

# Writing about writing in higher education: Modelling good practices

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I write about and model good writing practice for application by higher education teachers and students. My aim is to provide a useful writing resource through modelling what I consider to be good practices. I start with this formally structured Abstract which contains introduction, methodology, discussion and conclusion components. My methodology utilises literature review and personal views drawn from experience as an academic writer and teacher of writing skills. Key suggestions for effective writing are to develop a main message tailored to the identified audience through a story-telling approach which comprises a 'stand-alone' document that can be comprehended by a lay-person. Creating well structured sections with descriptive headings and supporting text sequentially consistent with the Title and paper aims ensure promises to the reader are upheld. Careful, creative and convincing use of references is vital in argument construction and ensuring credibility. While this paper may serve as a useful writing template within the higher education sector, effective writing requires practice and revision. The art of good writing is a lifelong pursuit. I demonstrate that creative writing can be produced whilst simultaneously adhering to the guidance I advocate.

## 1. Introduction: Setting the scene

Effective academic writing is vital to success in higher education and in professional life beyond the university (Rai & Lillis, 2012). The personal mantra I express to students is that: *You are only as good as your communication*, and I share with them Tredinnick's view that "writing is about the toughest and most disciplined thinking work you'll ever do" (2008, p39). Writing provides an opportunity to create an enduring legacy for expressing personal and professional perspectives in order to communicate with others. To ensure that written work is actually read by another person, it is essential to develop effective writing skills. By effective I mean being creative (engaging to the reader) and containing convincing content. Understanding effective ways to teach academic writing skills remains an abiding interest in higher education (e.g. Vardi, 2012; Maher, Feldon, Timmerman & Chao, 2013; Wisker, 2013).

My aim in this paper is to model and to discuss what I consider to be good writing practice for short report writing, such as undergraduate or postgraduate course work written assignments, Honours or Masters dissertations and journal papers. My intended audience is thus higher education teachers and students alike. To demonstrate important writing skills explicitly, I present this report in keeping with my preferred approach. I also provide explanations of the approach I take in academic writing and when teaching writing skills. Many works cited in this paper advocate a similar writing approach but to date I have not found a published model of effective aspects utilising the manner I have adopted. By modelling writing skills in this way, this paper may potentially serve as a template for aspiring academic writers. It is an example of an uncapped learning resource which I have been applying (in unpublished form) in my own teaching for many years now.

My methodology is a mixture of phenomenology (Saljo, 1997) and reflexivity (Fox, Martin & Green, 2007), derived from 25 years as an academic (including six years as an editor of an international journal), in concert with literature review that seeks to understand previous research related to the topic and enable me to join in the on-going conversation between authors and theorists (Bloomberg & Volpe, 2008). I acknowledge that the available literature on writing skills is massive. My selection is specifically biased toward journal articles about writing and publishing academic papers. This seemed

appropriate given I am modelling skills for short report writing and journal articles are the principle form in the published literature.

The topics I discuss are those I personally believe to be most important derived from personal experience. However, I found most of my own views to be already well established in published sources and thus cite them accordingly to support my argument. Matters and advice concerning effective report writing are common across many disciplines, as a scan of journal titles for works cited in this paper attest. In this paper, I write in my own personal preferred style. It is important to realise that different disciplines, institutions, journals and individuals may demand specific format requirements for academic writing so authors should comply with those as appropriate.

For consistency with my aim, I note here that an Introduction should clearly set out the aim and scope of the report content. For me, identifying desired audience or readership is an important extension of the aim. It also seemed appropriate to include my methodological account in this introduction section too as a bridge between my aim and the scope. I uphold the view of Arceci (2004) that methodological approaches are critically important to include in any academic paper; I require all my course-work students to include a methodological component in their writing assignments.

With respect to scope, I focus upon a limited number of specific writing skills related topics; the ones I most often find myself commenting on when marking student material and when peer-reviewing journal papers. These are grouped around effective delivery, building a credible argument and reflections on the art and science of writing. I do not discuss basic issues such as spelling and grammar as I assume that all academic writing would scrupulously comply here. I conclude with summary recommendations for effective writing.

