USING COMPUTER SUPPORTED REASONING MAPPING TO TEACH EFL LEARNERS CRITICAL REASONING AND ACADEMIC WRITING

Sonja Elsegood
selsegood@ialf.edu
Indonesian Australian Language Foundation, Indonesia

Ali Rahimi
rahimijah@yahoo.com
University of Kashan, Iran

Abstract

This paper describes how computer-generated argument mapping has been successfully incorporated in an English for Academic Purposes program to train Indonesian students en route to postgraduate studies in Australia, how to construct evidence-based logical reasoning in their English academic writing and also to critically follow the flow of reasoning in the English academic texts they read. This paper attempts to demonstrate, with reference to student sample work, that training students in the use of reasoning mapping software to diagram reasoning makes the complex pyramid hierarchical structure of logical reasoning far more easily understandable and aids them in being able to create well-reasoned academic writing in English.

Keywords: Computer Supported Argument Mapping (CSAM), critical reasoning, English for Academic Purposes (EAP)

Introduction

There has been a growing recognition in literature, that the key critical thinking skill for students to be successful in English language university study, is the ability to understand and use evidence-based logical reasoning. In virtually all disciplines, students are expected to be able to present both orally and in writing a well-argued logical academic case supporting conclusions based on research (Davies, 2001, 2003, 2006). Despite the importance of logical reasoning to academic success many students find it difficult either to present a well-reasoned academic case or to follow the flow of logical reasoning in their readings of academic texts let alone to engage in any kind of critical analysis of this reasoning. This is particularly the case in the TEFL context. We argue that the problem is that students usually do not receive any training in how to use evidence-based logical reasoning and that this problem can be overcome through training them in the use of Computer Supported Argument Mapping (CSAM).

In the following paper we present a case in support of the following claims:

1. EFL Students' problems with applying critical reasoning in their reading and writing of academic texts are not primarily language-based but result from a lack of explicit instruction in the mechanics and principles of evidence-based logical reasoning.
2. Computer Supported Argument Mapping (CSAM) offers a useful way to help EFL students build critical reasoning skills in their reading and writing of academic texts.

The contribution that this paper makes is that while there has been a considerable amount of research into the usefulness of CSMA for improving the critical thinking and reading/writing

skills of native speaker students there is still a need for more research to look at its usefulness in the TEFL context.

This paper attempts to answer the following questions:

1. Why explicitly teach critical reasoning particularly in the TEFL context?
2. How can CSAM help EFL students develop critical reading skills?
3. How can CSAM help EFL students construct grammatically correct, well-structured logically reasoned academic writing?
4. How can CSAM help EFL students develop critical thinking skills?

1. Why explicitly teach critical reasoning in the TEFL context?

The research demonstrates unequivocally that many university students lack critical reasoning skills when reading and writing academic texts (Benesch, 1999, Davies, 2003, Egege and Kutieleh, 2004; Moodie, 2001; Thomas, Kazlauskas and Davis 2004). This is particularly the case in the TEFL context. The evidence for this is that EFL students often find it difficult when reading academic texts in English to:

1. Distinguish between main and supporting ideas in a text
2. Distinguish between a writer's major and minor claims
3. Grasp the significance of logical connectors as cues signifying the logical relationships between ideas
4. Understand a writer's position and stance
5. Understand a writer's use of objection, rebuttal and concession to construct their academic case

EFL students' lack of critical reasoning skills is even more apparent when they write academic texts in English. Many students find it difficult to:

1. Logically develop their opinions and ideas by providing relevant, valid and sufficient support
2. Incorporate their own position, voice or stance in their written texts
3. Build a convincing academic case using evidence-based reasoning from research literature to support their position
4. Incorporate critique in their writing through the logical use of objection, rebuttal, concession and counterargument
5. Use logical connectors and rhetorical devices and formulas appropriately and correctly to link the ideas in their texts

The research indicates that an important factor contributing to a student's lack of critical reasoning skills is the assumption in many education systems that students will pick up skills of logical reasoning and argumentation through a process of osmosis, through being exposed to good reasoning. However the reality is that many students fail to pick up these skills during their education. As Varghese and Abraham (1998) report, evidence for this is Connor, Gorman, and Vahapassi's study of undergraduate written composition in 14 countries (1987), which found that the vast majority of students demonstrated difficulties in arguing to advocate their viewpoint on a complex issue.

Even more revealing are the results of Deanna Kuhn's 1991 study with 160 native speakers drawn from a wide range of age groups, occupations, and education levels, as reported by van Gelder (2005 a). Kuhn found that the majority of people interviewed, when asked their opinion on complex and controversial issues, were unable to provide genuine evidence in support of their views. Their responses demonstrated that many lacked basic skills of reasoning and argumentation. Van Gelder notes that this finding is confirmed by other studies (2005 b).

As a result of research such as the above, it is becoming accepted that critical reasoning skills, so vital to academic success in university, need to be explicitly taught. The ability to deal with arguments is seen to be a key critical reasoning skill (Davies, 2001, 2003, 2006). Davies argues that academic success depends on students' ability to read, understand, evaluate, and construct arguments, both written and oral. Talking about the Australian context, Davies notes that while the subject matter will vary from one university course to another, in almost all disciplines, the major purpose of study is to develop students' mastery of academic argumentation. Davies concludes that the principles of argument used in academic culture need to be explicitly taught to students as all disciplines require an ability to argue critically in essays, term papers or dissertations (2003, p 2). Davies also argues that, more often than not, EFL students' difficulties comprehending and constructing arguments are to do with problems with logic rather than language (2001, 2003, 2006). This conclusion is supported by Bolton's research (2007), analysing Indonesian students' essay writing in L1 and L2. He found that students faced similar problems with logic and argumentation in both L1 and L2 and this demonstrates that the issue is lack of training in logic rather than lack of proficiency in English.

The logic that both Davies and Bolton refer to is obviously the conventions of Western logical reasoning and Aristotelian rhetoric. It might be claimed that based on the findings of contrastive rhetoric, it is ethnocentric to teach Western logic to EFL students in the Asia region. However as Varghese and Abraham note (1998), this objection is not convincing since much academic argumentation today still favors Aristotelian rhetoric as its preferred mode of inquiry and persuasion.

Another objection to explicitly teaching Western logic and Aristotelian rhetoric is that the Western academic cultural tradition favours an adversarial style of argumentation, which is not in harmony with the consensual intellectual traditions of Asian cultures. Some Western scholars also critique the overly 'attack and defend' character of Western academic argument culture and suggest there is a need to move from debate to dialogue (Tannen, 1998).

However while there may definitely be valid grounds for developing a more consensual style of academic debate and critique, it does need to be acknowledged that students from exam orientated education systems in Asia often have an overly factual orientation to academic texts. There is a tendency to see the 'claims' made by scholars as 'facts' to be reproduced in examinations rather than as debatable propositions that they are expected to challenge by presenting argumentation and critique (Sinclair 2000). It would be an advantage for all students to be explicitly trained to see academic texts as advancing and supporting debatable claims. Indeed it could be said that all academic writing and research is comprised of claims and supports because it involves *evaluation* (making a judgment about something) and *analysis* (drawing a conclusion about something which is then supported). Even 'factual' claims require supports, as for example where scientific claims are supported by evidence that is constantly subjected to scrutiny and challenge. All research reports have a 'conclusion' or 'interpretation' section where writers present claims (draw conclusions) supported by evidence. In a critical review too, a writer presents claims about the text they are reviewing which they then support. Similarly, in a case study, the writer draws conclusions and supports these conclusions. Thus it could be argued that all academic texts consist of claims and supports and thus 'argumentation', though not all texts have an explicitly 'persuasive' tenor. This demonstrates the usefulness of giving all students explicit training in the principles of argumentation and Aristotelian rhetoric.

