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Respecting Process and Product in Research Papers

Michael Cribb

1.0 Introduction

The research paper (sometimes called a 'term paper') is a common task in university courses and is often assigned by the teacher as an alternative to the traditional exam. Typically, the teacher will supply a list of topics at the start of the semester for the students to choose from and specify the length and format of the paper to be submitted at the end of the semester. There are a number of advantages of this type of assignment over the traditional exam: they avoid the stress and 'one-off' nature of exams, which for some students can be overwhelming, while allowing students to inquire into a topic which hopefully they will find interesting and rewarding. Research papers, then, appear to be prima facie a practical and useful way for students to learn about their discipline while at the same time gaining credit.

However, for many students of English, writing a research paper can be a tortuous process which is often fraught with difficulties and worries that can match, or even exceed, those of the exam. The task calls on a number of sub-skills, such as the ability to write in paragraphs, formulate appropriate rhetorical forms, organize coherent discourse and cite sources, all of which need to be brought together in a written piece perhaps 2,000 to 3,000 words in length. This is by no means an easy task for Japanese students of English when we consider that not only are they writing in a second language but that over 75% claim to have had little or no experience of writing anything more than a sentence while at high school (Cornwell and McKay, 1998). Moreover, research papers demand extensive reading and critical literacy skills (Kasper, 2000b) when students are often used to a more reproductive style of learning with an emphasis on memorization and imitation (Ballard, 1996). It is little wonder then that many students receive quite a shock when they attempt to produce their first research paper at university and teachers can often be disappointed with the results despite their initial enthusiasm.
In this paper, I would like to look at how we can best approach research papers in order to give students of English in their early years of university the means to survive and function effectively in an academic environment where such papers are the norm. My philosophy will be that both product and process need to be respected to enable papers to be produced which gain maximum credit while minimizing the fear and worry for the student. By product I mean that research papers have to be written so that they respect the conventions and rules of the academic discourse community to which they are addressed. By process I mean that writing is a highly non-linear, recursive activity which demands that student write and rewrite but also ‘read to write’ and, as we will see, ‘write to read’. In other words, teachers cannot just assign papers at the start of semester and expect to collect them at the end if they want to receive quality academic reports from novice students.

In the next section, I will look at the literature in two areas to see what problems students have with writing and the skills they need to develop to overcome these problems. This will provide a theoretical underpinning for a pedagogic approach to teaching research papers which I will outline in section 3. I have used this approach for a number of years with first and second year students and found it to be successful in the balance it achieves between process and product.

2.0 Literature Background

I hope to illuminate here the theoretical foundations for my approach by looking at the literature on writing in two areas: (i) how process and product in writing have been viewed by academics and (ii) how reading is an integral part of the writing process. The former has been well documented in the literature and still causes some controversy even today. The latter has been less well documented but does, in my opinion, represent a facet of writing which is probably just as important.

2.1 Process versus product in writing

The product approach to teaching writing lays its emphasis on the end product and the means students have of realizing this. Such a means-to-an-end approach usually incorporates a model which is studied early in the process and students are asked to parallel this. The focus of the model has ranged from the sentence (employed in early product-writing teaching to reinforce oral production) to the more recent focus on genres and rhetorical styles which attempt to respect the discourse community (Swales 1990) to which the piece is being addressed. White
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(1988, p. 5) has outlined a basic three-stage procedural model for the product approach in which a model text is first taken as a starting point. The teacher subsequently brings to the student's attention the elements of text (e.g., linguistic and rhetorical forms, organization and structure) which can be manipulated before finally asking them to produce a parallel text using their own content.

In the product approach, emphasis is on correctness and adherence to the model with deviation from it being discouraged. Teachers' comments usually focus on form rather than content and the first draft is often viewed as the final draft with any subsequent changes being limited to surface level features. Some practitioners, though not all, have also taken the product approach to imply a linearly ordered writing sequence where students plan, write and then correct, with little deviation from this sequence. Further, Ramanthan and Kaplan (1996) have argued that by following a discipline (product) approach to writing, we give the students a sense of voice and audience which the process approach cannot achieve.