## **2. Effective delivery: Message, audience, story-telling and voice**

My discussion of effective delivery pertains to the final version of a paper, not on how to actually get motivated to write in the first instance. I am aware that suffering from writer's block is seemingly common to most writers, and also that much advice exists for getting writing started including techniques such as freewriting (Elbow, 1973), setting deadlines (Kearns & Gardiner, 2011), planning writing around figures, tables or other data-sets (Arceci, 2004) and deciding to only write one section at a time (Powell 2010). No matter how a writer gets motivated to commence writing there are important things to be clear about in the final editing and delivery which is the focus for my advice. I address four aspects in turn: messaging, audience, story-telling and voice.

### **2.1. Asserting the main message**

Reports or papers are easier to write and to read if they focus on a main message; or what Cahill et al. (2011) refer to as 'finding the pitch'. The main message is the reason why an author wants to write in the first place, and is the key interest point for a reader. Writing is effective when the author's intended message is easily conveyed to and understood by the reader (Saver, 2006 cited in McIntyre, 2007). Conversely writing that presents a mixed message with one part of the message out of synchronicity with the other parts creates doubt about the sincerity or believability of the author (Light 1998). Elbow (1973) observed that it is the human condition to send out lots of messages and that it is rare "simply to send a message with no other conflicting messages" (p.131).

Brown, Pressland & Rogers (1993) simultaneously model and emphasise the importance of having a main message; maintaining that the main message should appear at least four times in a written work (title, abstract, introduction and discussion). Minto (1998) advocates providing the entire message of writing to the reader in the first thirty seconds of reading, meaning that the title and introduction play a vital role.

I focus my own writing by always writing to a working title that conveys the key message (or at least purpose), and by having a clear statement of aims placed at the top of the page for writing work in progress. I urge my students to adopt this approach. I may go through many iterations of a working

title during the writing process before settling upon the final version. Titles are especially important as they will influence the reader's decision to read a paper (Alexandrov and Hennerici, 2007, McIntyre 2007) and Carraway (2006, p.383) maintains the title is the 'single most critical item' because it is the first point of engagement with an audience. In a world of online searching, I would advocate that the opening sentence of a paper (i.e. in the abstract) is equally important for engaging potential readers, as internet search engines often display at least the first sentence along with the title and author information. Conveying the main message in the title and opening words is a powerful way to write journal papers (Brown et al., 1993; Powell 2010). In the spirit of Arceci (2004, p.208) suggesting that the title and abstract 'must entice readers to read the entire article', I evoke a fishing bait analogy when communicating writing skills to students regarding the title and opening words.

The main message should also of course appear for the final time at the very end of a paper as part of the conclusions. Final words may be equally as valuable as opening words, so that the reader finishes reading with the main message foremost in their mind. I urge my students to avoid ending a paper with the clichéd and tired 'further research is needed...' line, which Alexandrov & Hennerici (2007) point out is redundant given the enquiry based nature of science. Instead I advocate provision of a positive affirmation around the main message.

## 2.2. Writing for the right audience

Identifying and writing for the right audience is equally vital for effective writing and is closely related to the main message. McIntyre (2007) suggests that before writing a journal article, an author should select the journal best suited to that work and the writer's message, and is easily accessible to the readership the writer seeks to influence. A similar sentiment can be extended to any report writing, including university assignments. Miller and Lehr (2007, p18) assert that the 'reader reigns supreme' in that writing is always about the readers and their needs, while Cahill et al. (2008, p.198) state that 'an effective pitch is tailored to your audience'.

For the writing process Hattersley (1998) suggests that having defined the message to be conveyed a writer should turn to audience analysis to determine how to develop it, while Brown et al (1993) employ a reverse approach of first identifying by name 3-4 specific individuals the writer wants to read their paper and then determine the main message so that the writing meets the needs of this audience. Identifying individuals should help clarify exactly what to write about, but it might make academic writing too specialised. Arceci (2004) suggests that a good paper should equally convince experts in the field as well as fill in knowledge gaps for interested, but less expert readers. Advice from editors canvassed by Powell (2010) suggests that most writers make the mistake of assuming too much knowledge on the part of their audience and that writing for the most adversarial or sceptical reader is a useful approach to adopt so as to substantiate the veracity of the arguments advanced.

