslexic in Copenhagen has a long waiting list, which shows that in order for dyslexic students to take a master's degree,[2] a rather large effort is required. According to Torleiv Høien and Ingvar Lundberg, dyslexia is "a continuous disturbance in the coding of the written language caused by a failure in the phonological system" (24). This indicates that the dyslexic person's problems primarily are on the local level, i.e. wording and spelling. However, the Danish Center for Dyslexia's homepage shows that the problems go beyond that, since young dyslex-ic people have the following characteristics:

- may have difficulty answering open questions to texts
- may work slowly
- may either give little attention to details or focus too much on them
- may have difficulty planning time and assignments.

At the School for the Dyslexic, reading pedagogues, psychologists, and speech therapists are employed to help students read and write for their studies, but the school does not employ any writing teachers. Writing and in particular writing pedagogy is not weighted highly. The teaching of the dyslexic student, therefore, focuses mainly on reading, and when it focuses on writing, it is primarily on the wording and spelling—the local level. Thus, the main focus is on formal rules and not so much on form as a catalyst for the content.[3]

However, while the dyslexic student's problems appear on the local level, these problems are reflected on the global level. This can be compared to the effect Carl Bereiter and Marlene Scardamalia describe in saying that "immature writers" have difficulty writing rhetorically because writing competencies such as spelling are not yet automatic (150). When dyslexic students have problems on the global level, it may be that they do not have the resources to think rhetorically when they write. Besides having trouble with meeting the formal requirements of the written language, it is likely they have problems meeting the requirements of the content.

At the university level, the requirements for the dyslexic students' written products are still exactly the same as for the ordinary student. The good paper must be knowledge transforming—applied with a purpose and involve logical reasoning; that is, the application of knowledge must be warranted (Rienecker, et al. 77). The good paper is therefore rhetorical—it has an overall claim that it proves by its application of knowledge. On top of this, the good paper must register highly on

Bloom's taxonomy: there must be analysis, synthesis, and evaluation (Rienecker, et al. 76-78).

In April 2003, I taught writing to two dyslexic students, Pia and Mass. At that time, I was following a course in writing pedagogy and passing that course required teaching writing. I got in contact with Mass through a friend of mine and with Pia through the School for the Dyslexic. In order to help the dyslexic students address problems on the content level, I felt they would benefit from writing lessons focusing on the academic paper as a genre. These writing lessons should help the dyslexic student to develop knowledge-transforming and logical reasoning skills while taking into account their lack of resources on the local level.

In order to accomplish these goals, I believed it was necessary to give the dyslexic students an understanding of their papers that would set the stage for transforming knowledge and logical reasoning processes—in Linda Flower's terms they needed a fitting task representation (284).[4] They also needed to free resources from the local level to be able to use this task representation throughout the writing process. To achieve this, I thought of drawing and speaking one's way through the paper to take advantage of the dyslexic students' visual and oral resources. This could be combined with creating a fitting task representation by using Stephen Toulmin's model of argument.

This article draws upon my experiences working with Pia and Mass. In order to explore the dyslexic student's problems in terms of writing pedagogy, I will first show that dyslexic students do not only have problems reading and spelling but also have problems with the content level in academic writing. I will do so by comparing Geraldine Price's article on dyslexic students in higher education with Linda Flower and Linda Carey's paper on writing pedagogy. Then I will argue how an alternative approach to writing can be necessary and useful for dyslexic students. Finally, I will describe and evaluate how this worked out in practice when I tried out these methods teaching Pia and Mass.

Methodological Details

At the time of the study, Pia and Mass were both taking a bachelor's degree at university. Pia studies Sociology, Mass archaeology. I taught Pia and Mass separately, Pia for one four-hour session and Mass for two sessions of two hours each. I would have liked to split Pia's instruction into two-hour sessions, as it would have given Pia the opportunity to let the new knowledge sink in, and it would have given me the opportunity to reflect on the first lesson before the second one took place. But Pia insisted on only one teaching session since she put so much mental effort in working with her dyslexia (no matter how many hours she spends) that she needs a day to recover. I recorded my conversations with Pia and Mass on audiotape before, during, and after the instruction. Their quotations in this article come from these recordings or from emails they wrote to me while planning the instruction. Finally, it is important to mention that I translated into English all quotations taken from non-English sources.