2. How can computer-supported argument mapping (CSAM) help EFL students develop critical reading skills?

CSAM provides a useful tool to help students understand firstly what argumentation is and secondly how a writer constructs an academic case using Aristotelian rhetoric. Trying to decode and follow the flow of reasoning in argumentative prose is a challenge for native speaker students let alone L2 readers. This is because students have to deconstruct a writer's arguments from the argumentative prose in which they are embedded. As Monk notes (2004), there are a number of steps involved in the decoding process when reading. Students need to ask themselves:

1. How many distinct arguments (minor claims) does a writer provide for their main point/claim/contention?
2. How many main lines of argument do they have to back it up?
3. Do they support all of these primary arguments with further evidence?
4. Do they provide any objections to their argument and rebut them? - Are these supported by evidence? (Monk 2004)

Based on research at Melbourne University (Twardy 2004), Van Gelder (2005 a) argues that if CSAM forms the basis for teaching logical reasoning, students find it easier to grasp the logical structure of argument. According to Van Gelder, the basic idea in argument mapping is very simple. Arguments have a structure, often quite complex, and complex structure is generally more easily understood and conveyed in visual or diagrammatic form. Thus argument mapping involves using graphical or diagrammatic methods to display the structure of reasoning and argumentation more clearly and explicitly so that the reader can follow the reasoning more easily. The rationale is that being able to more easily understand the structure of reasoning helps improve reasoning and argument skills. This can be clearly seen if we attempt to answer Monk's decoding questions above about a writer's argumentation when it is presented as argumentative prose or as an argument map. In the second instance it is far easier to follow the flow or reasoning and assess how the writer's case is structured and how well it is supported. Please refer to Appendix 1 and 2 in order to make this comparison.

The idea of argument diagramming is not new and the concept was first developed by Wigmore in 1913 and then Engelbart in the 1960s (Van Gelder 2005 b). Neither is the idea that producing diagrams of arguments can help students with developing their critical reasoning (Horn 1998). However it has only been with the development of CSAM software that the possibility of diagrammatic representation of complex argumentation has become a reality (Van Gelder 2005 b).

Monk (2004) argues that CSAM is a useful tool for comprehending and communicating reasoning because argument maps present reasoning in a completely clear and unambiguous form. The benefits of Argument maps are that they:

1. Make explicit the logical relationships that the linearity and abstractness of prose argumentation obscures the evidential and logical relationships between claims and supports are visually explicit (Monk 2004).
2. Reduce drastically the cognitive burden because we don't have to assemble a representation of the argument in working memory which is, as research shows, limited (Monk 2004)
3. Offer an instant and effortless scan ability of the overall structure of the argument, something that cannot easily be derived from prose. (Monk 2004). Argument maps provide a big picture as well as a little picture view of a writer's case.
4. Give unambiguous visual clues as to the significance of particular details due to the hierarchical ordering of the structure and the inferential relations between individual boxes (Monk 2004).

Students can practice a number of skills using CSAM software like *Rationale*:
(The following is from the Rationale website (http://rationale.austhink.com/learn)

Basic reasoning

1. Map out reasons for and against a contention
2. Classify evidence sources (basis boxes)
3. Evaluate the strengths and weaknesses of reasons and evidence
4. Show evaluation of claims through colour and icons (evaluation tab)
5. Essay writing with essay planning templates (essays panel)

Advanced reasoning

1. Identify assumptions and co-premises (advanced reasoning maps)
2. Identify individual premises, including unstated assumptions
3. Distinguish between the acceptability of premises and the validity or strength of inferences.

3. How can CSAM help EFL students construct grammatically correct, well structured logically reasoned academic writing?

As has already been discussed, many EFL students find it difficult both to present a clear position in their academic writing and to provide relevant and sufficient support for their position, both to substantiate their own claims and to weaken opposing claims. Many have problems sequencing different 'levels' of support to 'unpack' claims, for example, by providing a supporting reason before adding relevant supporting evidence or examples. EFL students' problems may indicate a lack of familiarity with the hierarchical ordering conventions of logical Western reasoning, such as the need to develop ideas by moving from the general to the particular and from the debatable to the more factual. Evidence for this is that EFL students tend to misuse logical connectors suggesting that they don't fully grasp what the logical relationships are between ideas in their writing.

The benefits of using CSAM for teaching academic writing is that:

1. Argument maps clearly show how writers and speakers logically support, develop or 'unpack' their ideas or oppose other people's ideas.
2. Through argument mapping students learn that logical reasoning has a tree or pyramid shaped hierarchical structure and must follows certain 'rules' or conventions.
3. Argument mapping make it easier for students to tell the difference between core sentences in a text which carry the main and supporting ideas and connective words and phrases which structure the text.
4. Argument mapping makes it easier for students to understand the logical links between claims and supports in a text and how these logical links are signaled through particular connective words and phrases.

Another benefit of CSAM is that it can be usefully combined with a genre approach to teach academic writing because argument mapping can be used to support the genre cycle of text deconstruction and then joint and individual construction of the target genre using teacher led scaffolding. Teaching the generic conventions of different text types is much easier in combination with argument mapping. The weakness of the traditional genre approach is that it doesn't systematically address the issue of how logical reasoning is constructed because the focus is not on the content of argumentation but rather on how texts are realized through particular generic structures and conventions and language features (Cope and Kalantzis 1993). This issue is

addressed when argument maps are constructed with students before commencing the genre cycle. Using an argument map that includes objections and rebuttals, a teacher can jointly scaffold various essay types merely by embedding supporting and opposing arguments into different rhetorical formulas and essay structures. (See examples of 3 different essay types based on one argument map see Appendix 3, 4, 5, and 6). In this way, students' awareness of how a writer moves from reasoning to argumentative prose increases dramatically.

A major advantage of argument mapping is that it reduces the cognitive load of students when learning to write academic texts because they need only focus on one thing at a time. This is because an argument map separates the 'content' ideas out from the generic framework in which they are embedded. By this is meant the rhetorical conventions of the text, as well as the rhetorical formulas and devices used to convey stance and evaluation, the connecting words and phrases which introduce and link ideas between sentences and paragraphs. These don't appear in an argument map so it is much easier for students to focus on their reasoning before converting this reasoning into argumentative prose.

Argument mapping also makes it much easier for a teacher to be able to identify the students' problems in terms of English sentence structure and grammar. In an argument map students write full, grammatical, declarative sentences in boxes. They use complete sentences, not words or phrases as in an outline. Thus the teacher can focus on whether the student really understands how to structure an English sentence, how to construct nominalizations, verb phrases and to use English tenses, modals, adverbial and adjectival phrases, correct word forms, passives etc. It is far easier for a teacher to give language error feedback on an argument map than in a whole essay where there may be so many errors at the sentence paragraph and whole text level that it is overwhelming.

An additional benefit of CSAM is that argument mapping can help to fight plagiarism. When argument mapping using academic sources, students clearly see which ideas and evaluations they have drawn from the research literature are 'intellectual property' of scholars that need to be both paraphrased carefully and referenced and which are their own. Argument maps can also be usefully combined with synthesis and paraphrasing grids. At the Indonesian Australian language Foundation in Bali, teachers guide EAP students through a step-by-step construction process when learning to write research based academic texts. This involves students first researching then mapping a 'skeleton' academic case presenting argumentation in support of a contention related to a debatable issue in their field. This map includes the major objections and rebuttals to their position and uses full, complete grammatical, declarative sentences in boxes. The next stage is that students conduct further research to identify supporting reasons and evidence for their case which they then bring together in a synthesis grid which shows how the major and minor claims in their argument map will be supported and opposed from all their sources. The next step is for students to create a paraphrasing grid in which they both paraphrase and reference each separate support or evidence they have extracted from the research literature to flesh out their argument map. The paraphrasing grid enables the teacher to evaluate students' paraphrasing efforts as both the original quote and extract from the literature and the students' paraphrased rendition are presented side by side. The final step is the writing of the research paper by adding appropriate logical connectors to signal the logical relationships between the claims and supports in their argument map.