Drawing some of these suggestions together, when writing a report, I follow the advice of Kalpakjian and Meade (2008) and first consider, Who will the reader be? or Who is the intended audience? and to write with them firmly in mind. However, my advice is ultimately to write for a lay-person and thereby avoid the trap of writing for a professional with the same education and specialist knowledge as yourself. Such an audience encourages clear and simple writing. For Dixon (2001, p.418) "a paper is well written if a reader who is not involved in the work can understand every single sentence in the paper". In my professional field, writing reports for the public is common and I especially like the advice of Bendix (1984, p273) urging writers to:

Think of your audience as ignorant of your field but vitally interested ... Assume that they have never been exposed to anything more than junior high school science, even if they are professionals in their own right. Do not write as if you think your audience is stupid. The reader badly wants your information ... you just have to give it in a form that will be useful.

In practice, although I urge my students to write for the general public for whom a Year 10 level of schooling can reasonably be assumed (in a developed country like Australia), they seem to find this too confronting. However, when I suggest that they write for themselves aged 18 years (e.g. just entering university for the first time), and pose the question *What did you know about this subject*

aged 18?, this seems to work well. Without my exhortations on a general public audience, students will typically write for me (i.e. an expert audience) and their writing will be replete with jargon, acronyms and knowledge assumptions. Baron (2007, p15) urges writers to cut the jargon altogether because when it is time to communicate "to the masses, we need to translate these concepts into Plain English". I strongly agree.

Choosing the right audience may help a writer get started with actual writing. For example, Nightingale (1986, p15) suggested that writing for a different audience is less stressful for the writer who otherwise may feel threatened by having to write for an experienced learned authority. It also requires the writer to lead the reader through the work in logical and progressive steps that are well signposted, including the use of connecting or transitional sentences (Lambie et al., 2008). These serve to link one paragraph and section of a report to another; such as *In the next section I address the issue of story-telling and how to create a 'stand-alone' document.*

### **2.3. Story-telling: Creating a 'stand-alone' work**

The most efficient way to engage readers with the content is to tell a story (Minto, 1998) because this guarantees that a reader will pay attention to what the writer says. Minto (1998) argues that the lure of an unfinished story is what compels readers to read to the end of a report. Through story-telling, I am of the view that effective writing emerges which will function as a 'stand-alone' work on the subject being addressed. Every good story has a beginning and middle and an end meaning that it "establishes a situation, introduces a complication that leads to a question, and then offers a resolution or answer" (Minto, 1998, p.47). I have found that the notion of framing scientific writing as story-telling (Morrison-Saunders, 2014) seems to help my students to become better writers. For example, Powell's (2010, p.873) use of the phrase 'research story' in relation to journal article writing in the natural sciences is something I share with my students to emphasise that scientists also are telling stories.

Cahill et al (2011) state that the most important skill for 'writing with pitch' is "having a story and not deviating from the narrative" (p.196). I strongly endorse this view in my teaching and writing. For anything other than a PhD thesis, I urge students and researchers to have a single aim or research question for a given written work (albeit with up to three sub-points if these are essential) and to be sure that every section of the work directly addresses that core aim or posed research question. In my experience most research students try and take on too much content overall. I argue that it is better to tell one story well, than to attempt to fuse multiple narratives together.

Telling a good story and creating a stand-alone document for me means that any stranger to the topic can understand exactly what it is all about just by reading it. This process starts by providing an engaging title for the work that is dynamic and informative (Alexandrov & Hennerici, 2007) and captures the main message as previously discussed. Rapid focus on what matters most in an academic paper is important. Kliever (2005, p592) argues that the "The first sentence of the first paragraph should pick up some or most of the words from the title"; this is something I strongly support, and have modelled in this paper.

### **2.4. Finding the right writing voice**

The tone or voice that a writer adopts in writing has direct impact on its communication effectiveness with the reader (Elbow 1973). Each author has their own style of course and it is vital that this is the case, because reading would become very dull indeed if all writing was identical in tone or style. However there are two particular issues concerning voice that I urge academic writers to consider: passive vs active voice and first vs third person writing.

