Technical Report #29
Assessment Tools for Teaching and Learning

Using asTTle Persuasive Writing:

A Case Study of Teaching Argument Writing

Submitted by the Assessment Tools for Teaching and Learning team,

Auckland UniServices Ltd

University of Auckland

August, 2003

Using asTTle Persuasive Writing:
Case Study of Teaching Argument Writing

This report outlines a case study in teaching argument writing using the asTTle persuasive writing progressive indicators. asTTle is funded by the Ministry of Education to Auckland Uniservices Ltd. at the University of Auckland to research and develop an assessment application for Reading, Writing, Mathematics, Pānui, Pāngarau, and Tuhituhi for Years 5-10 (Levels 2-6) for New Zealand schools. We acknowledge this funding, and thank the Ministry of Education for their continued assistance in the development of this project.

The ability to write persuasively or to conduct an argument is an essential academic skill in a number of subject areas and which is prized in high stakes assessments. Poor performance in such writing may be attributed to student inexperience with this socio-communicative purpose and ignorance of the task demands of this type of writing. A teaching intervention for argument writing based on the asTTle 'persuade' progress indicators for Levels 2 to 4 was implemented in four secondary school classrooms. The students were largely Maori and Pacific Nations students with scores for deep features of argument consistent with performance in the lower half of curriculum level 2. Within the course of a 25-hour instructional programme, a large average gain in deep features of argument writing of over one curriculum level (effect size = 1.6) was reliably found.

Prof. John Hattie
Project Director, asTTle
August 2003

The bibliographic citation for this report is:

Harland, D. (2003, August). *Using asTTle persuasive writing: A case study of teaching argument writing.* asTTle Technical Report, #29. University of Auckland/Ministry of Education.

Also see:

Harland, D. (2002). *Teaching argumentative writing to year 9 students.* Unpublished Masters thesis, University of Auckland, NZ.

Using asTTle Persuasive Writing: Teaching Argument Writing

Don Harland
University of Auckland & Howick College

Table of Contents

The ability to write persuasively or to argue a point of view is an essential curriculum objective in English (Ministry of Education, 1994). Harland (2002) reported a panel of six expert English curriculum teachers agreeing that "argumentative writing was an important part of the English curriculum" (p. 83). Further, this type of writing is a key element of success at the national school qualifications for English (New Zealand Qualifications Authority, 1999, 2000). Part of the rationale for the privilege position of this purpose of writing in schools is derived from the importance argumentative writing has in society beyond compulsory schooling (Christie, 1986b; Crammond, 1998; Martin, 1985; Yeh, 1998). It is unfortunate that the general ability of students (especially those from minority and low socio-economic backgrounds) to write persuasively has been found to be relatively low in New Zealand (Flockton & Crooks, 1998), in the United States of America (Applebee & Langer, 1984; Knudson, 1991; Yeh, 1998), and Australia (Martin, 1985).

Poor performance in argumentation can be partially attributed to students' ignorance of the task demands of this socio-communicative purpose as it is instantiated in written language (Harland, 2002). Writing is a purposeful social interaction that functions to accomplish certain social goals. To use language as a system for representing and transforming their own worlds, students need to develop knowledge not just about texts, but also about writing as a purpose-driven communicative response in social and cultural contexts. Each socio-communicative purpose has generic elements related to the type of audience being addressed, the selection and organisation of content, and selection and use of language resources (Glasswell, Parr, & Aikman, 2001).

The Assessment Tools for Teaching and Learning (asTTle) project, released to all New Zealand schools in 2003, has adopted a socio-communicative approach to the assessment of writing (Ministry of Education, 2003). The asTTle approach to persuasive writing and its marking rubrics (known as progress indicators) have been designed for Levels 2—4 of the English curriculum. This research study has adopted the asTTle understanding of the characteristics of persuasive writing as

the basis for the intervention and as a means of monitoring whether the intervention was changing students' performance in writing persuasively. The next section, taken from the asTTle Writing Manual (Hattie, Brown, & Keegan, 2002) supplied with the asTTle CD ROM, provides greater insight into the nature of argumentative writing within the asTTle Project.