Students learn how to add appropriate rhetorical devices and formulae to convey their positive/negative evaluation of opposing or supporting reasons or evidence reported from research. At this stage students are guided in how to convey stance or insert their own writer's

voice through the skillful use of rhetorical devices, problematising phrases, modals, adjectives and adverbs which either weaken or strengthen their own or other's claims or evidence.
Based on our experience at IALF Bali, we have found it extremely useful if students are required to provide a map of their reasoning whenever they hand in a piece of written work that involves presenting some kind of reasoning or argument. In addition, in order to promote critical thinking it is highly recommended that students be required to present their reasoning maps to each other for peer critiquing before writing up their essay or papers.

As has been mentioned, mandatory mapping before writing makes teachers' lives easier because an argument map offers an instant and effortless scan ability of the overall structure of the argument or academic case presented by the student. What arguments are well or poorly supported, what objections are presented, whether these are skillfully rebutted or whether the rebuttal needs further evidence, etc. is all clearly evident. It saves teachers considerable time and effort, which they usually spend in trying to decipher what a student's argument in a piece of prose argumentation consists of.

An example of a student's argument map (appendix 7), an extract from her paraphrasing grid (appendix 8) and her final research assignment (appendix 9) is attached. This student commenced her 3 month EAP program with an IELTS Writing band score of 5.5. The research essay assignment was undertaken in the final phase of her EAP program

How can CSAM help EFL students develop critical thinking skills?
Van Gelder (2005 b) has presented a convincing case arguing that CSAM has the potential to enhance human reasoning and augment human intelligence. He argues that CSAM helps strengthen and extend peoples' intrinsic reasoning skills, i.e., the skills they deploy unconsciously when engaging in reasoning in everyday or educational or professional contexts, particularly those involving complex reasoning

Rider and Thomason (2008), argue that "Lots of Argument Mapping Practice" (LAMP) using a software tool like *Rationale* considerably improves students' critical thinking skills and has additional cognitive and pedagogical benefits like helping students to learn to better understand and critique arguments, to improve in their reading and writing, to become clearer in their thinking and even to gain meta-cognitive skills that ultimately make them better learners.

It does seem irrefutable that argument mapping is a useful tool for developing critical thinking particularly in helping students to critically evaluate reasoning. One reason as previously mentioned, is because argument maps make the structure of reasoning completely explicit and thus they help students see strengths and weaknesses in their own and others' argumentation that would otherwise be obscured or hidden (Monk 2004).

However an even more important reason why argument mapping is a useful tool for developing critical thinking is that mapping an issue from two sides encourages rational debate about issues and mitigates against biases like belief preservation and confirmation bias (Monk 2004). Van Gelder (2004) argues that in particular the explicit teaching of counterargument (objection, rebuttal and concession), helps overcome a natural human tendency to belief preservation. He points out that the human mind has a natural tendency toward cognitive biases and blind spots, in particular belief preservation. There is the tendency to pay more attention to evidence that supports our existing opinions rather than contradicts them. He argues that teachers need to push students to apply compensatory strategies, in particular to use counterargument. Teachers should therefore encourage students to put extra effort into searching for and attending to evidence that contradicts what they currently believe. In addition, when "weighing up" the arguments for and

against, students should be encouraged to be given "extra credit" for those arguments that go against their position and students also need to be trained to cultivate a willingness to change their mind when the evidence starts mounting against their position.

Hoffman also believes that the true benefit of CSAM is its capacity to promote flexible thinking and reduce biased thinking. He points out that the primary goal of such mapping so far, has been to clarify the structure of argumentation, but not necessarily to change the ways students frame what is going on. Hoffman however argues that the main goal of CSAM should be to visualize the mostly implicit logic of people's reasoning in order to stimulate self-reflection and the modification of implicit assumptions thus aiming for positive cognitive change (Hoffmann 2004). This is another claim for CSAM that could be usefully tested in the TEFL context.

Concluding Remarks

Computer-generated argument mapping can be effectively utilized in English for Academic Purposes programs to equip students with the ability to create evidence-based logical reasoning in their English academic writing. Acquainted with critical thinking competency, they are able to delve into the argumentation and reasoning in the English academic texts they read. Students are in need of training in the utilization of reasoning mapping software to diagram reasoning to be able to cope with the formidable task of realizing the complex pyramid hierarchical structure of logical reasoning. This way they can perceive the intricate network of discussions and avoid specious argumentation as well as erroneous interpretation. Hence, they learn to relate the ideas to one another logically and meaningfully. They can contribute fully, valuably, and effectively to the development of ideas and, in turn, gain from what these ideas critically offer them. By expanding students' critical thinking ability and providing them with logical reasoning techniques, teaching them what to value and what to ignore, computer-generated argument mapping further empowers students to take a critical, profound and innovative stance while dealing with certain texts. They will be able differentiate between cogent, well-grounded argument and specious discussion.

References

Austhink (developers of Rationale CSAM software) http://rationale.austhink.com/learn

Benesch, S. (1995). Genres and processes in sociocultural context. *Journal of Second Language Writing, 4*(2), 191-195.

Benesch, S. (1999).Thinking critically, thinking dialogically. *TESOL Quarterly*, 3 (3), 573-580.

Bolton, S. (2007) *No Argument! Language and Logic in Indonesian EAP Student writing.* Dissertation submitted to the University of Manchester for the degree of MEd Educational Technology and ELT

Connor, U., Gorman, T. and Vahapassi, A. (1987). The argumentative/persuasive task.In T. P.Gorman, A. C. Purves and R. E. Dagenhart (eds.). *The IEA Study of Written Composition*, Vol. I. *The International Writing Scales and Scoring Scales* Jyvaskyla, Finland: Institute for Educational Research, 155-171.

Cope B. & Kalantzis M. (Eds) (1993) *The powers of literacy: A genre approach to teaching writing* (Pittsburgh, PA, University of Pittsburgh Press).

Davies, W. M., (2001), 'Where to Begin? Problems in Teaching Critical Reasoning to NESB Students', *Sources of Confusion*, Language and Academic Skills Conference, La Trobe University, November.2003

Davies, W. M., (2006) 'An "Infusion" Approach to Critical Thinking: Moore [sic] on the Critical Thinking Debate', *Higher Education Research and Development, 25 (2)* (reply to Tim Moore's paper: "The Critical Thinking Debate: How General are General Thinking Skills?" *HERD*, Vol 1 (1), 2004, pp. 3-18.

Davies, W. M., (2003), 'A Cautionary Note about the Teaching of Critical Reasoning', Higher Education Research and Development Society of Australia (HERDSA), *Learning for an Unknown Future.* 2-9th July, 2003, Christchurch, New Zealand.

Egege, S and Kutieleh, S. (2004) Critical Thinking and International Students: A Marriage of Necessity *Dealing With Diversity* First Year in Higher Education Conference, Monash University, July 2004 www.fyhe.qut.edu.au/past_papers/papers04.htm.

Horn, R. E 1998). *Mapping Great Debates: Can Computers Think?* Bainbridge Island WA: MacroVU, Inc.