The Task Representation of the Dyslexic Student

How can the problems of the dyslexic student be understood in a context of writing pedagogy? The answer may be found in a comparison between Price's article on the dyslexic student's problems in academic writing and Flower and Carey's article on task representation and its role in writing. Flower and Carey focus on three different operations that are essential for a good writing process and for the result of that process: constructing a representation of the task, integrating topic knowledge and rhetorical knowledge, and developing and applying problem-solving strategies.[5] In the following sections, I will discuss how dyslexic student writers experience each of these operations.

Constructing a Representation of the Task

According to Price, dyslexic students do not distinguish between organizing and planning, and they plan instead of organizing (21).[6] Price writes that planning is the systematic arrangement of details, whereas organizing is the structuring of the whole writing process. Furthermore, planning deals with *what* is to be done, whereas organizing deals with *how* it is to be done (21). Price also shows that the difference between the dyslexic student writer and the successful writer relates to when the planning of a paper takes place. Dyslexic students spend very little time analyzing the assignment and determining what he or she needs to do. They quickly make a plan, collect material, and write the paper. The successful writer, on the other hand, spends a good deal of time analysing the assignment, deciding what to do, collecting material, and then creating a plan for the paper (22).[7]

The distinction between determining what to do and creating a plan can be seen as the difference between having a task representation and creating an outline for the paper: "Task representation is an interpretive process that translates the rhetorical situation—as the writer reads it—into the act of composing. As such, it is the major bridge linking the public context of writing with the private process of an individual writer" (Flower 35). Task representation involves a meeting between the general conception of the genre and the assignment. When a writer stands before a given assignment, she creates a mental picture of the assignment based upon her conscious or unconscious understanding of the genre and the specific assignment: What is the purpose of the paper? What do I wish to achieve? What should be the focus? (Flower and Carey 285). And the task representation she creates will control what knowledge she decides to use and how it will be used (285). Consequently, it is essential for the quality of the paper that the writer has an appropriate task representation. When a dyslexic student plans instead of organizing, it can result in the task representation being too abstract (285).

Developing and Applying Problem-Solving Strategies

The final requirement for writing is to have strategies to draw upon when solving writing problems and choosing the appropriate strategy (Flower and Carey 287). Task representation

plays an important role in this operation as well. In order to identify and diagnose problems, it is necessary to have an explicit task representation (Flower 28). From one's task representation one can analyse whether the problems are on the global or the local level. If the task representation is not explicit, problems are often solved superficially (33). Also, a good task representation is dynamic and not static. At the same time that it guides the work on the paper, the task representation is molded and changed by the work (Flower and Carey 285).

When dyslexic students don't have a lucid task representation but primarily work from an outline, it becomes difficult for them to solve problems during writing. Dyslexic students only have their outline to turn to when new problems arise, and when they do not have the energy to deal with the paper's global level, one could imagine that mainly the superficial problems—the problems on the local level—will be solved.

Integrating Topic Knowledge and Rhetorical Knowledge

Price describes the cognitive operations of the writing process as an alternation between focus, structure, and subject (23). She argues that dyslexic students typically focus on the subject they are writing about as their primary task. They tend not to attend to structuring because their self-esteem in this area is low. They also overlook focus because of major difficulties in the two other areas (24).

Bereiter and Scardamalia differentiate between content space and rhetorical space and argue that if one not only thinks in the content space but also in the rhetorical space, an opportunity arises for transforming knowledge (149). As I use my knowledge with a specific purpose for a specific audience, as I think argumentatively, I may very well be faced with problems I would not have thought of myself. These new discoveries and problems influence my understanding of the subject and create an opportunity for a new understanding and, thus, for transforming knowledge (Flower and Carey 286). If dyslexic students have the energy to think only about the topic, they are not thinking rhetorically. And this is a great problem because it obstructs the possibility of their creating new knowledge, the rhetorical aspect of writing.

How Do These Theories Fit with Pia's and Mass' Conceptions of their Problems?

The absence of an explicit task representation, the absence of tools to diagnose and solve problems, and the absence of tools to think rhetorically were reflected in Pia's and Mass' thoughts about writing. Pia talked in a very general way of her feelings towards writing. She said that because she expends so many mental resources on writing, it can be difficult to keep track of where she is going. Furthermore, she said that her course of action is to create an outline to write from: she explained that she has been taught that it can be helpful to write the introductory section, the conclusion, and then the body of the paper,[8] but she starts at the top and writes the whole text from one end to the other. "I throw it away if it seems too weird and start again," she says. "I don't use writing as a way of think-

ing—you would have to enjoy writing to do that. Instead, I talk about my papers before writing them, because otherwise they will be much worse".