Characteristics of Argument Writing

Persuasive or argument writing centres on an assumption that a writer must convince a particular reader, whether real or imagined, through the presentation of relevant points with supporting evidence. The main focus is to argue a position or to persuade a reader to a particular point of view. A thesis or position statement provides the reader with the context. In the body of the text, there are main points with elaboration, usually in the form of supporting evidence. This part of the text takes the reader through a structured and logical presentation of information (i.e., evidence and/or illustration) to support the writer's position or thesis. The conclusion restates the writer's position and/or makes a recommendation for action about what ought or ought not to be done. There is a focus on objects and ideas, rather than events, happenings or processes. Information and ideas are grouped logically and linked thematically. Organizing devices such as paragraphing and conjunctions are used to show relations among content items or ideas.

In terms of language resources arguments name and describe, in noun phrases, generalized participants or abstract concepts (e.g., parents or the gun-control lobby). Arguments employ declarative or stating mood choices to make statements of fact and offer personal opinions on the topic. Precise, descriptive, factual language is employed to give detail and credibility to the argument. Persuasive or emotive language is commonly used to add to the impact on the reader and make the argument seem powerful. Further details about the types of language used in persuasive writing can be found in the asTTle writing manual.

Naturally, accuracy and sophistication in the use of grammar, punctuation, and spelling are vital characteristics of successful writing. However, these surface features are not unique to any one socio-communicative purpose. The deep features having to do with the characteristics generic to persuasion or argumentation for Curriculum Levels 2—4 are shown in Table 1. Note that each Curriculum Level contains three sub-levels to further distinguish progress; these are Basic, Proficient, and Advanced which represent rough thirds within each level (Hattie, Brown, & Keegan, 2002).

Table 1.
asTTle Persuade Progress Indicators by Curriculum Level

Dimension	Level 2	Level 3	Level 4
Audience Awareness	Evidence that writer recognises that his/her *opinion* is needed. May use language to state opinions from a personal perspective.	Language use and writing style generally appropriate to audience. Writer states his/her position on the issue and makes some attempt to influence	Language use and writing style appropriate and directed to audience (e.g. writing attempts to persuade reader). Clearly stated position is evident and maintained throughout.
Content/Ideas	Writing covers some (1 or more) task and topic appropriate domains: (e.g. position statement – writer identifies position on the issue, makes 2 or more simple opinion/statements related to the topic, makes use of a final statement to round off the text in some way). Can include many statements unrelated to the topic and/or task.	Most argument domain elements are present (main points, some supporting evidence/illustration, re-statement of position). Some elaboration of main points occurs. May include information that does not contribute to argument.	Argument domain elements (e.g. position statement, main points, illustration/evidence of main points, re-statement) are comprehensive and elaborated. Content is relevant & functions to add weight to the writer's position.
Structure / Organisation	Semblance of organisation is evident (e.g. some grouping of ideas) But text may be limited because of presentation of opinion statements as discrete elements.	Evidence of attempts at overall structuring of content through grouping ideas within and across sentences (may use devices such as paragraphing and simple linking of ideas through conjunctions such as because, and, since, although etc).	Content managed effectively through grouping and/or paragraphing main ideas & supporting evidence. Ideas are linked in more complex ways (e.g. varied use of linking words and phrases, conjunctions and text connectives e.g. on the one hand, however, although).
Language Resources	Language has structure of simple opinion statements (e.g. may be stated from a personal perspective "I reckon"). Topic related language present but little opinion is conveyed through language choices (e.g. nouns may be neutral, may have basic descriptors or may lack simple adjectivals. Verbs and adverbials may be limited). Shows some understanding of the use of pronouns but reference (the who or what) may be unclear or overused. Simple sentences used but may attempt complex sentences	Evidence of use of some task appropriate structures and language (e.g. attempts to use verbs in passive structures to make arguments seem more objective and convincing). Evidence that the writer is a beginning to select language to create a particular effect and to influence the reader (e.g. "point of view " nouns, viewpoint adverbials, opinion adjectives, adverbs and adjectives to add detail and weight to opinion statements and evidence, some use of modal auxiliary verbs (can, might, should, may) present). May be some unclear or repetitious reference. . Many simple sentences correct. Some successful complex sentences evident.	Consistent use of appropriate language for task and topic (passive structures may be used to make the argument seem more formal and objective, modal auxiliaries (may, might, can, should, shall) may be used to add persuasive power). Language supports a particular viewpoint and is used to persuade the reader (e.g. "point of view" nouns, viewpoint adverbials, opinion adjectives, adverbs, & adjectives to add detail and weight to opinion statements and supporting evidence). Reference links clear (pronoun use). Most sentences correct. Control of complex sentences evident, where appropriate. Uses complete sentences