Moodie, J. (2001) The Development of critical voice in the writing of international postgraduate students *Changing Identities* National Language and Academic Skills Conference Wollongong, 28 Nov

Monk , P and van Gelder, T. (2004) Enhancing our Grasp of Complex Arguments http://austhink.org/monk/Fenner/Fenner.htm plenary address by Paul Monk at the 2004 Fenner Conference on the Environment, Australian Academy of Science, Canberra, 24 May 2004. [15 June 04]

Okada, A. J. Buckingham, S.J. Shum and Sherborne, T (eds) (2008) *Knowledge Cartograp y* Springer

Rationale CSAM software website http://rationale.austhink.com

Rider, Y and Thomason, N (2008) 'Cognitive and Pedagogical Benefits of Argument Mapping: LAMP Guides the Way to Better Thinking' in Okada, A. J. Buckingham, S.J. Shum and Sherborne, T (eds) (2008) *Knowledge Cartography* Springer

Sinclair, S. (2000). 'When I say 'Describe' I don't mean that you should just describe'… *Sources of Confusion*, National Language and Academic Skills Conference, La Trobe University, November 27-28, 2000

Varghese S.A and Abraham S. A. (1998) 'Undergraduates Arguing A Case*' Journal Of Second Language Writing*, 7 (3), 287-306 National University Of Singapore

Tannen, D. 1998 The *Argument Culture*: *Moving From Debate To Dialogue*, Random House

Thomas, T, Kazlauskas, A and Davis, T. (2004) 'Teaching first year students to communicate their reasoning' *Dealing With Diversity* First Year in Higher Education Conference, Monash University, July2004 http://www.fyhe.qut.edu.au/past_papers/papers04.htm

van Gelder, T. (2005 a). Teaching critical thinking: Some lessons from cognitive science *College Teaching*, *45*(1), 1–6.

van Gelder, T. (2005 b) 'Enhancing and Augmenting Human Reasoning' in Zilhão A (ed.) (2005) *Evolution, Rationality, and Cognition: A Cognitive Science for the Twenty-First Century*, Routledge

Twardy, C. R., (2004). Argument Maps Improve Critical Thinking Teaching Philosophy, 27:2

Zilhão A (ed.) (2005) *Evolution, Rationality, and Cognition: A Cognitive Science for the Twenty-First Century*, Routledge

APPENDIX 1

Should marine mammals be kept in captivity in marine parks? Discuss.

(*Marine mammals* are warm-blooded sea animals such as whales, dolphins and seals. *Marine parks* are places where these animals are kept in pools and perform in shows for the public to see. An example of a marine park in Australia is 'Seaworld' on the Gold Coast in Queensland, Australia)

Adapted from online text by Bill Daly, 1997,http://www.ltn.lv/~markir/essaywriting/frntpage.htm

The issue of whether we should allow marine parks to stay open has been widely debated in our community recently. It is an important issue because it concerns fundamental moral and economic questions about the way we use our native wildlife. A variety of arguments have been put forward. This essay will consider arguments for having marine parks and point to some of the problems with these views. It will then put forward good reasons why laws should be introduced to prohibit these unnecessary and cruel institutions.

It has been argued that dolphin parks provide the only opportunity for much of the public to see marine mammals (Smith, 1997). Most Australians, so this argument goes, live in cities and never get to see these animals. It is claimed that marine parks allow the average Australian to appreciate our marine wildlife. However, as Smith states, dolphins, whales and seals can be viewed in the wild at a number of places on the Australian coast. In fact, there are more places where they can be seen in the wild than places where they can be seen in captivity. Moreover, most Australians would have to travel shorter distances to get to these wild locations than they would to get to the marine parks on the Gold Coast. In addition, places where there are wild marine mammals do not charge exorbitant entry fees - they are free.

Dr Alison Lane, Director of the Cairns Marine Science Institute, contends that we need marine parks for scientific research (*The Age*, 19.2.1999).
She argues that much of our knowledge of marine mammals comes from studies that were undertaken at marine parks. The knowledge obtained at marine parks, she says, can be useful for planning for the conservation of marine mammal species. However, as Jones (1998) explains, park research is only useful for understanding captive animals and is not useful for learning about animals in the wild. Dolphin and whale biology changes in marine park conditions. Their diets are different, they have significantly lower life spans and they are more prone to disease. Furthermore, marine mammals in dolphin parks are trained, and this means that their patterns of social behaviour are changed. Therefore, research undertaken at marine parks can be generally seen to be unreliable.

It is the belief of the Marine Park Owners Association that marine parks attract numerous foreign tourists (*The Sun-Herald* 12.4.1999). The organisation asserts that these tourists spend a great deal of money, increasing our foreign exchange earnings and assisting our national balance of payments. However, it is arguable that foreign tourists would still come to Australia if the parks were closed. Indeed, recent surveys of overseas tourists show that they come here for a variety of other reasons and not to visit places like Seaworld (*The Age, Good Weekend* 16.8.1999). Tourists come here to see our native wildlife in its natural environment and not to see it in cages and cement pools. There are plenty of opportunities for them to see animals in these conditions in their own countries. What is more, we should be promoting our beautiful natural environment to tourists, not the ugly concrete marine park venues.

Marine parks are unnecessary and cruel, and they should not be supported. The dolphins and whales in these parks are kept in very small, cramped ponds, whereas in the wild they are used to roaming long distances freely across the seas. Another point to consider is that the concrete walls of the pools interfere with the animals' sonar systems of communication making it difficult or impossible for them to communicate with each other.

A related argument is that keeping these animals in confined areas is a terrible restriction of the freedom of highly intelligent creatures that have sophisticated language ability. Moreover, these animals are friendly and helpful to human beings and as such deserve our respect. There are many

documented cases of marine mammals helping humans who are in danger at sea or helping fishermen with their work.

In conclusion, marine parks need to be closed, or at the very least, no new animals should be captured for marine parks in the future. Our society should no longer be prepared to tolerate unnecessary cruelty to animals for the purposes of science or entertainment. If these creatures continue to suffer as victims of captivity, future generations will surely remember us as cruel and inhumane.

Bibliography

The Age, 19.2.1999

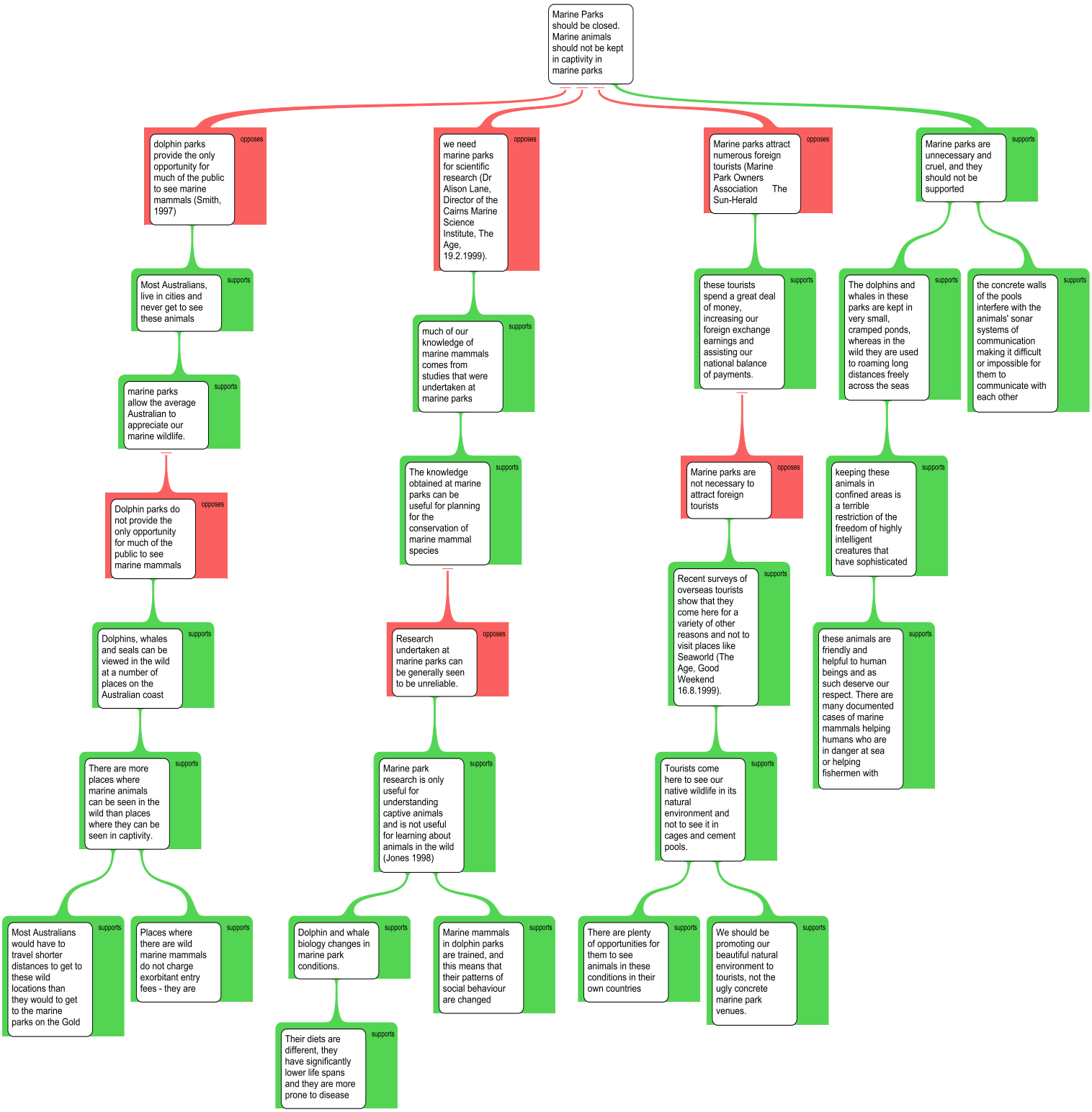
The Age Good Weekend, 16.8.1999

Jones, G. (1998). 'The Myths about Animal Research in Marine Parks'. In *Scientific Australian*. vol 12, no 3.