Mass says that his biggest problem when writing is the first phase—it is hard for him to get an overview of the paper. "I usually write a table of contents so I have all the headlines, but it rarely stays the same. Thoughts come up that I enter into the table of contents. It makes me feel that the paper does not have a clear focus," he says. For him, a good paper is a paper with a clear task definition. Also, he believes a good paper has to have an introduction where some questions are asked, the body where information about the subject is given, and a conclusion which refers to the introduction. About his process he says, "Here I begin by writing the sections where the reader needs to get knowledge. When I finish with that, I write the conclusion and finally the introduction, which I have worked on during the other sections."

Both Pia and Mass plan instead of organize; rather than constructing an explicit task representation, they work exclusively from an outline. When Mass describes the good paper as introduction—body—conclusion without explicating the relation between them, it seems that he does not make any rhetorical reflections: What is the purpose of the paper, What is the claim? This is also evident in Mass' understanding that his objective is to give the reader knowledge instead of persuading her.

In addition, Pia and Mass say that they do not edit their texts on the global level. When they have written an outline, they use that as their only basis for developing their essays. This means that their writing process is linear, as opposed to recursive, as they do not have a dynamic task representation. If they get new ideas or encounter problems during writing, they feel they lose focus and they do not have the tools to overcome these difficulties. Pia will even start all over again.

What Do Dyslexic Students Need?

Writing professionals argue that students should write as early on in the process as possible in order to guide their search for literature and to get closer to a task definition so that an explicit task representation will be created as early as possible (Rienecker, et al. 17). But because Pia and Mass do not have the mental reserves to concentrate on anything beyond the local level, they cannot use writing to get to a task definition. When Pia and Mass start writing, they need to produce finished material. At the same time, they need tools to create a rhetorical task representation, and they need to use it when working on their papers—a dynamic task representation. The questions are how it might be created and how it might be made applicable.

According to Howard Gardner, humans have other kinds of intelligence in addition to the logical (28). While one can question his division of different types of intelligence and whether they can be separated in the way he proposes, I find most important his idea that there can be several different ways to achieve the same goal (52). To address Pia's and Mass' difficulty writing, I could take advantage of some of their other resources to the extent that it was possible. My idea

was to utilize their visual and oral resources; for example, instead of writing, they were to draw and speak their way through their papers. In the rest of this paper, I will explain how I used Toulmin's model of argument and Pia's and Mass' oral resources in my teaching. To indicate that I am still concerned with the process but that that process doesn't have to be a writing process, I will from now on refer to the *process of the paper* instead of *the writing process*.

Pia's and Mass' Papers

In order to accomplish as much as possible in the short time available, I chose to leave the invention phase out by working on papers Pia and Mass were in the middle of writing or had already finished. Pia is a sociology student, and she was in the process of writing a paper in a group. The subject of the assignment was open but it was to be written on the topic "Qualitative Method." Thus, key elements in the paper were arguments for using interviews and a fundamental reasoning for and description of how the qualitative interviews were used as a method. Pia's group had chosen to write about how one's type of job affects one's identity using Anthony Giddens' and Ulrich Beck's theories about how the postmodern person to a great extent creates her own identity. For the paper, they were going to interview two university alumni, one without a job and one with a job.

In the written material Pia had sent to me, she had gotten through the introductory section, her first assignment for the group. She outlined the task definition, stating what the group was going to do and which theorists they were inspired by. Additionally, she had written a section about method, where she argued why qualitative interviews were the best tool for the group's examination. Finally, Pia had written a section where she briefly went over Giddens' understanding of postmodern society. From a draft it is difficult to say where Pia's paper would go and what challenges it would face. Many things can change before the paper is finished—especially when taking into account that Pia was not writing the paper alone. Still, I find some characteristics of Pia's writing relevant. On the formal level Pia's written text worked fairly well. There were a few spelling mistakes, and the language and the construction of sentences were, perhaps, not especially sophisticated, but this was not essential. It is more interesting that Pia's introductory section and her task definition—about half a page—did not show the argumentation on the global level. This means that while one might be able to interpret a logical movement in the text, one does not get a clear picture of where Pia was going, why her task definition was relevant from a scientific perspective, why she had chosen these specific theorists, and how she would answer the task definition. The only thing the reader was told was that the group intended to do interviews.

