

The development of an interactive writing tool

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Abstract

This paper outlines the development of a series of interactive tools designed to support a group of postgraduate students with their academic writing. The development began in response to a request to support a group of postgraduate university students with the aim being to enable them to have a better understanding of analytical writing and to produce Masters Exegeses with a higher level of analytical writing. The initial interactive tool was used in a workshop context and was designed to help students differentiate between descriptive, analytical and critical/evaluative writing and move their writing towards more critical writing. Student feedback from this workshop led me to further consider what the process of academic writing entailed and how to support the crafting process and the shift from being a writer to being a reader of that writing. A second interactive tool was designed to facilitate this shift, while at the same time offering prompting questions to support a move from descriptive to analytical, critical and evaluative writing. This tool was modified to include the acronym for a commonly used prompt to suggest useful processes in writing, such as elaboration and linking. Finally, a third interactive tool was designed to facilitate the editing process as a whole. Further iterations of the interactive tool are planned and investigation has begun into the possibility of creating a piece of interactive software based on the models already in use.

Background context

This series of work began following the request from a postgraduate Creative Arts programme coordinator who reported that, although students gained good grades at Masters Thesis examination, the thesis examiners reported that the level of analytical writing from the students could be higher. The problem posed for me in designing a workshop to address this issue was how to support these students to firstly understand what analytical writing was and then to develop analytical writing in their exegesis writing. An exegesis is the written explanation detailing the thinking behind and the development of a student design or art project that accompanies a creative project in examination for Masters of Design and Fine Arts.

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I thought an interactive workshop structured to facilitate students to examine and discuss their own writing would be a good way to start addressing the identified need. When developing a plan for an interactive workshop with the students, I had two main concerns. The first concern was how to present the relatively abstract concept of critical analysis to a group of postgraduate university students whose main focus was creative work. In order to address this aspect, I focussed on the creation of a manipulative tool that enabled the students to engage in activities that helped them differentiate between descriptive and analytical writing and facilitated the crafting of writing from a descriptive style to a more analytical style. As a teacher, observation of the powers of manipulation of concrete objects to facilitate discussion and understanding of more abstract ideas led me to believe that such an approach might be useful. These observations are supported by early models of experiential learning proposed by theorists such as Lewin, Dewey and Piaget (as cited in Kolb, 1984). Kolb (1984) aptly summarises experiential learning as: “the process whereby knowledge is created through the transformation of experience” (p. 38).

Kolb’s (1984) principle, in conjunction with an understanding of learning styles such as those described by Honey and Mumford (1992, as cited in McLoughlin, 1999) was applied to the design of the workshop activities. The activities involved experimentation, in the form of manipulating phrases of the students’ own writing, followed by a process of review and reflection, via discussion, about the writing. The purpose of these activities was to help students understand characteristics of different styles of writing and to consider whether their own writing was descriptive, analytical or critical/evaluative.

Another concern was to create a device that would give the students the ability to independently continue to analyse and improve their own writing through crafting whenever they were engaged in the writing process. This tool will be described in the section below. I believed that such a take-away device would offer the opportunity for full integration of the learner’s knowledge as described by McLoughlin (1999) to fulfil the final stage of the learning cycle proposed by Honey and Mumford (1992, as cited in McLoughlin, 1999). It was hoped that effective learning and development of understanding would thus continue long after the initial workshop had taken place. As a learning advisor, I feel that it is important to continue enabling students to develop their independent learning skills. It was with this dual purpose of developing initial understanding of the stylistic differences in writing and creating a useful interactive tool for further independent use, after introduction of the tool to students during the workshop, that the first model was designed.

Stage one: Writing workshop one

Research on analytical and critical writing in a tertiary context led me to the Learning Development site at Plymouth University and a very useful model for developing writing which encompasses a series of focusing questions which can act as prompts to enable students to produce a certain writing style. For example, it was suggested

that questions such as When? and Where? tend to elicit a descriptive response whilst questions such as How? and Why? tend to elicit a more analytical response, and a question such as So what? tends to elicit a more critical response (Plymouth University, 2010).