Smith, H. (1997). 'Marine Parks: Good for Business, Good for Australia'. In *Leisure Business Review*. vol 24, no. 4

The Sun-Herald, 12.4.1999

APPENDIX 2


Marine Parks should be closed. Marine animals should not be kept in captivity in marine parks
dolphin parks provide the only opportunity for much of the public to see marine mammals (Smith, 1997)
opposes
we need marine parks for scientific research (Dr Alison Lane, Director of the Cairns Marine Science Institute, The Age, 19.2.1999).
opposes
Marine parks attract numerous foreign tourists (Marine Park Owners Association The Sun-Herald
opposes
Marine parks are unnecessary and cruel, and they should not be supported
supports
Most Australians, live in cities and never get to see these animals
supports
much of our knowledge of marine mammals comes from studies that were undertaken at marine parks
supports
these tourists spend a great deal of money, increasing our foreign exchange earnings and assisting our national balance of payments.
supports
The dolphins and whales in these parks are kept in very small, cramped ponds, whereas in the wild they are used to roaming long distances freely across the seas
supports
the concrete walls of the pools interfere with the animals' sonar systems of communication making it difficult or impossible for them to communicate with each other
supports
marine parks allow the average Australian to appreciate our marine wildlife.
supports
The knowledge obtained at marine parks can be useful for planning for the conservation of marine mammal species
supports
Marine parks are not necessary to attract foreign tourists
opposes
keeping these animals in confined areas is a terrible restriction of the freedom of highly intelligent creatures that have sophisticated
supports
Dolphin parks do not provide the only opportunity for much of the public to see marine mammals
opposes
Research undertaken at marine parks can be generally seen to be unreliable.
opposes
Recent surveys of overseas tourists show that they come here for a variety of other reasons and not to visit places like Seaworld (The Age, Good Weekend 16.8.1999).
supports
these animals are friendly and helpful to human beings and as such deserve our respect. There are many documented cases of marine mammals helping humans who are in danger at sea or helping fishermen with
supports
Dolphins, whales and seals can be viewed in the wild at a number of places on the Australian coast
supports
Marine park research is only useful for understanding captive animals and is not useful for learning about animals in the wild (Jones 1998)
supports
Tourists come here to see our native wildlife in its natural environment and not to see it in cages and cement pools.
supports
There are more places where marine animals can be seen in the wild than places where they can be seen in captivity.
supports
Most Australians would have to travel shorter distances to get to these wild locations than they would to get to the marine parks on the Gold
supports
Places where there are wild marine mammals do not charge exorbitant entry fees - they are
supports
Dolphin and whale biology changes in marine park conditions.
supports
Marine mammals in dolphin parks are trained, and this means that their patterns of social behaviour are changed
supports
There are plenty of opportunities for them to see animals in these conditions in their own countries
supports
We should be promoting our beautiful natural environment to tourists, not the ugly concrete marine park venues.
supports
Their diets are different, they have significantly lower life spans and they are more prone to disease
supports

APPENDIX 3

The following claims and supports were adapted from an online text by Bill Daly, 1997 Writing Argumentative Essays http://www.ltn.lv/~markir/essaywriting/frntpage.htm

Opinion essay- One-sided Rhetorical Pattern

The essay below uses only supporting arguments. Notice the rhetorical formulas or devices are italicized

FOR childcare & subsidising childcare

Over the last decades there has been increasing financial pressure on mothers to contribute to their families income by working. However, childcare is expensive and many working mothers could not afford to work without the government childcare subsidy. *Some people argue that* childcare has negative effects and should not be subsidised by the government. *Others argue that* childcare benefits children, parents and the economy. *This essay supports this last view and argues that* the government should provide more not less financial assistance to parents who use childcare because childcare has many positive effects.

Firstly, childcare may assist children in early learning. *For example,* childcare gives children an opportunity to mix with other children and to develop social skills at any early age. *Indeed* a whole range of learning occurs in childcare centers.

Secondly, childcare benefits the relationship between parents and children. *For example,* children become less dependent on their parents and parents themselves are less stressed if there are periods of separation. *In fact*, recent studies show that the parent child relationship can be improved by the use of high quality childcare facilities.

Finally, childcare benefits the national economy. *Evidence for this is that* working parents contribute to the national economy because they are able to utilize their productive skills and pay income tax.

In conclusion, government support for childcare services assists individual families and is important of the economic well-being of the whole nation. *For these reasons* the government should subsidise childcare services.

APPENDIX 4

Two sided essay: Clustering Rhetorical pattern

The following is a classic 'discussion essay' which presents both sides of the argument but opposing and supporting arguments are listed in separate paragraphs
Notice that opposing or counter arguments/objections to the writer's thesis (which is given in the conclusion) are presented first and are then followed by rebuttals or arguments supporting the writer's thesis. Notice the rhetorical formulas or devices are italicized

FOR childcare & subsidising childcare

Recent changes in federal government priorities have seen a reduction in financial support for parents who use childcare. This is occurring at a time when there is increasing social and financial pressure on parents, particularly mothers, to work. *There is ongoing debate about whether* childcare *is really beneficial* and should be subsidized by governments or not. *This essay presents arguments for and against* subsiding childcare.

People who disagree agree with subsiding childcare *contend that* childcare has many detrimental effects on children, parents and the economy and should therefore not be subsidised by governments. *They claim that* children who attend childcare centers at an early age may miss out on important early learning that occurs in parent child interaction. *They also argue that* children may become emotionally deprived and emotionally insecure if they go to childcare. *Another point they make is that* the government and the economy as a whole cannot afford the costs involved in supporting childcare for working parents.

However, there are also strong arguments in support of subsiding childcare. *Proponents of childcare say that* childcare benefits children, parents and the economy. *They argue that* childcare assists children in early learning because it gives children an opportunity to mix with other children and so develop social skills at an early age. *Another argument they make is that* childcare benefits the relationship between parents and children because children become less dependent on their parents and parents become less stressed if there are periods of separation. *Furthermore they believe that* childcare benefits the national economy because working parents are able to utilize their productive skills and pay income tax.

In conclusion, after looking at the different points of view and the evidence for them, it is my contention that government support for childcare should continue because the many benefits of childcare outweigh the drawbacks.

APPENDIX 5

Two sided essay: Alternating Rhetorical pattern
In the following essay, the writer shifts between objection and rebuttal for each separate theme or topic used to develop their case.. Notice the rhetorical formulas or devices are italicized

FOR childcare and subsidising childcare

Recent changes in federal government priorities have seen a reduction in financial support for parents who use childcare. This is occurring at a time when there is increasing social and financial pressure on parents, particularly mothers, to work. *The issue of* childcare and working mothers *has been debated for some time*. *Many argue that* the best place for children is always in their own homes with their own parents. *However, it is my contention that* there are many advantages to be had from using childcare and therefore the government should provide more financial assistance to parents who do so.