The main criticism of the product approach is that it does not (in its extreme form) attempt to demonstrate how a writer arrived at that particular product. In other words, it sheds no light on the process of writing. Critics argue that we need to focus our attention on the process a writer goes through in order to achieve a particular product rather than the formal features of that product. Most of the studies that have investigated how students write have all shown writing to be a “complex non-linear... process” in which both “skilled and unskilled writers discover their ideas in the process of composing” (Zamel 1983, p. 166). Following Emig’s (1971) influential case study which revealed the complex quality of the writing process, Perl (1979, 1980) found that writers discover many of their ideas during the writing process. In other words, writers do not sit down with a fixed set of ideas in their heads which are then transcribed onto paper. Rather the process of writing can actually spawn novel ideas and lead to new avenues of discovery.

Zamel (1983), who has been one of the most outspoken antagonists of the product approach to writing, notes how unskilled and beginning writers can often fail to experience writing as a cyclic process and therefore misunderstand the process. They become convinced that “writers know beforehand what it is they will say... [and this is] reinforced by a pedagogy... based on the same assumption...” (pp. 165-66). In a study of six writers who were observed while writing, Zamel concludes that:

composing... seems to be a process of discovering and exploring ideas and
constructing a framework with which to best present these ideas. This process is creative and generative and may not always be based on a clear sense of direction or explicit plan, but rather a plan that allows for further discovery and exploration...

(Zamel, 1983, p. 180)

These studies have led to several varieties of the process approach being implemented which emphasize flexibility and creativeness in the writing process. Rather than writing being linear where writers plan what they want to say at the beginning, it is seen as a process where writers only discover what they want to say by actually engaging in the process. White (1988, p. 7) contrasts the product approach with a procedural model for the process approach. In this model, the task required of the students is specified at the start and students are asked to 'communicate' as far as possible. In a simple case, this would merely be a brainstorming exercise but in a more complex case, such as a research paper, reading would be involved. A model may then be introduced if so desired but only after an attempt at communication has been made, thus relegating the status of the model to a secondary position. Finally, students write and rewrite as much as possible to produce the finished piece.

Taken to their extremes, both the product and process approaches to the teaching of writing attract criticisms from some practitioners. However, most teachers, while perhaps being firmly grounded in one tradition, rarely go to such an extreme so as to exclude all aspects of the other approach, and a good deal of overlap is to be found in many classrooms. The product approach, for example, while being overly concerned with the finished product and the readership for which it is intended, does contain a process: it just remains hidden and is not taught. Similarly, the process approach, while laying emphasis on the creative aspect of writing does recognize the need to produce a coherent piece that will be accepted by the discourse community, and this will thus receive focus toward the end of the process. It is this eclectic mix of process and product which forms the basis for the pedagogic framework I intend to develop in section 3.0.

Finally, many teachers recognize that the purpose of writing may not be the same in all environments and this will determine the degree to which process and product are emphasized and de-emphasized accordingly. That is, different purposes will demand a variety of approaches each with a different focus. Raimes (1991, p. 415), for example, notes how she teaches two types of writing: (1) writing for learning (with prewriting, drafts, revision, and editing) and (2) writing for display (i.e., examination writing). Students are made aware of the different purposes and different strategies of each type.
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2.2 Reading to write and writing to read

Whilst the literature on process and product in writing has tended to concentrate on writing as an end in itself, a number of scholars have noted how reading is an integral part of the writing process. Carson (2000), for example, claims that reading and writing "co-exist in persistent and nontrivial ways" and notes how students "read to write" and also "write to read" in undergraduate courses (p. 20). In other words, reading and writing are opposite sides of the same coin in the research process: reading leads to writing and writing in turn leads to more reading. This suggests that the research process is not one where students just sit down and start writing; neither is it one where students go through a reading stage and then progress to a writing stage. The two processes, in fact, are interwoven together and occur simultaneously.

Through the 'reading to write' process, students develop strong critical literacy skills which, according to Kasper (2000b), are the "key to the research papers that are a central component of many mainstream college courses" (p. 187). Critical literacy skills include the ability to locate and evaluate information drawn from a variety of sources, to present it in an organized fashion, to critically analyze it and to cite sources (p. 187). To these I would add the ability to identify and delineate a topic as well as the ability to develop a thesis statement and revise it as the research progresses. Furthermore, Nelson and Burns (2000) note that reading can familiarize students with the rhetorical structures of the discipline they are writing in and which they are likely to use in future research.