Material from this site was adapted to form the basis of a chart style worksheet which divided writing into three categories: descriptive, analytical and critical/evaluative writing. These three categories were designed to create an awareness of the different writing styles and enable clear differentiation of descriptive writing from analytical and critical/evaluative writing. Material about reflective writing from Portsmouth University (n.d.) was also adapted into the chart, giving a fourth category. This category was reflective writing, which was important in the workshop context, as exegesis writing requires students to consider and reflect on their own meaning making in a creative arts context.

In order to facilitate self-analysis of student writing, the chart was designed to be printed in landscape on A3 paper with space under each category for the students to place their writing according to which questions it best answered (see Figure 1).

After a brief introduction to the concept and aim of the workshop, the students were invited to cut their writing into phrases and place the phrases into the appropriate frame space on the chart. Students had previously been asked to bring a printed, double spaced, single sided sample of their writing to the workshop. After this activity, students were then encouraged to form small groups of two or three and discuss the rationale for placing their phrases into each portion of the framework. The purpose of this small group discussion was for the students to have the opportunity to discuss their thinking about their writing and consider the more abstract concepts of writing styles. This discussion, it was hoped, would enable them to further learn about and understand the difference between descriptive, analytical and critical/evaluative writing, after the concrete experience of physically placing phrases of their writing into different parts on the A3 chart. The significance of discussion to the learning process is a concept espoused by Freire (1998), who claims: "Learning is a process where knowledge is presented to us, then shaped through understanding, discussion and reflection" (n.p.).

Much discussion arose from this activity as the students justified why they had categorised their writing into the different sections on the chart. It was also observed that, while most students engaged readily in the activity, a few declared they were not writers and had no interest in discussing their writing.

Developing a specific writing style

Style	Descriptive	Analytical	Critical / evaluative	Reflective
Examples of Questions to ask	What is this about? Who is this by? When does this occur?	How does this occur? Why did this occur? What if this were wrong? What are the alternatives?	So what? What does this mean? What are the implications? What next? Is it transferable? How and where else can it be applied?	Exploration and explanation of events usually written in past tense What are my next steps? What have I learnt from this?
Example phrases or words	This project is focused on..... In the context of...	The alternatives to this are.... If....x was not done then y would happen	The implications of this are..... This experience was convincing in that.....	For me, the most significant learning was..... I thought/felt
My writing				

Figure 1. *Chart for writing workshop one.*

Material from Plymouth University (2010) was adapted into the chart as the basis of three categories: descriptive, analytical and critical/evaluative writing. Material from Portsmouth University (n.d.) was also adapted into the chart, giving a fourth category of reflective writing.

The second part of the workshop involved the students looking at where most of their writing was placed on the chart and then, using the prompting questions on the chart, discussing what they would have to do to move their writing to a more critical, analytical level. Again there was much discussion generated about the writing. From observation it became clear that the students, once alerted to the characteristics of each style of writing, were able to differentiate between descriptive, analytical and critical/evaluative writing. Furthermore, once they had become aware of how they could modify their writing in order to move it from one category to another, they became quite animated and, working in groups, began crafting their writing to make it more analytical or critical. Oral feedback from the students reflected that they were able to examine their writing and categorize it according to style. The

students also reflected that the prompting questions were useful in enabling them to craft their writing to become more analytical, critical, evaluative or reflective. Once the workshop was completed, the students took the charts away with them to use independently with their writing.

Stage two: Writing workshop two

A later discussion with the Masters course coordinator followed feedback comments from a student supervisor and it appeared that this focus on writing style may have been initiated too early in the writing process and possibly may have served to stifle the creative flow of the students' writing. It became apparent that these students required not only an understanding of the difference between different styles of writing such as descriptive and critical writing, but also that greater attention needed to be given to the writing process and when the kind of analysis of writing suggested by the chart should be conducted. What has also become very clear through the development of this interactive tool was that writing is a much more complex, non-linear process than I initially perceived it to be.