It has been argued that children who attend childcare centres at an early age miss out on important early learning that occurs in parent-child interaction. These children, *so this argument goes,* may be educationally disadvantaged later in life. *However*, childcare centres may actually assist children in their early learning. *For example*, they give children an opportunity to mix with other children and to develop social skills at an early age. *Indeed,* a whole range of learning occurs in childcare centers.

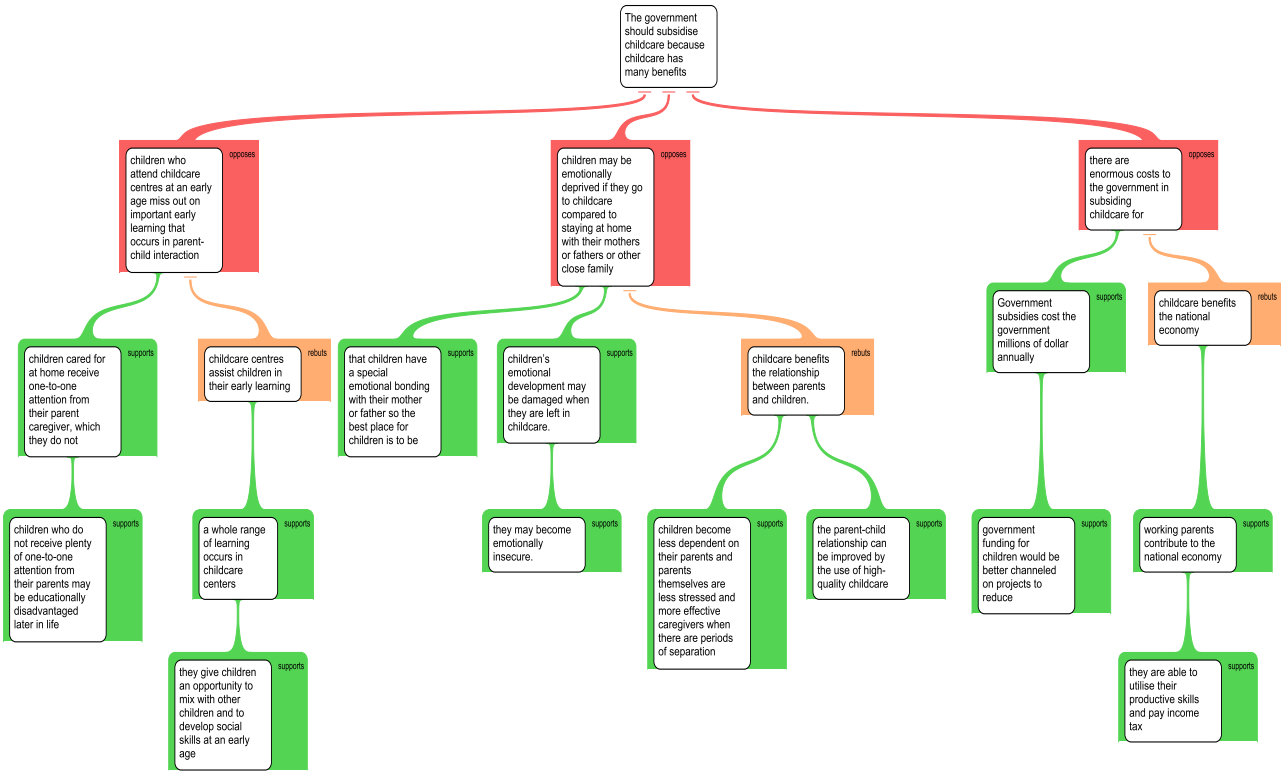
Another argument against the use of childcare facilities *is that* children can be emotionally deprived in these facilities compared to the home. *This argument assumes that t*he best place for children is to be at their parents', especially mothers', side for twenty-four hours a day. *It claims that* children's emotional development can be damaged when they are left in childcare facilities. *However, it is my contention that* childcare *actually* benefits the relationship between parents and children. *The reason is that* children become less dependent on their parents and parents themselves are less stressed and more effective caregivers when there are periods of separation. In *fact, recent studies indicate that* the parent-child relationship can be improved by the use of high-quality childcare facilities.

It could further be asserted that the government and the economy as a whole cannot afford the enormous cost involved in supporting childcare for working parents. *However,* childcare actually benefits the national economy because working parents contribute to the national economy. *Evidence for this is that* they are able to utilise their productive skills and pay income tax, while nonworking parents can become a drain on the tax system through dependent spouse and other rebates.

In conclusion, despite the claims by opponents of childcare *that* childcare has a negative impact on children, families and on the national budget, *in fact,* childcare services assist individual families and are important for the economic well-being of the whole nation. *Therefore* government support for childcare should continue.

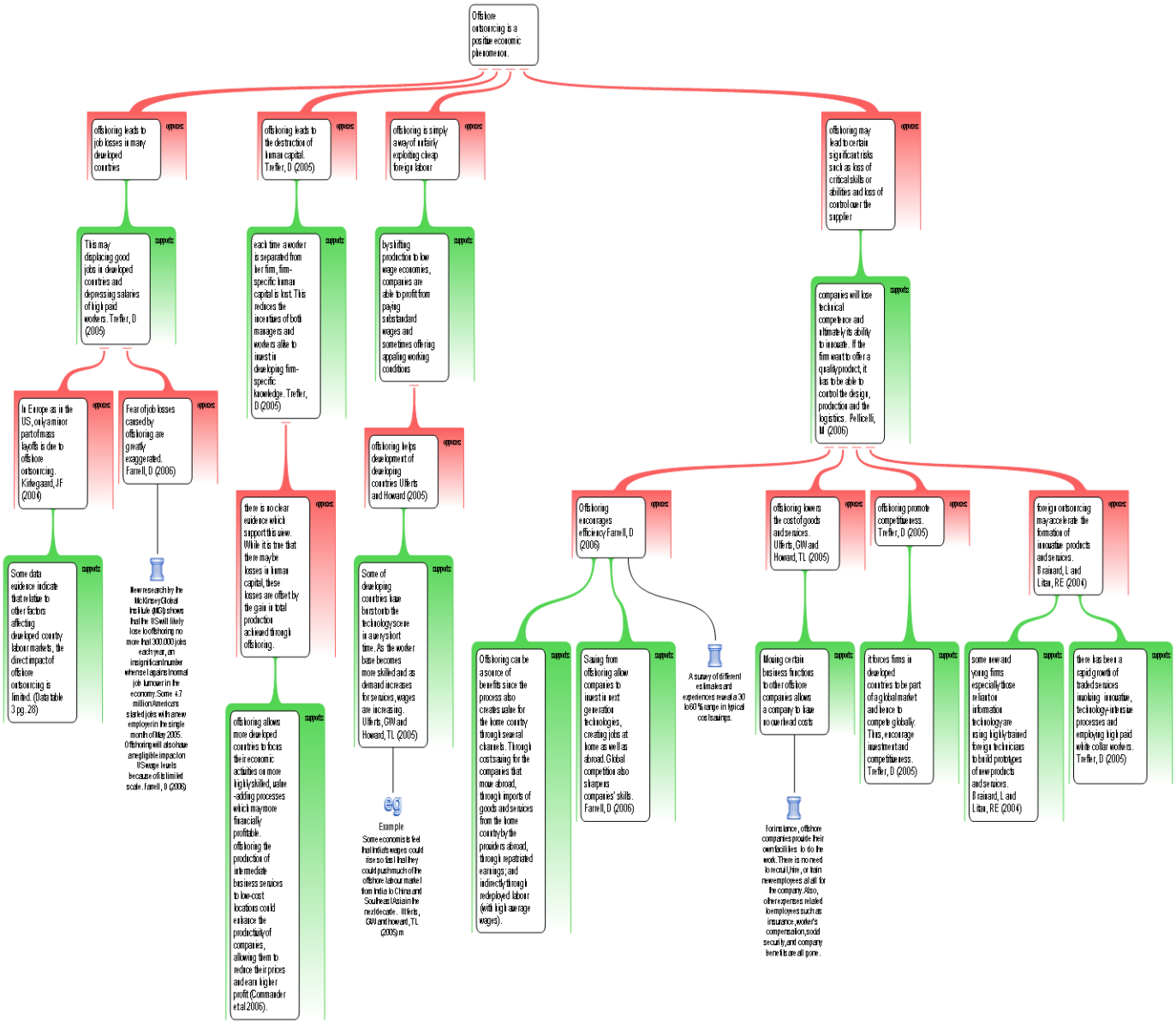
APPENDIX 6

Following Claims and supports were **adapted from an online text by Bill Daly, 1997 Writing Argumentative Essays, http://www.ltn.lv/~markir/essaywriting/frntpage.htm**



APPENDIX 7

Sample student map for research essay assignment
(On entry to her 3 month EAP program this student has IELTS writing score of 5.5, this assignment represents the final course task)



APPENDIX 8

Sample Paraphrasing Grid (extract only)

Main Claim: Offshore outsourcing is a positive economic phenomenon.