These omissions could indicate the lack of a fitting task representation in relation to the academic paper or it could indicate that Pia's group did not yet know where they were going. However, if Pia wrote the paper alone, the absence of argumentation on the global level would become problematic because, as she said, she writes the paper from one end to the other. This means that the missing elements this section needs would not be entered later on. Where more

experienced writers would see the missing elements in the revision, Pia would not revise on the global level. Therefore, Pia's original draft for the introductory section would probably be the final version.[9] In any case, Pia's paper was perfect for further study: she had the basic topic and an idea about what she wanted to do. This way we could concentrate on how she could incorporate the arguments and get control of the paper on the global level.

Mass studies archaeology, and his topic was also self chosen and was written in the subject "Humanistic Theory of Science." He, too, had to cover certain methodical areas in his paper, and he did this through a comparative analysis of the Faroe Islands' National Museum and the Danish National Museum. In the paper, Mass compares the two museums on the assumption that by comparing how they started and what ideas they were founded on, he would be able to offer a suggestion for future development of the Faroe Islands' National Museum. It is important to know that Mass is from the Faroe Islands[10]—something I was aware of before reading Mass' paper. I expected that he chose the topic because he had a personal interest and that he would have a lot of arguments for the Faroe Islands' National Museum's lack of development.

But the paper did not argue very much at all. It was structured so the reader got an overview of the development of the two museums and a description of the differences between their developments. The issue, as I had understood it, was that the Faroe National Museum had not progressed much, and near the end of the paper, Mass reflected on why it had not progressed and what might change the situation. But he did not reason here; rather he offered some random ideas. He wrote,

> I start thinking about the good old 1980s where the [new] museum wasn't built and at this moment the position as head of the regional archives is available and has been since the summer of 2002! Why? This leads my thoughts to the political authorities' interests, lack of interest or perhaps their indifference towards our history and cultural heritage. Is this an unconscious reflection or perhaps a maintaining of a weak or divided identity and self-perception? Is the future perspective of the museum so strongly connected with national identity that the political association with Denmark indirectly plays a part? These thoughts I cannot answer in this paper which is why I leave them open!

Offering ideas or further perspectives in a paper is not necessarily wrong; on the contrary it indicates that the writer can imagine further scientific research in the topic. The problem is that this passage is nearly the only place where Mass does not just describe. The reader, therefore, feels quite cheated when nothing more happens.

In his essay, Mass did in some respects transform knowledge by using knowledge to describe the development of the two museums. But the task definition that Mass had chosen was still asking for description; that is, Mass did not argue very much, and he did not register highly on Bloom's taxonomy. The motivation and focal point of the topic—the Faroe Islands' National

Museum's lack of progress—were not even mentioned in the introductory section. On top of this Mass' paper was characterized by very broad headings that asked for description, including "The History of the National Museum," "Background," "The Idea Behind the Danish National Museum," and "The Development up to Today." These headings tell nothing about Mass' arguments in the paper, and they set the stage for informing rather than reasoning. According to Mass, these headings are his only writing tool; therefore, it is not hard to understand that he easily loses track of the paper.

Toulmin's Model of Argument

According to Signe Hegelund and Christian Kock, Toulmin's model of argument can be a useful tool when writing academic papers. Hegelund and Kock's starting point is Flower's reasoning that many students have difficulty understanding the task definition of an academic paper. They argue that a specific interpretation of Toulmin's model should be helpful in understanding the academic genre, the paper's overall focus, its components, and how these components contribute to the overall focus. Hegelund and Kock's interpretation of the model means that it is applicable to academic writing. By now this model is a well known writing tool in higher education in Denmark, but as I have recently learned that it is primarily a Danish model, I will briefly explain Hegelund and Kock's interpretation to my mostly U.S. audience.

Of the six components, the Claim, the Data, and the Qualifier are the components closest to Toulmin's. In an academic paper, the claim is the paper's overall claim. That a paper even has such a claim is crucial to the academic genre: "The student should have something to say – a statement that is hers, not just a reiteration of statements made by one or several scholars she has studied" (Hegelund and Kock). The Data works as the evidence for the claim, and Hegelund and Kock elaborate how this manifests itself in the academic paper by pointing out three different types of data: theoretical data, specific data drawn from studies by others, and specific data drawn from one's own study. The Qualifier is the component that indicates how certain the Claim is; its function is to nuance the paper's overall claim.

The Warrant, the Backing, and the Rebuttal are viewed by Hegelund and Kock as the paper's application and discussion of the method. This is the point where the primary interpretation takes place. The Warrant works as the method itself, the Backing as the strengthening of the method, and the Rebuttal as a way to secure a discussion of the method. Hence, by interpreting Toulmin's original model, the newer model includes all the typical global components of academic papers (Appendix 1). Having said this, I want to point out that the model does not directly reflect the paper. After filling the model in, one cannot simply put its boxes together. On the contrary, Hegelund and Kock stress that a component such as the Qualifier can easily be present throughout the entire paper.