Using an active rather than passive voice has seemingly unanimous support by authors writing about writing (e.g. Carraway, 2006; Baron, 2007; Lambie et al., 2008; Sigel, 2009). Active voice clearly identifies who acted, what the action was, and who received the action in that sequence (Lambie et al., 2008) while the passive voice generally puts the object first and often leaves the subject out altogether. Sigel (2009) points out that use of passive voice is a stylistic issue that pertains to clarity; it is not

grammatically incorrect, but argues that use of the passive voice "bogs down the narrative... and makes for imprecise arguments" (p479). I advocate writing in the first person as one way to maintain an active voice rather than in the third person (which can be either active or passive).

Like Hamill (1999), I prefer to write in the first person and strongly encourage this for academic writing. For me it is an easier way to communicate and is somehow more 'honest'. It is more direct and uses fewer words than the third person. The alternative is the second person which Baron (2007) promotes on the basis that writing about 'you' is friendly and inviting and is conversational. Personally I avoid this approach because it is rarely clear exactly who is meant to be represented by 'you' or 'we' or 'us' (unless the author very clearly specifies this). Meanwhile, third person writing is detached as though the writer were just observers of the world separate from what it is they are writing about; it is a style that says in the words of Brown et al. (1993, p.189) "I am here, but I am not really here", our words become colourless and flat and give readers little incentive to read them". Tredinnick (2008) exhorts writers to write as they speak (meaning in the first person voice of course); however in a section entitled 'Question everything they taught you at school' (p26), he argues that "we get told the opposite so early and so often; we get drummed out of us the one piece of wisdom that would help each of us write" (p.26) and that:

We learn, at home, on our way through school, and then at work, that writing is supposed to be different from speaking — less personal, less plain, more circumspect, more polysyllabic, smarter, more proper all round. We learn to mistrust the way we'd say it well. This all began the day someone told you to use the passive voice when expressing conclusions in an essay. When they told you never to write "I" in your history and science papers — in any papers at all. ... It's the day you learn that you don't belong anymore in your writing (Tredinnick, 2008, pp26-27).

When an author is not part of their writing, the perennial problem of plagiarism is likely occurring (Morrison-Saunders, 2012); the solution to which is dependent upon academics teaching critical writing skills to their students (Vardi, 2012). I wish only for higher education students to be beguiled by their subjects (Hobson & Morrison-Saunders, 2013) and thus to place themselves centre stage in their writing about their chosen subject. Maddox (1983) and Carraway (2006) similarly argue that scientists need to be willing to take responsibility for the content of their work by writing in the first person. Thus the writing becomes more engaging and persuasive. For me, writing in the first person, employing the active voice and engaging in story-telling go hand-in-hand for effective written communication that creates a compelling stand-alone work on the subject.

### **3. Building a credible argument: Keeping promises to the reader**

The most important aspect of credible argument for me relates to what I refer to as *keeping promises to the reader*. As Denny (2009, p.67) wrote, "The written word, if there is any ambiguity, will always be read negatively". Put more simply, a reader likely won't notice good writing (i.e. where promises are kept), but will react negatively to bad writing. The biggest promises are around the Title and aim of a paper. Thus a key test for effective writing becomes *Does the paper deliver on what is promised in the title and aim?* I find that the answer to this kind of question occupies most of my feedback to students or when peer-reviewing journal manuscripts.

There are structural and content aspects to writing credibly. I address the structural dimension of argument credibility and keeping promises to the reader in relation to the effective use of headings within a report or paper, and the content dimension in relation to use of references.

#### **3.1 Using headings effectively**

Coming from the sciences, report writing with clear division into sections is the norm (as also is the case for most journal papers). I strongly advocate the use of numbering for headings and require my students to include a formal Table of Contents (ToC) with written work submitted for assessment or feedback. For me, a quick glance at a ToC is sufficient to understand and 'test' the structure of a report against the promises being made to the reader by the author; the key promises being the Title and statement of aims. Table 1 depicts how a ToC for this paper as a scientific report might appear.