Source	Quote from literature	Paraphrase
Commander et al (2006)	Today, there is broad agreement among economists that the offshoring of jobs has created net benefits for both host and home countries.	Offshoring is seen as benefiting both the origin and destination countries.
Ulferts and Howard (2005)	Manufacturing, for example, has been using offshore arrangements for decades as a way to drive down costs and boost production. In the 1990s the production of IT hardware moved offshore, resulting in price reduction of 10% to 30%. In deciding which company to choose, US businesses can tap into an international pool of highly talented, experienced workers who do the same skilled job at a lower price.	It could lower cost of goods and services to the origin country and provide jobs to the destination country.
Liikanen (2004)	The current economic slowdown in the EU does not guarantee that new jobs will be created t replace those lost. Secondly, deindustrialisation is often accompanied by offshoring of some jobs as activities are transferred abroad; however, this time part of the offshoring process includes high-tech and research-intensive jobs as opposed to the blue-collar job migration that has been traditionally easier to accept. That could well have serious implications for Europe's future competitiveness.	Offshoring process includes high technology activities and research-intensive jobs as opposed to the blue-collar job migration that has been traditionally accepted in developed countries
Trefler, D (2005)	Service offshoring is the use of workers located abroad to provide sophisticated services to US customers. Service offshoring is currently small. As it grows it will undoubtedly have important effects on America. However, the real concern is that in the longer run of 10 – 20 years, Chinese and Indian exports will devastate the United States. What we are less familiar with is losing high paying jobs to India.	Service offshoring employs highly skilled, white-collar workers operating in low cost countries. This concern raises issue that a number of people will lose their jobs and in the longer run the offshore destination countries will devastate the developed nations.

APPENDIX 9

Sample Student Research Essay Assignment
OFFSHORING IS A POSITIVE ECONOMIC PHENOMENON

Offshore outsourcing (offshoring) refers to purchases by companies (or government) for services from foreign providers, or the transfer of particular tasks within the organization to a foreign country (Kierkegaard 2004). Offshoring has been a worldwide phenomenon that is especially affecting the developed countries of the world such as the US, European Union and Japan. Offshoring has intensified due to the rapid rise in available infrastructure for sending digital information around the globe at very low and declining cost (Commander et al 2006). According to (Kierkegaard) the advances in information and communication technology have been one of the major factors which trigger offshoring. The Internet and lower cost telecommunication increase connectivity and business networking throughout the world. Another factor that has driven the recent rapid increase in offshoring is access to a large pool of skilled English speaking labour in several countries.

Offshoring as one element in a significantly changing world is seen as benefiting both the origin and destination countries (Commander et al 2006). It could lower cost of goods and services to the origin country and provide jobs to the destination country (Ulferts and Howard 2005). Nevertheless, offshoring has been a controversial issue causing debate among economists.

The current debates reflect several concerns. Opponents of offshoring state that offshoring process includes high technology activities and research-intensive jobs as opposed to the blue-collar job migration that has been traditionally accepted in developed countries (Liikanen 2004). Service offshoring employs highly skilled, white-collar workers operating in low cost countries. This concern raises issue that a number of people will lose their jobs and in the longer run the offshore destination countries will devastate the developed nations (Trefler 2005). In addition to some other risks, another concern is the disruption caused by the growth of service offshoring, which may make it less worthwhile for firms to make long-term investments in their own human capital (Trefler 2005). On the other hand, proponents of offshoring often say it is necessary to move jobs overseas because of a shortage of qualified workers in the domestic market and the great amount of qualified candidates in foreign markets (Ulferts and Howard 2005). Also, lowering cost, deploying work opportunities and increasing competitiveness of products and services in the global market are viewed as other advantages offering by offshoring.

As concerns are widespread about advantages and drawbacks, this paper will examine the risks and benefits of offshoring and argues that the likely risks involved are overstated, while the potential economic benefits are far greater.

A study by (Trefler 2005) finds that offshoring might lead to the loss of job opportunities in developed countries and reduce salaries of well-paid workers. According to Brainard and Litan (2004) offshoring could result in around 250,000 layoffs in U.S each year. This figure was drawn from research conducted by Forrester, an information technology consulting firm, who predicts that the number of U.S. jobs outsourced will increase from about 400,000 in 2004 to 3.3 million in 2015. However, a later study by Farrell (2006), reveals that apprehension of job losses because of offshoring is very much overstated. Research by McKinsey Global Institute (MGI) finds that jobs lost by offshoring are approximately only about 300.000 each year. This figure is small compared to average job revenue in the economy. For example, about 4.7 million Americans started jobs with a new company in the month of May 2005. Theoretically, the greatest number of US service jobs that could be carried out offshore is only about 11% of total service employment. In fact, projection of all US service jobs essentially will be done offshore by 2008 is less than 2% (Farrell 2006).

Due to the requirement of a physical presence only a small portion of service jobs could ever go offshore, for example, stocking shelves, providing nursing care, or installing networks. In health care and retail, which are two of the largest service sectors, only 8% and 3% of jobs respectively could be done distantly. The highest percentage of jobs that could be performed remotely in industries such as packaged software (49%) and IT services (44%) represent only 1 or 2 % on the whole employment)Farrell 2006). Similarly, a study by Kirkegaard (2004) investigates the relationship between offshoring and mass layoffs in Europe as well as in the US. Using data about various reasons for mass layoffs in the US from 1996 to 2003 this study finds that offshoring has a relatively small impact on both the US and European labour markets compared to other sources of job losses. Furthermore, this study concludes that jobs moved from developed countries to low level salaries in the developing countries are low paid work and the range is limited (Kirkegaard 2004).

A large body of evidence confirms that offshoring is not the cause of mass layoffs. The US Bureau of Labour Statistics shows that only 1% of service layoffs involving more than 50 employees in the first quarter of 2004 was linked with offshoring (Farrell 2006)

Additionally, Mary Amity and Shang-Jin Wei, two economists at the IMF, (cited in Farrell 2006) estimate that US and UK service sectors exposed to offshoring are creating as many or more new jobs than the ones that move offshore.

Another argument against offshoring is that offshoring might lead to the destruction of human capital. Trefler (2005) assumes that if a worker is separated from his/her firm, firm-specific human capital is lost as well. This may reduce the incentives of both managers and workers to invest in developing firm-specific knowledge. For example, a well-paid Information System (IT) consultant will typically know much more than just IT. He/she will know about the unique needs of the firm. Offshoring leads to more frequent separations between workers and firms, thus destroying important dimensions of human capital. In other words, this study presumes that offshoring is likely to reduce the length and value of worker-firm relationships. However, as the above analysis indicates, the assertions are likely to be overstated as there is no clear evidence which support this view. While it is true that there may be losses in human capital, these losses are offset by the gain in total production achieved through offshoring. Offshoring allows more developed countries to focus their economic activities on more highly skilled, value-adding processes which may be more financially profitable. It can be further stated that offshoring the production of intermediate business services to low-cost locations could enhance the productivity of companies, allowing them to reduce their prices and earn higher profit (Commander et al 2006). What is more, some of the gains from offshoring can be used to help displaced employee cope. Wage loss insurance, for example, would cost only a fraction of the savings that offshoring will bring (Farrell 2006).