The advantage of this model of argument is that it is a top-down approach that "increases the student's sense of the paper as one focused on functional unity" (Hegelund

and Kock). Seeing the paper as one argument ensures that the paper's chapters or sections have a mutual dependence and that the paper makes sense (Rienecker, et al.162). Thus, the model helps to create a fitting task representation.[11] And this is exactly what Pia and Mass need.

As well as helping to create a task representation, the model has another strength: it is visual. By using the model, the student can see the whole paper on one sheet of paper. At the same time, the model makes it possible to have a dynamic task representation. If the student discovers problems during the process of the paper, she can use the model to identify and diagnose the problem, and if she finds out that the problem is global, for instance that the focus needs revision, she can edit and rewrite the model. This may contribute to a recursive process for developing the paper.

My Use of Toulmin

Despite all its advantages, the Toulmin model can be difficult to grasp[12], especially with a time limit of four hours. It is a fundamentally new way of thinking. First of all, one has to understand the model: what does each element represent and how are they linked? Also, the writer has to be able to apply it to his or her paper, and this is not just about putting the paper into boxes, but about seeing one's paper from a completely new angle—as one overall argument. This is exactly why we worked with papers that Pia and Mass had already written or were in the process of writing and talked about the papers before the model was to be filled in. This way, Pia and Mass could divide their energy between understanding Toulmin and seeing how his model could encapsulate their entire paper and viewing their own papers in a new perspective. With this approach, they would have a completely filled-in model of their paper, which we might not have had time for if we had started from scratch.

I made a big point of introducing Toulmin's model. I started the lessons by explaining the requirements of the academic paper. I briefly went through Bloom's taxonomy and made it clear that creating a fitting task representation is a problem for all students, not just students with dyslexia. Additionally, I stressed why the idea was to draw and talk, what I thought the advantages would be, and what perceptions I had of their problems. In some teaching situations, I think it can be worthwhile to hide one's agenda and one's reasons for using a specific method. However, in this case, where the students were aware they had been selected to work with me because of their dyslexia, where they did not know me in advance, and where my idea might seem quite alternative to them, it was important that they understood the reasons for doing what we did. People with dyslexia are often faced with prejudices, and the drawing/talking exercise could be perceived as condescending. By playing with open cards, I hoped that Pia and Mass would focus on their papers instead of my agenda. After this introduction, I explained Toulmin's model to them.

To begin the work, the students filled out the Toulmin rubric in regards to the complete paper and, after this, only concerning their introductory sections.[13] I felt that both levels were important

in order to show them the bridge between the global level and the local level. By using the model on the global level, they got a more explicit understanding of their task representation; they could see the main strategy of the paper, and from this they could create an outline for the paper. They also had the chance to appreciate the difference between outline and task representation, and they had the opportunity to see the work that lies ahead of creating an outline. By using Toulmin's model for the individual chapters, here the introduction, the student saw that the model also applied at lower levels. They could get an overview of what they might say in each paragraph and why, and they could discover that all they needed was to write the final text.[14]

How Did Toulmin's Model of Argument Work?

This was a lot to set up in just four hours, and I was prepared for mixed reactions, but both Pia and Mass entered their papers into the model, and the problems they had about what goes where I consider very small. I think this small success had to do with several aspects of the teaching situation. First, the teaching was one-on-one, so Pia or Mass could ask questions before getting confused. Secondly, because we worked with papers they had already spent time working on and that we had discussed, they did not have to concentrate on the topic but could concentrate on filling in the model. However, the fact that they could fill in the model straight away is not the same as actually understanding the model. In this case, I am not sure whether Pia could see the aim of the model, so the interesting aspect to me is why Pia did not understand the model.

In her evaluation, Pia said that it had been confusing that I had called the parts of the model of argument the Claim, the Data, and the Warrant. She said that it would have been easier if I had just called the Warrant *the method*. She said that it was confusing as a person with dyslexia when one did not understand one of the terms. Taken alone, Pia's suggestion does not necessarily mean that she had not understood that the model reflects the functions of the different elements of the paper. However, she also said that the model was a sort of outline, and this made me more certain. While I could have experienced the same reaction to the model among students who were not dyslexic, I do think that Pia's dyslexia influenced her misunderstanding. Laila Boye writes that "[dyslexic students suffer] the emotional consequences of their primary handicap which is that they do not have sufficient faith in their own abilities." This could mean that it does not take much for the dyslexic student to block mentally when faced with new knowledge, and this may be what Pia is referring to when she says that dyslexic students get confused. When Pia did not completely understand the term the Warrant, one could imagine that the psycho-dynamic dimension of the learning situation was influenced by her losing self-confidence and hence mentally blocking even more towards the term.