Reading research by Winchester (2007) about the writing and editing process led to the development of another workshop which attempted to address several issues. The first issue was the facilitation of the shift from being a writer to being a reader of that writing, so that students could have a supported way of reviewing what they had written. The second issue was to situate the crafting process within the task of writing. The final issue addressed was how to support students to maintain a creative flow in their writing whilst becoming more aware of the writing styles they were using. This workshop explored the writing process and postulated where the students might enter into a crafting exercise such as we had introduced in the initial workshop. See Figure 2 for the segment of the worksheet situating the crafting process in writing that was presented to the students in writing workshop two.

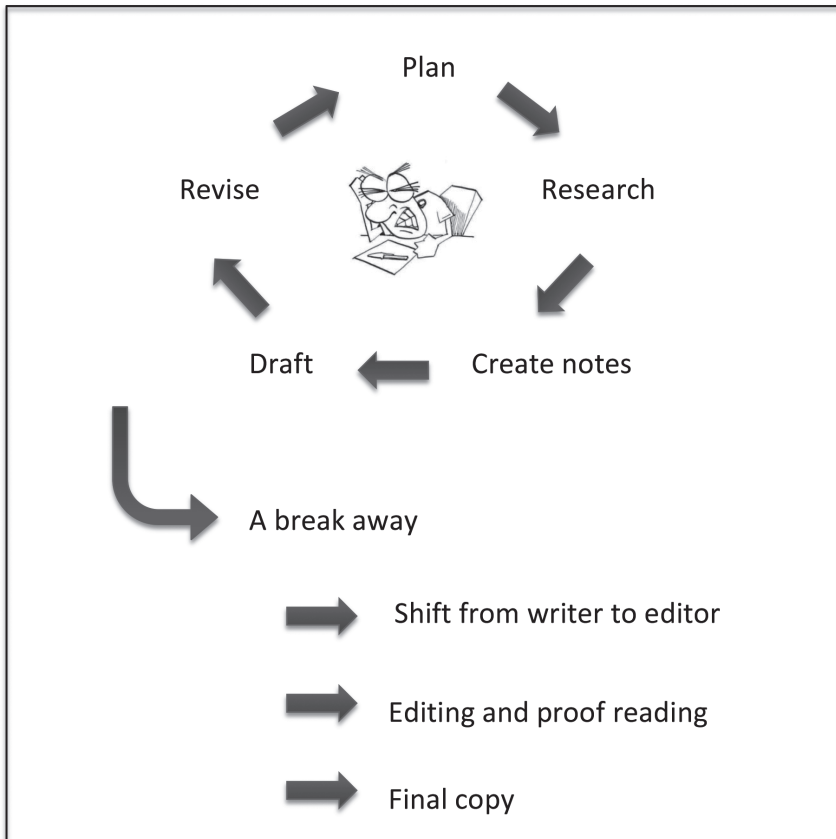


Figure 2. *Worksheet presented for writing workshop two*

Further details of how the student could approach each stage of revising, editing and proof reading were also included in the workshop hand-outs, along with suggested websites for students to access for individual support. After delivering and reviewing the second workshop, the coordinator and I both felt that this workshop went some way in addressing the concerns about creative flow whilst providing the students with a deeper understanding of writing styles and the writing process itself. The full worksheet, which contained further accompanying advice and recommended websites also offered the students a way to continue to develop their understanding in independent, needs based manner.

However, since the creation of the second workshop, I have been further influenced by the model described by S. Starfield (personal communication, September 3, 2012). Working in an Australian tertiary education context supporting thesis writing at university, Starfield proposes that writing is a very complex process and that the shift from being a writer to being a reader of that writing is fluid and on-going throughout the different stages of the writing process. Future worksheets presented to students will reflect this new understanding of complexity and fluidity.