**Table 1: Example table of contents for this paper in scientific report format**

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When teaching writing skills, I emphasise that the words of section headings should appropriately match vital content within the text that follows, and be sequentially consistent. In the words of Cahill et al. (2008, p.202) in relation to addressing research questions "Do not swap the order, such that if you list questions 1, 2, 3 in the introduction, do not discuss the methods as 3, 1, 2". As with the aim or research questions, I apply this same approach for the Title with regards the content and sequence of text in sections of a report.

In writing workshops I illustrate this using a published paper with a title comprising three topic components, by showing how the text throughout the paper (e.g. abstract, introduction, aims of paper, methods, results and conclusions) conforms with the same sequence. I have found this simple approach to be remarkably effective for helping students to enhance the flow and structure of their writing. It is in large measure an editing technique as few writers (including myself) stay 'on message' when composing text.

I also employ a process I call 'writing backwards' during the editing phases of writing, whereby I read my conclusion statements (i.e. the main message of a paper), and then revisit in turn my Title, aims and section headings and components to ensure that the structure of the writing throughout appropriately matches or logically leads to that conclusion.

Ultimately how structure is handled is part of the storytelling process itself and it can (and perhaps should) be a creative aspect of a particular piece of writing, not a static or uniform approach applied equally to all reports. Thus I utilise descriptive section headings. As Minto (1998, p.45) writes:

... corporations and consulting firms write the dullest documents in the world, primarily because they organise around predefined headings (such as Findings or Objectives) rather than around a compelling message. The better way is to formulate the message first, and then word the headings to match.

The most well-known scientific reporting structure is known as IMRAD – with section headings delineating the Introduction, Methods, Results and Discussion elements of a report notwithstanding that individual journals may have slight variations on these (Kalpakjian & Meade, 2008). It is also necessary to provide headings for Abstract, Conclusion and References components. While there are structural benefits of IMRAD that I apply with respect to the sequence of topics, I prefer to adopt descriptive section headings that impart deeper meaning to my reader.

The act of dividing up a report in this way and numbering the sections makes it easier to structure and balance for the author (e.g. equal level sections and sub-sections should be approximately equal in size or length). Sections also provide focus for the reader. Sub-headings in consecutive sections of a report (e.g. within the methods, results and discussion sections) are particularly effective if their topics match

as it makes for a logical flow in the report that enables the reader to move back and forth between corresponding portions (Kliewer, 2005; Provenzale, 2007).

As with section headings, the captions applied to Tables, Figures or Boxes encapsulate promises to the reader that impart vital content, and I advocate carefully selected descriptive text for them. It is important that they be introduced or cited in the main text of the report (McIntyre, 2007) and also discussed in terms of their meaning. Hattersley (1998, p25) stresses that 'facts don't speak for themselves' so my personal advice is to never assume that a table, figure or box is self-explanatory. The meaning of them must be explained for the reader, but this should be done in a complementary way as it is inappropriate to duplicate information presented in a figure in the accompanying text (McIntyre, 2007). Promises made to the reader should be kept, but without undue repetition.

### **3.2. Developing an argument: Referencing and credibility**

Implicit in academic writing is a promise to the reader that academic integrity is being upheld, as outside of the written work itself the author would have signed a statement to that effect (e.g. student declaration for assignments or dissertations, author/publisher copyright agreements for journal papers). Lambie et al. (2008, p.19) wrote (citing Glatthorn & Joiner, 2005) that:

one mark of scholarly writing is that all 'assertions are documented and supported' meaning that the writer provides evidence for his or her statements or claims that may be 'reasonably challenged'.

Thus referencing the ideas and facts that inform a written argument gives the report or story credibility. One reason I advocate writing in the first person is so that original content generated by the author is obvious to the reader.