Intervention

An instructional program and workbook were devised to assist both teachers and students in understanding and practicing the key elements of argumentative writing. Because the intervention was designed to be implemented through multiple professional teachers of English, the instructions, in metascript fashion, are general and the guidelines suggest particular strategies without being overly prescriptive (Appendix 1). Note that this program is not designed to provide instruction or feedback concerning the surface features of writing; it is explicitly intended to guide the development of careful selection and organisation of content in order to persuade a certain audience using powerful, appropriate language.

Explicit metaknowledge of text features and how they might be applied were provided. Models of text, selected to reflect the interests of young teenagers, explicit guidelines for planning processes, and a range of age-appropriate task prompts are provided. The program gave the teacher resources so that they could provide initial explicit instruction and input, and provided guided practice resources so that the students could learn the various instructed elements, prior to taking over responsibility for full implementation of a complete argumentative script. Specific practice and instruction for sub-routines such as introduction, conclusion, and paragraph construction around claim and evidence were provided. Additionally, the program provided materials and strategies for helping students anticipate and respond to an audience's likely counter-arguments. Student think sheets that provide a planning framework for generating ideas, organising of thoughts, identifying schema appropriate sequences, controlling syntax and language resources, and monitoring executive control of the writing process were provided to supplement the teaching program (Appendix 2). Details of the lesson sequences and content can be found in Harland (2001) pages 69—72.

This intensive 'catch up' program was aimed at increasing the ability of Year 9 students identified as performing below Curriculum Level 4. Teachers (three female New Zealand European/Pakeha and one male Pacific Nations) and students (56 Maori, 46 Pacific Nations, 8 New Zealand European/Pakeha, and 2 other) from four classes in three, co-educational, low socio-economic urban schools, with high Maori and Pacific Nations student rolls, participated in the study.

The students were assessed five times with essays to establish beginning points and to monitor effect of the deep features oriented instructional program. In addition to the pre-test, four other assessments were taken; one at the end of each of the three sections of the intervention, and a final one at a delayed period ($M = 62$ days, $SD = 5.5$) after the intervention. Each essay required students to argue for the student's opinion about one of five different topics. The topics involved

(a) making the school day longer by an hour, (b) making students go to summer school, (c) making participation in school co-curricular activities compulsory, (d) reducing the amount of time given to the Polynesian performing arts festival, and (e) making students complete 2 to 3 hours of homework per night.

The number of students completing the essay tasks was severely curtailed due to school reorganisation of classes during the two terms. Thus, valid data were available only from students who completed the pre-test, the first during investigation essay, and either the third or fourth during investigation essay. The total number of students providing a complete set of scores was reduced to 63.