It requires more knowledge about dyslexia and more knowledge about Pia to determine whether I am correct in this matter. I decided to keep it in mind when I taught Mass later on and to spend more time elaborating the meaning and function of the term. In working with

Mass, I stressed that the boxes in no way indicated where in the paper they were to be placed but instead what their functions were. Mass was more positive than Pia regarding Toulmin's model. This was due to several issues. I was aware of Pia's critique when I taught Mass, and I therefore spent more time explaining and elaborating the model's function and the Claim, the Data, and the Warrant. Additionally, I split Mass' teaching into two blocks of two hours instead of one block of four. This way, he continued to work with Toulmin at home and had more time to relate to the model.

Oral Resources

I wrote that the Toulmin model of argument can work as a way of making the task representation both explicit and dynamic, but Pia and Mass still needed tools that would help them achieve these advantages. Since using this method they would not be writing, Pia and Mass needed another content-generating tool to get material to fill out and revise from. This tool was orality. The methods typically recommended in writing have certain similarities with the way we communicate orally. Christian Kock shows this in the article "Speech as a Content-Generating Strategy in Writing." He draws on Elbow's term freewriting, letting the writer write freely without stopping and revising sentences or reflecting upon whether the writing is good enough, to explain that this is exactly what happens when we speak (64):

> When we speak we do not usually get caught up in the text we have just produced; we can never get it back or improve on it, so if it was not good enough, our only option is to produce more text. As for monitoring our spoken output, it is no problem to hear oneself and keep talking at the same time; rather, it is impossible to do only one of those things: we automatically hear ourselves, and this input probably acts as a stimulus to new output rather than as an obstacle. What we hear ourselves say will often remind us of something else that we would also like to say. (66)

First of all, while speaking, one is not put off by problems on the local level—whether one speaks and structures one's sentences correctly. Secondly, one can think while speaking precisely because one inevitably hears oneself and thereby thinks of new ideas. And this is exactly what Pia and Mass needed. They needed to generate ideas without writing, so the resources they used on the local level were released and could be used for thinking on the global level. By speaking instead of writing, they had the same opportunity as "ordinary" students to slowly build and revise their task representation before writing the finished text.

How Did I Use the Oral Resources?

Since Pia and Mass had already written or were in the progress of writing their papers, it might seem that our talk would just be a reiteration of what they had already written. However,

because Pia's task representation was still very diffuse, we could talk about where she wanted to go with the paper and why, so her task representation became explicit. For Mass, who had primarily described instead of reasoning, the point was how the paper could be more knowledge-transforming and argumentative to register higher on Bloom's taxonomy.

I started by asking questions related to their papers' global level, and I did this twice. First, we had an informal talk about the papers, and based on this conversation, they filled out the model of argument as well as possible. Then, I asked more specific questions about their papers: What was the purpose of their paper? What was the overall claim? Why was this the overall claim? What was the problem? How could they prove this? What were the possible refutations? The entire conversation was recorded on a tape recorder, and the students listened to the recording immediately afterwards. I hoped that they would realize that the model does not have to be static but can be elaborated and changed. When they had to enter the introductory section into the model, we repeated the same process. First, we had an informal conversation about the section, and they filled the model in as well as they could. After this, we had a more demanding talk that was recorded, and they filled in the model by using the tape recorder.

This process had several advantages. Filling in the model of argument and the conversations about the papers interacted. Even though we worked with two different levels (the whole paper and only parts of the paper), the process provided an example of how each stage could be repeatedly revised. At the same time, the conversation had a purpose: the model had to be filled in. This meant that the students did not need to transcribe but could write key words down; furthermore, the conversation would be applied to something completely concrete immediately after having it. Also, Pia and Mass knew that the questions I asked were meant for the model and, therefore, would work as a sort of imitation. My questions showed Pia and Mass how they themselves could ask questions about their own papers. Thus, my questions not only functioned for here and now but were another way of giving Pia and Mass an understanding of the genre and, therefore, also a way of helping them towards a better task representation.

How Did It Work Out?