Conversely, writing leads to reading by helping students to understand texts and spawning further reading. Kasper (2000a) notes that when students write written responses to texts, the text "becomes richer and more meaningful experience... as... writing consolidates knowledge and builds schemata with which to read" (p. 8).

The literature appears to suggest that both product and process have their roles to play in writing and that reading is an integral part of writing and the research process, especially when composing academic research papers. In the next section, I will introduce a classroom procedure based on this theoretical assumption.

3.0 The Research Paper

The dilemma for students and teachers is that the research paper is a complex task requiring the coordination of several sub-skills, many of which the students lack, yet it is a necessary part of academic work if Japanese university students are to function and prosper, especially in overseas programmes at foreign universities. How then can the teacher introduce students to
their first research paper in a way which minimizes the pain and maximizes the benefit? In the following section, I will give some suggestions for achieving this and introduce a procedure which I have found to be successful with first or second year students of English. The doctrine underlying this is that both process and product are to be respected and integrated in an eclectic mix. Process in the sense that writing is a non-linear activity (the process) which involves students reading to write and writing to read. Product in the sense that the final paper (the product) must respect the conventions and rules of the academic discourse community to which the paper is being addressed (whether this be real or imaginary).

Though the procedure outlined here is not the only way to implement a research paper project, it will help to highlight many of the facets of process/product writing, or 'researching' as I prefer to call it, and hopefully provide a framework for teachers to work with and modify to suit their needs. The whole process from beginning to end can typically take a semester for students to complete and will require several hours of in-class instruction, guidance and support from the teacher, although this is time well invested when we consider how often students will be expected to write research papers in the future.

The basic procedure can be initially conceptualized as consisting of four stages:

(1) Topic selection and thesis statement
(2) Mid-project draft
(3) Annotated bibliography (optional)
(4) Final paper

It must be said immediately though that perceiving the research procedure as a staged process like this belies the fact that underneath it is a complex, interwoven process where stages overlap and merge according to individual students. For example, while developing a thesis statement is one of the first activities, students constantly revise this statement as the project progresses, sometimes right up to the final report. Furthermore, the stages only represent points in time when students are expected to submit something. There is no indication given of their own private writing and note-taking nor indeed the extensive reading and critical analysis which is carried out to achieve this. However, for the reader, as a first conceptualization of the process it will suffice. I will describe each stage below showing what is expected of each students and attempt to illuminate the nature of the process underlying this.
3.1 Topic selection and thesis statement

The first step is to make the topic selection and develop a thesis statement. Often, the teacher can give a list of suggested topics for the students to choose from since this will allow them to pick a topic which they are comfortable with and which they feel they can handle. However, it is not until students actually start reading around the subject area that they can get a grasp for what the topic is about. Teachers should therefore give students some time to spend in the library and/or on the Internet reading introductory articles on some of the suggested topic areas before they make their final selections. After they have made their selections, and certainly after they have formed a thesis statement, they should be encouraged to persevere with their topic even if they find out later it was not quite what they though it was. Students who make topic changes in mid-project usually find they have double workloads with no obvious advantage.

Whilst the selection of topic is usually a relative simple affair, the development of the thesis statement is where the students often find their first difficulties arise. A thesis statement is two or three written sentences which state the purpose of the paper and give a reason for its existence. It provides the central issue of the paper, around which all other information and arguments 'hang.' Meriwether (1997) has suggested that a good thesis:

(1) should be one arguable point
(2) should not be a question
(3) should be restricted [i.e., cover only the points one intends to discuss]
(4) should have unity [i.e., a single purpose]

(Meriwether, 1997, pp. 50-51)

Many university undergraduates fail to understand the need for a thesis statement, and its development is a task for which they are often not prepared. When a good thesis statement is not emphasized by the teacher, students' papers often lack focus or attempt to answer multiple questions, and the task of producing coherence and logical organization in the final report is made all the more difficult. Papers which are organized around a tight and well thought out thesis are usually more coherent and well structured.

We should not expect though at this stage for thesis statements to simply materialize in the minds of the students after they have made their topic selection. Students are often unfamiliar with the arguments and issues underlying the topic and time is required for them to build up the
necessary schemata. Extensive reading on the subject area will be necessary and, as the students read, ideas and opinions will form giving them the means to frame a research hypothesis (thesis). In other words, reading leads to writing. Unlike the topic selection, however, the thesis statement can and will often change as the project progresses towards completion. As students read in more detail about the topic and discover relevant information, they are likely to want to modify and revise their statements, sometimes right up to the final report. They should be encouraged to do this (so long as any revision is not a surreptitious attempt to change the topic completely).