Building a credible argument with regards to referencing requires advanced writing skills and in higher education circles this is a matter that receives much attention. There are countless guides to referencing available through universities (e.g. library or faculty level), chapters in research methods books, plus journal homepages and online sources. I do not present or cite that material here. For anyone making use of this paper as a good practice model I simply draw attention to my attempts to:

- attribute all ideas drawn from other sources to the appropriate source(s);
- make clear when something is my personal view;
- utilise an appropriate overall quantity of references so as to demonstrate integrity of research but not overwhelm the reader or unbalance the paper;
- utilise a range of sources across multiple disciplines and topics within the writing genre; and
- use or position reference citations in different ways within my writing (e.g. at start, middle or ends of sentences; as paraphrased ideas and as direct quotations; and at times utilising multiple citations within a sentence, either in groups for a shared point, or woven amongst narrative around a common topic).

It takes practice and experience to learn how to engage well with reference sources. Lambie et al. (2008, p.21) observed that "new writers often struggle to organise and integrate supportive information and citations into their papers". They also flag that writings that incorporate information from multiple sources are more interesting to read than simply paraphrasing or quotation with citations placed at the end of each paragraph. The latter I call the 'plonking' approach to referencing; I find it to be passive and boring to read, especially if it is the only referencing style that is employed. I encourage my students to write in a more active manner which weaves citation and engagement with published material into the narrative. One final referencing tip provided by Lambie et al. (2008) is that it is best to use direct quotations in moderation. My own 'rule' here is to only quote particularly strong or interesting phrases. I enjoy making use of quotations; I note though that when quoting, the writer is no longer writing in their own voice so unless the quote is a good match with the narrative, it may be better to paraphrase (with appropriate citation) instead.

## 4. Improving writing skills: The art and science of writing

Like most guides to writing, this paper has covered many ideas and topics in discrete steps. Here my intention is to step back from individual details to contemplate the bigger picture and consider how the ideas I have presented might be used in practice to improve writing skills. I also reflect on the art and science of writing before discussing the role of a conclusion.

In introducing this paper I indicated that it might serve as a writing model for higher education students and academics. Using a template, such as a previous report published on a similar topic or taken from the target journal that an author is aiming to publish in, is a frequently mentioned writing technique (e.g. McIntyre, 2007; Kalpakjian & Meade, 2008; Powell, 2010). For teaching writing skills to university students Tomaska (2007) gets students to rewrite a previously published work. Lambie et al. (2008) provide an example of a scholarly writing guideline comprising a mixture of guidance to individual sections of a report as well as questions relating to issues such as flow and continuity, clarity and readability. Similarly but in a more prescriptive approach, Kliwer (2005) suggests that writing a research paper is largely formulaic and provides a paragraph by paragraph (18 in total) guide grouped in the IMRAD format. While a template approach has some appeal, I draw attention to the wisdom of Brown et al. (1993, p.187) who state that "there are guidelines but no rules" for how to write well. Thus I emphasise when teaching writing skills, that writers must find their own way with what works for them personally.

One piece of advice for improving writing seemingly common to most writers on the subject is that good writing always requires re-writing. For example the advice received by Powell (2010) from prolific authors and journal editors is to 'revise and revise and revise' (p.874) once a first draft is completed noting that even polished authors go through an average of 10-12 drafts, and sometimes as many as 30. This paper originated as *An Essay on Essay Writing* in 1994; I have used it every year in my teaching since, and I have lost track of how many revisions I have completed to arrive at this version.

Much of the revision process will likely involve cutting out words, sentences, paragraphs or sections so as to meet university assignment or journal word limits. As Elbow (1973, p.41) put it,

Editing must be cut-throat. ... Learn to say things with a relationship instead of words. ... Every word omitted keeps another reader with you. Every word retained saps strength from the others. Think of throwing away not as negative... but as a positive, creative, generative act. Learn to play the role of the sculptor pulling off layers of stone with his chisel [sic] to reveal a figure beneath. Leaving things out makes the backbone or structure show better.

In other words, 'less is more'; a point that I make with my students, and one I try to apply in my own writing, especially during the editing stage.

Carraway (2006) and Powell (2010) both encourage authors to set aside a report for a period of days or weeks once an entire draft is completed before reading with fresh eyes to catch mistakes or problems in flow. They also advocate reading the manuscript aloud as this provides an opportunity to hear the report as another person would read it, enabling errors and clumsy composition to become self-evident.