Pia expressed a great deal of excitement about working with the tape recorder, whereas Mass did not find it particularly valuable. This difference has several explanations. First, Pia was aware that speaking about her papers with others prior to writing had a clear influence on them, which may have made her more positive towards the idea before even trying it. Furthermore, through the School for the Dyslexic, Pia had obtained a computer that read her writing aloud, and even though she had not tried recording and listening to herself, she had worked with listening as a tool for writing.

There was, however, another interesting point that made itself clear. When we spoke together, it was clear that Pia and Mass had many ideas connected to their task representation that seemed to be between the lines or even not present in their papers at all. This was especially true

in Mass' paper. It had puzzled me that Mass' paper did not argue very much. Mass had many arguments, good observations, and interesting issues when we spoke, but these points were not realized in the paper. When I pointed this out to Mass, he was quite surprised: according to him, we were discussing exactly what he had already written in the paper. In this situation, it seems reasonable that he didn't find our conversation a significant mechanism for generating ideas. It's clear that even though students with dyslexia have an explicit task representation, it may not actually be realized in the paper. Obviously, I can not directly compare what Mass thinks he has written in his paper with the task representation he had when writing it. But his conception of what he had written must, in any case, reflect some parts of his task representation, and this same task representation was not reflected in the paper.

Although the evaluations were mixed, I found the exercises useful. Both Pia and Mass got new ideas from the conversations and the tape recordings. It became clearer to them why their task definitions were interesting—and why they were task definitions at all. Mass decided that he would argue that the Faroe Islands' National Museum's lack of development was a result of the Faroe Islands' relationship to Denmark. He also realized that this claim would control the structure of the paper. In the conversation about the paper's introductory section and by filling in the model of argument based on this section, his argument became apparent. Where Mass previously wanted to compare in order to see the differences between the two museums, he now wanted to compare in order to explain what the problem was for the Faroe Islands' National Museum.

What Happened When Pia and Mass Wrote?

There was not much time left in our sessions when Pia and Mass got to writing. Pia wrote about one page of her introduction; Mass only had time to write sub-headings for his. However, interesting things happened at this stage of the teaching as well. Even though Mass did not write finished text, his sub-headings showed a remarkable difference from his original paper. He had not worked with sub-headings previously, only with chapter headings. Now he had many sub-headings, approximately one for every ten lines of writing. Finally, and most importantly, his sub-headings showed the argument that was now present. Where the headings had been very broad, the sub-headings took the form of claims. The overall claim in this introductory section was that a comparison between the two museums with regards to understanding the Faroe Islands' National Museum's lack of development was a scientifically interesting issue. To support this, Mass would argue that the Faroe Islands' National Museum was underdeveloped and that, precisely, the Danish National Museum's history could shed light on this matter. He would also argue that problems had emerged from founding ideas for the museums and the crucial role of the national identity.

Mass' sub-headings reflected this reasoning, so even though he did not get to writing text, I think that he gained a new sense of control. If he lost the grasp when writing the paragraphs, he would no longer feel that the paper was slipping away from him. He would now be able to look

at the sub-headings and the model of argument to see what his thoughts were. Although I cannot be certain, I feel that if Mass had written text, it would have been a lot more evidence-driven, and he would no longer have had the feeling of losing focus, as he had described before the lesson.

Pia got from the sub-headings to writing, and here also big changes took place. Her reasoning became more explicit, and her direction was much clearer. It became apparent what function the different theorists would have in the paper and why her problem was relevant from an academic perspective. But even though I commended her and repeatedly explained the differences in her drafts, she could not see it. Instead, it seemed as if she felt stressed and uncomfortable.

Because Pia clung to the realization that the text she had written previously was more eloquent and had fewer spelling mistakes, she could not see the potential in the new text. At that point, her criteria for success was still the well-written paper. Prior to the instruction, Pia expressed the same tendencies, saying that if there were too many red lines (the lines the spelling check on the computer makes when it cannot recognize a word), she became uncomfortable and stopped. "Red lines" is not a defeat for most common writers but it seems like a defeat to Pia.[15] If this is true, Pia needs to realize that a poorly written paper with good content can be at least as good as a well-written paper without content.[16] At the same time, it can be said that since Pia chooses to be taught academic writing, she shows that she actually is aware of other criteria for success.

Conclusion

Because Pia and Mass were respectively finished with their papers and in the working process, they worked with topics they were quite familiar with. This made their use of the model and their conversations about the papers start at a completely different place than if they had only just chosen the topic.