3.2 Mid-project draft

Up until this stage, students have been ‘reading to write.’ Through the mid-project draft, however, they begin to ‘write to read.’ That is, by writing, they begin to critically analyze their own assumptions and knowledge of arguments and evidence presented in the literature which sends them back to the original sources to check their understanding. A student, for example, might find that her original understanding of a piece is not what she thought it was which may force her to revise certain arguments or search for other sources. Or a student may return to a source to find it “richer” and with extra meaning than it did on first reading (Kasper, 2000a). And by taking students beyond the thesis, the mid-project draft gives students a chance to make their first real attempt at putting down in writing the evidence, arguments and opinions which will eventually form the backbone of the final paper.

When writing the draft, students should be encouraged to write quickly, not worrying too much about grammar and correctness at the local level. The main idea is that students write rapidly and get their thesis statement and the supporting arguments down on paper, as well as any counter-arguments, while avoiding “writer’s block” which can occur if students worry too much about accuracy (Rose, 1984). Students should be encouraged to revise and rewrite (Chenoweth, 1987) as much as possible until they have one or two pages of handwritten text which can be submitted to the teacher, an exercise which can be started in class and finished for homework if so desired. The advantage then is that the teacher can ensure students write in their own words rather than trying to use the complex and lengthy sentences and rhetorical forms of the books and articles which they have been reading.

The teacher should briefly check the students’ mid-project draft concentrating on coherence and logical organization at the global level rather than correcting errors in grammar or punctuation. Any attempt to correct mistakes at the local level is futile and counter-productive
at this stage since this will needlessly focus students' attention on surface level feature when their real need is a global focus. In other words, comments such as 'how does this piece of evidence support your thesis' or 'this argument is weak' are much more valuable than comments such as 'wrong tense' or 'spelling mistake.'

3.3 Annotated Bibliography

The annotated bibliography is designed to help student realize the importance of citing sources in a research paper. All papers, whether written by students or academics, need to be thoroughly grounded in the discipline in order for them to be accepted by the discourse community. Papers that lack properly cited sources, or sometimes any references at all, do not have credibility or carry the weight that a well referenced paper does. They also open the student up to charges of plagiarism, something which overseas universities as well as Japanese universities now take very seriously. Students therefore need to understand the importance of referencing sources, summarizing and quoting authors without raising the specter of plagiarism, hence the motivation for the annotated bibliography.

The annotated bibliography is simply a list of cited sources that the student is planning to use in the final paper followed by a one paragraph summary of the contents of the source. The teacher should show the students how to cite properly in the format of the discipline (e.g. APA or MLA) in which the students are writing and encourage the students to summarize the sources' ideas and details rather than simply copying them. I usually specify a minimum of five English sources which the students need to cite. This encourages students to rely on more than just one or two sources, giving them a broader view of the topic overall and a feel for the arguments for and against the hypothesis.

Through the annotated bibliography, particularly the summaries, students are once again writing to read since they often have to go back to the sources to get further detail and meaning thus deepening their understanding both of the original source and of the topic as a whole.

3.4 Final Paper

Students who have gone through the above process and come this far hopefully are at a stage where they are much more critically aware of the arguments and evidence for and against their thesis and are able to write with more confidence and a sense of voice in the final paper. They become aware of what to foreground and what to background thus leading to an essay which is more coherent and logically organized. Unfortunately, far too many students are left to
their own devices when approaching their first research paper and do not get to experience the above process nor realize its importance. In the absence of any model or critical thinking, they can easily fall back on a reproductive style which simply paraphrases and reproduces what is said in the literature.

Even for the critically aware student, however, we should remember that they do not and cannot simply sit down and compose the final paper from beginning to end in a linear fashion. In order to help them through this process, two principles should be emphasized. While these principles are applied throughout the whole research project, they become particularly important during the final stages when the students are attempting to bring everything together in order to produce a document worthy of merit. The two principles are: (1) the principle of simplicity and (2) the principle of explicitness. The principle of simplicity states that since students are not experts in the second language they are using and since this is their first introduction to research paper writing, then erring on the side of simplicity rather than complexity in everything they do is a more parsimonious solution which will allow them to concentrate their efforts on getting the basics right.