Having colleagues or other people not directly involved in the research or reporting activity review writing and using these comments to inform the next draft is also widely supported (e.g. Arceci, 2004; Kalpakjian & Meade, 2008; McIntyre, 2007). Some of the benefits of the formal independent peer review process employed by most scientific journals should arise from having colleagues review written work. Weil (2004) suggests reviewers can be useful to authors by identifying and helping rectify errors or omissions arising from the inevitable limitations of knowledge or experience individuals bring to research and writing, and in providing a fresh perspective on written work reviewers can often identify problems or limitations of which the author is no longer aware.

Effective writing is not just about the nature of the structure and content of a report but equally how that content is communicated to the reader, and this relates to the art of writing itself. From a reader's perspective a paper is well written if it reads effortlessly (Kalpakjian & Meade, 2008). For such cases, Kalpakjian & Meade (2008, p.232) write, "This is both a tangible quality that reflects the science of writing and an intangible quality that reflects the art of writing". Brown et al. (1993) note that researchers and writers are all human beings with feelings and emotions that influence their work and provide "the window through which we communicate with others" (p.189). In a similar vein Kalpakjian & Meade (2008, p.232-233) maintain that "good scientific writing is elegant... and can convey the depth of emotionally charged topics... without using emotionally charged language". How each writer engages with their own writing and establishes individual style and skill is naturally highly personal.

In an empirical sense, the art of effective writing is about the transfer of meaning from writer to the reader through the meaning attributed to words (Elbow, 1973). Processes of meaning making are linked to the structure and function of the human brain itself in terms of the brain's two hemispheres. The right hemisphere deals with experience and holistic interaction with the surrounding world, while the left hemisphere, which includes use of language, processes and orders or 're-presents' that worldly information into fragmented entities grouped into classes that a person's logic and intellect can manipulate as specific lines of thought (McGilchrist, 2009). In the context of the left hemisphere, written communication must be logical and make sense. However to convey broader understanding effective writing will evoke and provoke a kind of 'higher' meaning in the right hemisphere of the reader's brain. In short effective writing will meet the requirements of logic and scientific rigour on the one hand whilst also evoking the more poetic workings of the right hemisphere of the brain. Thus there is the double challenge for writers of being both creative and capturing convincing content. This explains why when it comes to writing, every individual will always have room to grow no matter how experienced or professionally senior that person may be; as Baron (2007) notes learning to write effectively is a 'lifelong apprenticeship' (p15).

There is much more that could be said on the topic of effective writing (as entire books devoted to the topic attest). For the sake of brevity I will draw this paper to a close with my conclusions. First though, I should point out that the purpose of a Conclusion is to reiterate the main learning points arising from the discussion component of a paper; no major new ideas or material should be introduced at this stage.

## **5. Conclusions and recommendations for writing effectively**

In this paper I have modelled and explained some good writing practices for application within the higher education sector, drawing on literature review and personal experience. By way of summarising my key points, I make the following recommendations to writers.

- Carefully choose the main message for the writing and ensure that it is tailored to the intended audience and is emphasised in prominent places in the written work.
- Keep writing simple by having only one clear aim or research question that is explicitly addressed or 'answered' in the content that follows.
- Adopt a story-telling approach to writing with a clear beginning, middle and end that creates a stand-alone work.
- Write in the first person (if permitted) and use an active voice that is engaging for the reader and true to the writer.
- Be sure to keep all promises made to the reader, especially those implicit in the Title of the work and explicitly stated in the aim or research question.
- Provide descriptive headings and sub-headings for sections with supporting text that is sequentially consistent with them (number headings if permitted).
- Ensure authorship attribution for all ideas to ensure a credible 'story' or argument and engage with references creatively.

- Have someone proofread or critically review draft writing or read it aloud to reveal ways to improve it prior to completion.
- Realise that developing skills in the art of writing requires practice, revision and learning over time to attain excellent written content and creative expression.

Room for creativity in writing remains whilst adhering to these recommendations. I view the writing practices modelled in this paper as foundations for effective writing upon which the true creative elements can be overlaid. I hope readers find them to be useful in their own writing related endeavours.

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