Moreover, profit generated through offshoring can be used to develop firm's human capital. Workers need help coping with the accelerated pace of job change that accompanies openness to global trade (Farrell 2006). Improving human capital would help to overcome losses from offshoring. Education and training can have a significant impact on economic growth, particularly through the influence of human capital on the introduction and absorption of new technologies, which in turn can raise overall productivity. In addition, higher profit then can finance more investment to improve existing products or produce new products (Commander et al 2006).

Unfairly exploiting inexpensive foreign labour is also cited as one negative consequence of offshoring. Some people believe that companies simply take advantage of paying low level wages and sometimes offer bad working conditions when shifting production to low wage countries. However, a study released by Ulferts and Howard (2005) indicates that offshoring helps the development of developing countries. Many developing countries have exploded into the technology scene in a very short time. As the worker base becomes more skilled and as demand increases for services, wages are increasing. A number of economists think that India's wages could increase so fast that they could push much of the offshore

labour market from India to China and Southeast Asia in the next decade. Research by Commander et al (2006) supports this point and add that India and China which attract offshored jobs will benefit through more jobs, higher incomes, and faster growth. Consequently, there will be increased demand for exports from the offshoring nations.

In terms of risk involved, opponents of offshoring try to argue that offshoring may lead to certain major risks such as loss of critical skills or abilities and loss of control over the supplier. A good quality product needs to be maintained by firms in order to be competitive and therefore the design, production and the logistics has to be controlled. Moving a particular task remotely will make companies lose technical capability and eventually its ability to innovate (Pellicelli 2006). It might be true that some risks will be faced through offshoring. However, offshoring basically encourages efficiency. According to a survey, usual cost savings range in between 30 to 60 % (Kirkegaard 2004). Liikanen (2004) argues that through offshoring many benefits can be obtained as the process also creates value for the home country in a number of ways. For example, by saving costs for the companies that move abroad, by repatriating earnings, and indirectly by redeploying labour with high average wages.

In addition, Liikanen (2004) remarks that over the medium term the economy will be more proficient and will be using its assets more realistically. Employment will also be intensified even in different sectors than those experiencing turn down. Still during the transitional stage nationally produced goods and services will take some part of employment lost.

Furthermore, profit generated by offshoring allows companies to invest in advanced technologies, creating jobs at home as well as abroad. Companies' skills are even more strengthened because of global competition (Farrell 2006).

Offshoring offers an even larger degree of benefits. As Ulferts and Howard (2005) state that everyone benefits when considering that shifting jobs offshore would lower costs as a company can sell its products cheaper. Shifting particular business functions to other offshore companies allows a company to have no overhead costs. For instance, offshore companies supply their own facilities to do the work. There is no need to take on, hire, or train new employees at all for the company. Also, other expenditure related to employees such as insurance, worker's compensation, social security, and company benefits are all gone (Ulferts and Howard 2005). Offshoring encourages firms in developed countries to be part of a global market and hence to compete globally. Thus, this promotes investment and competitiveness (Trefler 2005).

A significant study by Commander et al (2006) finds that the most important trigger for offshoring have been cost considerations. Labour costs in many countries that magnetize offshored activities are 70 – 90 percent lower than in the highly developed market economies. For example, the wages of Indian software engineers are about 25% of the wages of comparably skilled American software engineers (as measured between the late 1990s and 2003). Such large wage gaps can create considerable costs savings for firms, allowing them to reduce their price and reinforce their competitive position in global markets.
Foreign outsourcing can speed up the formation of innovative products and services (Brainard and Litan 2004). Most firms especially those depending on information and technology are using highly trained foreign technicians to build prototypes of new products and services. A fast escalation of traded services involving innovative, technology-intensive processes has been occurring and involves high paid white-collar workers (Trefler 2005).

It is therefore clear that offshoring will have parallel beneficial effects for economic growth and job creation in the companies and in the countries from which jobs are offshored. India and China that mostly attract offshored jobs will also benefit through more jobs, higher incomes, and faster growth. Consequently, there will be increased demand for exports from the offshoring nations. Briefly, offshoring,

like other forms of trade should be positive for both offshored and offshoring countries (Commander et al 2006).

In conclusion, in spite of many different arguments against offshoring, one cannot assume that risks related to offshoring would scale up for the broader economy. Indeed, there are obvious benefits that offset the disadvantages of offshoring. Offshoring which is caused by improvement in international communication, the computerization of business services as well as the availability of an educated labour force has provided substantial cost savings and improved economic growth for both original and destination countries. The challenge is to deal with these forces and trends so as not only to compete better, but also to create higher paying jobs which in turn result in a higher quality of life. Clearly, offshoring presents attractive opportunities for enterprises and converts benefits to costumers (Liikanen 2004). Offshoring is likely to grow in the future and could have positive effect on global economic development.

Bibliography

1. AeA's Board of Directors 2004, "Offshore Outsourcing in an Increasingly Competitive and Rapidly Changing World: A High-Tech Perspective", Advancing the Business of Technology, retrieved 9 August 2008, http://www.aeanet.org
2. Antràs, P (2005), "Discussion of Daniel Trefler's, Offshoring: Threats and Opportunities," presented at the Brookings Trade Forum, Harvard University, NBER and CEPR, May 12, 2005, retrieved 9 August 2008, http://www.brookings.edu
3. Brainard, L and Litan, RE 2004, "Service Offshoring: Bane or Boon and What to Do?", CESifo Forum, Journal on European Economic Issues, Summer 2004, vol.5, No.2, retrieved 6 August 2008, http://citeseerx.ist.psu.edu
4. Carmel, E and Abbott, P 2007, "Why 'Nearshore' Means that Distance Matters", Communication of the ACM, October 2007, vol.50, no.10, retrieved 7 August 2008, http://anapps.american.edu
5. Commander, S et al., 2006, "Migrating workers and jobs: a challenge to the European social model?", London Business School, retrieved 7 August 2008, http://ftp.iza.org
6. Cronin, B, Catchpowle, L and Hall, D 2004, "Outsourcing and Offshoring", CESifo Forum, Journal on European Economic Issues, Summer 2004, vol.5, no.2, retrieved 6 August 2008, http://citeseerx.ist.psu.edu
7. Farrell, D 2006, "U.S. Offshoring: Small Steps to Make It Win – Win", Economists' Voice, March 2006, The Berkeley Electronic Press, retrieved 7 August 2008, http://www.mckinsey.com
8. Kirkegaard, JF 2004, "Offshore Outsourcing – Much Ado about What?", CESifo Forum, Journal on European Economic Issues, Summer 2004, vol.5, no.2, retrieved 6 August 2008, http://citeseerx.ist.psu.edu
9. Kirkegaard, JF 2004, "Outsourcing – Stain on the White Collar?", Institute for International Economics, retrieved 7 August 2008, http://www.iie.com/publications
10. Liikanen, E 2004, "Adjustment of Europe's Industries in a Competitive World", CESifo Forum, Journal on European Economic Issues, Summer 2004, vol.5, no.2, retrieved 7 August 2008, http://www.iie.com/publications
11. Pellicelli, M 2006, "The New Economic of Outsourcing: empirical evidence from Italian textile-apparel industry", Study Aziendali E manageriali, 2006, retrieved 9 August 2008, Retrieved from Science Direct Database http://www.sciencedirect.com
12. Trefler, D 2005, "Offshoring: Threats and Opportunities", paper prepared for the Brookings Trade Forum, 12 – 13 May, Washington DC, retrieved 7 August 2008, http://www.rotman.utoronto.ca
    Ulferts, GW and Howard, TL 2005, "Offshore Outsourcing: The Impact on Businesses", viewed 9 August 2008, http://www.sbaer.uca.edu