This principle is based somewhat on skill theory (Johnson, 1995) which describes how novice users need to time to practice basic skills in order to convert declarative knowledge into proceduralized knowledge before they attempt to take on higher level tasks. Of course, simple is a relative term and may mean that some students are already able to handle higher level processing tasks than others. But, in general, teachers should encourage students to look for simplicity in the process wherever they can, for example, deciding on a topic, choosing which books to read, selecting grammatical and rhetorical forms and even fixing the layout and typeface of the final report.

The second principle is the principle of explicitness. The principle of explicitness states that to maximize reader understanding it is better to write explicitly in the paper what the writer means rather than implying the meaning or leaving it unsaid. In other words, give as much detail and support for the thesis and arguments to make them clear and unambiguous to the reader. This principle borrows from the principle of simplicity somewhat in that an explicit rhetorical form and style is a more parsimonious solution for a novice second language writer especially when we consider that students have limited control over the language they are using. This is particularly true of Japanese students of English who often study expository writing in their first language where it is considered the norm to leave the main point of the essay unsaid until the end (Oi and Kamimura, 1995). When students of English transfer this rhetorical style
across into their second language, this can cause problems for the native English reader who ex-
pects the main point to be explicitly stated at the beginning of the essay, although I am not sug-
gesting one style is better than another.

Given these principles, how should students go about writing the final paper? It would be
impossible to list everything which needs to be known about this subject here, so I will restrict
myself to just a few comments which I feel are important and which hopefully will illuminate the
complex process underling the task. As mentioned before, respecting process and product is
one of the prime concerns. The students are trying to produce a product (the paper) which will
be accepted by the academic discourse community in which they are writing. This community
has certain conventions and rules which govern what is acceptable and what is not (Swales,
1990). It is counterproductive if students try to write outside of this community. At the same
time, we have to realize that writing is a non-linear process which requires students to write and
rewrite (Chenoweth, 1987) as well as read.

One of the first things to aim for is a simple structure and organization. All written work
needs structure for it to effectively communicate with the reader. Poorly structured papers do
not communicate their intended message effectively. The classic Introduction-Body-Conclusion
structure may be shunned by some teachers as too prosaic yet it has proved to be popular over
the years and is a simple way for students to come to terms with a lengthy paper, especially in a
Western context. Furthermore, this structure operates on the principle of explicitness because
the main thesis statement is repeated three times. It is sometimes said that the art of writing a
paper is saying the same thing three times and so the writer first mentions the thesis in the in-
troduction, refers to it again in the main body and re-emphasizes it again in the conclusion, thus
making sure that the reader is left in no doubt as to what the purpose of the paper is. Novice stu-
dents who attempt to write outside of this 3-part structure often fail to explicitly signal the main
purpose of the paper to the reader.

Furthermore, it should be noted that structure also needs to be ‘balanced’ for it to com-
municate effectively. That is, each section (introduction, body, conclusion) needs to be of the
appropriate length for the reader to appreciate it. So, for example, in a paper of 2,000 words in
length, an introduction should typically be 200-300 words. Students who write one-sentence in-
tructions or introductions which are too long often confuse their readers.

By selecting a 3-part structure to the paper, the student’s task is reduced immeasurably, es-
pecially since each part in some ways mirrors the others. Now the students can set out to work
on each of the three parts. It is probably true to say that while the body of the report contains
the 'meat' of the paper (i.e. the arguments, evidence and opinions) it is the introduction which is read first and most by the reader and is thus an important part. In fact, it is very common for busy academics to skim through a paper by reading the introduction and then jumping straight to the conclusion thus avoiding the lengthy main body, (although I trust the teacher who is grading papers is not so busy!) Hence it is appropriate to tell students that while the body of the report is the longest section and will take the most time in writing, the introduction needs to be carefully crafted in order to catch the readers' attention and draw them into the paper.