However, the results do show potential in the teaching method and in this case, at least, it made a positive difference. When Pia and Mass wrote at the end of the lesson, they reasoned more and had a better overview. They knew where the paper was going and they knew how to get there. Instead of writing linearly after only few speculations about what they wanted the paper to do, they had now been through a long thought process and were ready to write. Although I am not sure whether Pia and Mass could see it themselves, their task representation became more explicit, and this freed mental resources to actually use this representation in the paper. Before, Pia and Mass had no other tools than creating an outline as a starting point. Now, they actually had tools that helped them in their reasoning and that they are capable of applying; now, they just need to integrate the tools for themselves.

Tools for writing without writing do not necessarily only apply to dyslexic students. One could easily imagine "ordinary" students benefiting from them as an alternative to writing. This is a subject for future research.

Notes

[1] This paper builds on research that has taken place in Denmark. This means that the problems in question can be different according to different school systems, but it does not mean that the result of the research isn't of relevance outside Denmark.

[2] In Denmark, we start off by taking a bachelor's degree which only takes 3 years and then continue to a master's degree. It is extremely uncommon in Denmark only to take the bachelor's degree.

[3] I monitored a writing class at The School for the Dyslexic on December 3, 2003, and there are a few writing pedagogy ideas that have been accommodated such as freewriting. But the feedback given on the freewriting was solely given on the local level.

[4] This will be dealt with more extensively later on in the article.

[5] Flower and Carey have a fourth aspect as well: that in order to achieve creativity in writing one is to work with ill-defined problems (284). I have not included this aspect since the academic assignment in Denmark in its essence is ill defined.

[6] According to Price, the reason that dyslexics have these problems is that their linguistic competencies are not fully developed. Because of the focus on the decoding of individual words and the individual word's semantic meaning and spelling, they have not developed the meta-linguistic abilities that are essential in the decoding of the deeper structures of the language (20).

[7] Price describes the successful writing process as linear (as opposed to a recursive writing process)—something that is not particularly rhetorical. Having said this, Price writes in the same article that when one writes there is an alternation between focus, structure, and subject (23), and this does not point towards a linear writing process. In addition to this the essential aspect in this context is the difference between the analysis and the planning of the assignment and not whether the best writing process is linear or recursive.

[8] In my view, this shows a misinterpretation of the good writing process. My guess is that what Pia has been taught is to get an idea of the task definition, work on the body of the paper, and then return to her task definition and change it as her work with the body of the paper comes along.

[9] In this particular case I am aware that since Pia is writing in a group, one could imagine other members of the group doing the editing that Pia does not do herself.

[10] For American readers it may relevant to mention that the Faroe Islands for many years was a Danish colony. The Faroe Islands have had home rule since 1948, and because of their huge economic problems in the 1980's, it is not unproblematic for the Faroe Islands to become completely self-governing even if they wish to be. The Faroe Islands are therefore economically dependent on Denmark, and Denmark still has the final say in legislative matters.

[11] The applicability of Toulmin's Argument model has been criticized several times. The important critique in this context is Fulkerson's, in that it deals with using the model for academic writing. Fulkerson criticizes the warrant's field dependence, which makes it difficult to decide who determines the validity of the reasoning (55). However, I think that Hegelund and Kock's argument for the model's use as a heuristic in the composition of academic assignments refutes Fulkerson's arguments. Kock and Hegelund argue that the warrant at any time is constituted by the method of the given subject. Consequently I can not see any problem in using the model as a writing pedagogical tool in academic writing.

[12] I have learned from other writing teachers who have used the model of argument that it looks easy when empty, but filling it in is a different matter.

[13] Thus, I did not only use the model on the macro level (Hegelund and Kock's argument), but also on lower levels, somewhere in between micro and macro level. It could be discussed whether such a transformation is unproblematic, but as I pointed out that not all boxes in the model had to be filled in or explicit when we were no longer on the global level, I do not think it was a problem.

[14] I am aware that when I chose to work on the introduction it might not change their perception of the process of the paper as linear. At the same time I think it was the best choice: in the introduction it is reflected whether one wants to reason and transform knowledge. The problem to be examined is presented and more importantly is legitimised (Rienecker, et al. 132). I therefore chose not to prioritise explicitly changing the linear process of the paper (hoping that it would happen as a bonus by simply using Toulmin) and instead primarily focus on changing the task representation and giving Pia and Mass tools for doing that. I also stressed to the students that the primary interest of the introduction is its function.

[15] Pia's comment is a good example of what I described earlier on: that freewriting does not work for the dyslexic.

[16] I am aware of my separating content and form, but since it is form in the sense of correct spelling as opposed to, for instance, wording, I find it necessary to make the distinction.

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