Stage Three: The interactive writing tool

The response of students who were offered the chart in the first workshop to help them develop a more critical voice in their writing, had been very positive. Moreover, outside the context of the original exegesis workshop, the chart had been used as a discussion point with many students in individual consultations when they had asked about critical and analytical writing. It was anecdotally reported by several students that they found the so what question the most useful. However, the cutting up of the writing to place on the chart, although facilitating an understanding of analytical writing and offering much opportunity for discussion, was not the most practical or time efficient way to enable students to analyse their writing. I still felt that there had been some merit in the original interactive tool and so gave further thought as to how it could be developed in a way that was not so intrusive in first draft writing, and could be used as required by the students when they wished to review their writing.

Bearing in mind my preference for having a manipulative tool, I designed a frame to go around student writing with the key prompting questions from the original chart up the side and across the top of the frame.

The concept behind this thinking was that once the writing was drafted, the student could place the frame over the printed draft and run this draft through the frame to interrogate the writing with the prompting questions on the frame. Thus the student would be able to analyse the writing to ascertain the writing style, then craft the writing to give an analytical or critical/evaluative response, or, if required, a reflective response. Students who were offered this frame were keen to use it and understood its application. One student reported that she did not know how it worked, but that the tool enabled her to move outside her writing and then to critique it in a way she had not been able to previously.

A further refinement of the tool was the addition of a directional arrow across the top and colour to the side panels to visually encourage the students to make a movement to more analytical writing. The window was narrowed vertically and widened horizontally to keep the focus on one paragraph of writing at a time. The acronym PERL and its explanations (Point, Elaboration, Relevance, and Link) were included in the appropriate side and top panels (See Figure 4). Some tutors use the ideas behind this acronym to prompt higher level writing in analysis of research and I thought the inclusion of this acronym would reinforce such prompting.

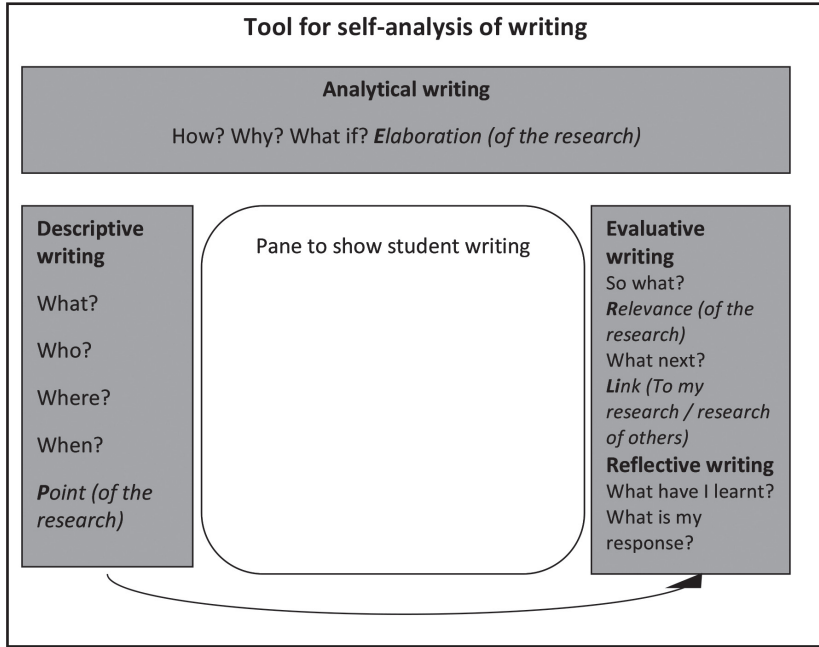


Figure 3. Stage Three. The interactive writing tool

Stage Four: An interactive editing tool

Using the principle of a tactile tool with prompting questions, a further model was created to provide a specific tool for editing (See Figure 4). This interactive tool was based on the process of editing as outlined in a video on OWLL Massey University, by Martin McMorro (n.d).