It is partly for this reason that I spent some time in class giving students instructions on how to write an introduction. Again, while there are several types of introduction that can be approached, the inverted pyramid or funnel approach (Meriwether, 1997) is probably the simplest method especially for persuasive type essays. With the funnel approach, the students starts out with a broad statement which is designed to 'hook', or catch, the readers' attention and draw them into the report. The hook might be a controversial statement, an interesting statistic, an anecdote or a quote by a well know scholar. As the hook is developed it leads into the thesis statement which tells the reader what the purpose of the paper is. Finally, there is a signposting part at the end of the introduction which tells the reader what to expect in the subsequent sections of the paper. Typically this will consist of a statement such as First, I will talk about... second, I will...

Again, we can see how simplicity and explicitness play an important part in the writing process: simplicity in that students are not attempting to construct an introduction which is way beyond their ability and explicitness in that students unambiguously state the purpose of the paper in the beginning rather than leaving the reader to infer it or leaving it unsaid, a technique which is sometimes employed in other styles. The principle of explicitness is also observed by including a signposting statement. Yet students are also following an organization and layout which, while simple, is very much accepted by the academic readership.

To keep things simple further, the structure of the conclusion can be explained as simply the introduction in reverse. Rather than the funnel of hook-thesis-signposting, the funnel is inverted to give signposting-thesis-release. The (reverse) signposting here briefly tells the reader what has been said. Then the thesis statement is stated again before the writer gives a closing remark to leave the reader with some food for thought (a type of reverse hook). By reversing the introduction in this way for the conclusion, the student's work is simplified.

By giving some guidance on how to write introductions and conclusions, we simplify the task for students and free up more time for the writing of the main body, which is probably the
most difficult section. Whilst there are no hard and fast rules on how to write this section, the teacher can allay the students' fears somewhat by explaining that writing is not simply a product but also involves a process. Students will inevitable need to draft, write and rewrite, concentrating on a global level first while slowly moving to a local focus.

As the paper reaches its final stages, techniques such as conferencing and publication (Hutton, 1985) can be introduced by the teacher to help students through the writing process. Conferencing is when the writer makes public a previously private piece so that he or she can receive comments from the teacher and peers. This can be successful provided that the writer is a willing participant in the conferencing procedure and that ownership is respected. Ideas spawned from this conferencing process can lead to more writing and restructuring of what has already been written. Publication refers to bringing a piece up to standard so that it is suitable for an audience (Hutton, 1985, p. 105). This establishes a connection between writer and discourse community and most clearly demonstrates the relationship between writer, text and reader. Publication can require extensive proof-reading and spell checking, both important parts of the writing process which should not be neglected: it is no use spending time developing students' critical thinking and literacy skills if their final papers are riddled with mistakes at the grammatical and lexical level.

Finally, as mentioned earlier, we must also remember there are certain rules and conventions that the writer must work within if they are to produce papers which can be accepted by the academic discourse community. The conventions cover areas such as citation format, style, rhetorical structure, etc. For example, academic research papers are formal written pieces which require writers to avoid overuse of informal language (e.g. overuse of the first person or personal experiences). These mistakes often appear in students' writing, a few samples of which are given below (with the unacceptable portions italicized):

*In the Language Acquisition class, we read the articles about the critical period.*

I will begin with a concise definition of miscommunication, *in case you were wondering.*

4.0 Conclusion

Research papers are as much a part of university life for students of English as exams are, yet students' introduction to these is very often on an ad-hoc basis consisting of a list of topics to choose from, a few words of advice from the teacher and a deadline for when the paper is to be
submitted. These papers, though, call for a number of sub-skills to be brought together, including extensive reading and critical literary analysis, in a written piece of perhaps 2,000 to 3,000 words even though many Japanese students of English have had little experience with writing much beyond the sentence level at high school. It is little wonder then that students can often struggle through a long and painful process with their first research paper and the final reports often fall short of the teacher’s expectations.

In this article, I hope I have shown how composing a research paper is a complex balance between process and product which needs to be taken seriously by teachers if students are to gain maximum benefit from the task. The process side involves not just the writing of the final report but requires that students read in order to write and also write in order to read. Through this interwoven mix of reading and writing, students develop critical literacy skills which enable them to write with confidence and produce academic reports worthy of merit. At the same time, students also need to recognize that they have to write within the discipline and respect the discourse community to which the papers are addressed.

As teachers, we cannot just assign research papers at the beginning of the semester and expect to receive quality papers at the end if time and guidance is not given to the task. Neither can students expect to function effectively in an academic environment if they do not commit themselves to achieving an appropriate balance between process and product.

References
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