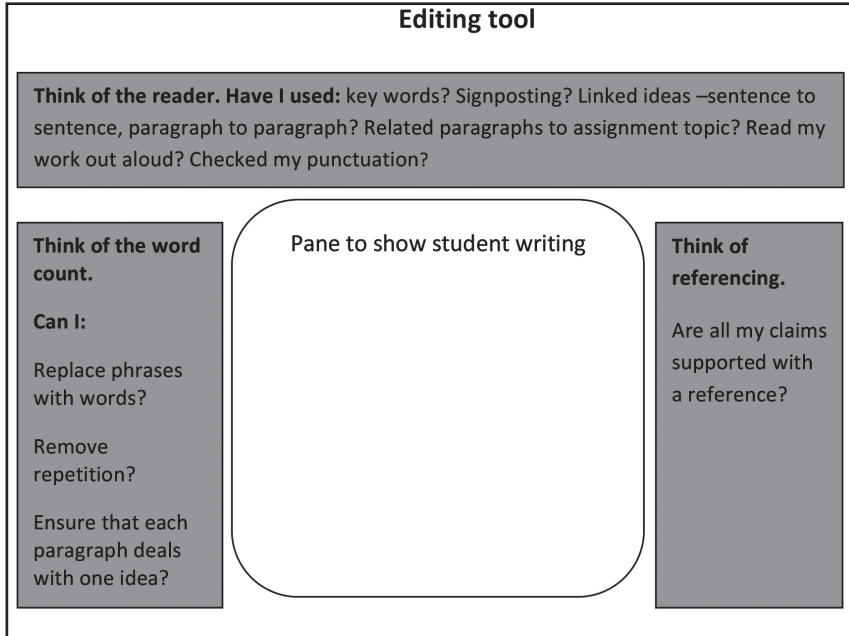


Figure 4. Stage Four. The interactive editing tool

Following a short workshop demonstrating the use of the chart and interactive tools at the 2012 ATLAANZ conference, several attendees expressed an interest in using the tools in their tertiary institutions. Copies were distributed upon request. Several more iterations of the interactive writing tool are planned, including some that will function on structure rather than style.

All versions of the tool have been offered to and used by a number of students across a range of levels and in many subject areas outside of the original Master of Design workshop context. Oral response to the tool has been positive with students reporting it useful in both the crafting and editing processes, as well as for developing an understanding of the characteristics of the different styles of writing. One student involved in the peer mentoring system found the A3 chart so useful that she used it with the students she was mentoring.

Lamination of the tools has ensured that they are reusable and robust. However, I was concerned that not all students produce paper copies of their work anymore and so it was with this in mind that I began work on stage 5 of the interactive writing tool.

Stage Five: The development of an electronic writing tool

The final stage of the project was to write up a brief for the tool to be converted into a piece of software. After discussion with the manager of a design laboratory, a written brief for software requirements was prepared. At the point of writing this article, advice has come back that the software in the form of a Windows plugin will require considerable expertise and be costly to develop. Further investigation is now proceeding into the possibility that the tool will become part of a web based design and into funding possibilities. It may be that the development of the writing tool could become part of a research project and as such funding for development may be available.

Conclusion

Initially this project had started out as the design, planning and delivery of a workshop for Masters levels students to support the understanding and development of analytical writing within a context of exegesis writing. The process of designing and delivering this workshop and the reflective discussion that followed led me to consider a variety of aspects of the writing task and to consider when and how intervention to improve quality of writing could take place. This in turn had led to the development of interactive tools that could be used by the students independently as and when required. The initial design of the tools to analyse writing style has been extended to encompass the editing process. Anecdotal feedback from students about these interactive tools has been positive and the ideas have been responded to favourably by colleagues at a conference workshop. Exactly how the usefulness of such items can be gauged in a meaningful way is a further point of reflection and possible research. However, what can be said is that these interactive tools seem to provide a useful framework for developing a discussion about the characteristics of different writing styles and offer a mechanism through which students at tertiary level can begin to analyse and modify their own academic writing.

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