Results

The four classes completed the program during the middle two terms of the school year. Across the four classes an average of 27 hours ($SD = 3.3$) was spent teaching the training program; in other words, given a four hour per week schedule typical of high schools, the program lasted on average of seven weeks per class. In addition, two hours on average were spent conducting assessments across the program.

All opinion-based persuasive or argumentative essays were scored according to the asTTle persuasive purpose progress indicators for four deep score variables (Table 1) and three surface scores (i.e., grammar, punctuation, and spelling—see asTTle writing manual for details). Additionally, an approximate word count of the pre-test and the second during-instruction essay were taken. All essays were scored by the researcher. Estimates of reliability for essays scored by the researcher (63 students by four essays) were very high; $\alpha = .95$ for total score, $\alpha = .92$ for deep score, and $\alpha = .93$ for surface score. These estimates indicate the researcher exhibited very consistent scoring patterns.

A sample of 42 scripts were cross-checked by a panel of three writing specialists who were given no face to face instruction, but just the asTTle progress indicators and tips for scoring. Pearson coefficients of agreement between the researcher and the three expert markers averaged $r = .70$ ($SD = .05$) for deep scores and $r = .60$ ($SD = .07$) for surface scores. These estimates of consistency are within tolerance for such light levels of training.

At the first assessment, the bulk of students scored, according to the asTTle progress indicator for deep features, between Level 2 Proficient and Level 3 Basic (M = Level 2 Advanced; $SD = 1.5$ curriculum sub-levels). The average length of this first essay was estimated at 180 words ($SD = 59$).

The essay submitted either at the end of the second or third instructional unit showed significantly improved average results for deep scores; the effect size of 1.6 represents a huge gain, reflected in an average improvement of one curriculum level. The score range for one standard deviation either side of the mean was Level 3 Basic to Level 4 Basic (M = nearly Level 3 Advanced; SD = 1.4 curriculum sub-levels). The average essay length increased to 221 words (SD = 7.3) representing an increase in elaboration and reasoning. Some two months after the completion of the intervention, another argumentative essay was supplied by the students. The score range for one standard deviation either side of the mean was Level 3 Basic to Level 3 Advanced (M = Level 3 Proficient; SD = 1.1 curriculum sub-levels). This clearly indicates that the gains achieved through this program were largely sustained.

In contrast to these large and sustained gains, some small improvement in surface features was found (pre-test average was Level 2 Advanced, while at the end of the intervention and at the 2 month delay the average was Level 3 Basic). This shows that explicit training in the deep features of argumentative writing had only minimal effect on the surface features. The deep feature gains noted here are consistent across the three schools and four teachers. A two-way (time x class) within-subject analysis of variance established that the strongest effect was for time (Wilk's Λ = .11; F =10.4; df =14, 46; p = <.001).

Conclusion

This intervention program, which focused on the deep features of argumentative writing, successfully demonstrated that low-achieving students in Year 9 could be taught to produce longer and more persuasive essays. Further, this intervention shows that students could make and keep a one-curriculum level gain based on only an eight week training program and that regardless of differences in actual delivery by the teacher the intervention positively impacted on all students' ability to write more sophisticated argumentation. Additionally, this study has shown that the asTTle persuade progress indicators can be used successfully to develop a teaching program and to monitor improvement in argumentative writing. As well, the data clearly indicate that high levels of consistency within an expert rater is possible and that, even with no training, sufficient between-rater consistency can be obtained for within-class, low-stakes purposes by using the asTTle progress indicators. Most importantly, this study shows that the ability to write persuasively is eminently teachable and learnable when both teachers and students are provided with materials and strategies that make explicit the qualities of good writing.

References

Applebee, A.N. & Langer, J.A. (1984). Contexts for learning to write: studies of secondary school instruction. In A.N. Applebee (Ed.), *Contexts for learning to write: studies of secondary school instruction.* Norwood, New Jersey: Ablex Publishing Corporation

Christie, F. (1986). Writing in schools: Generic structures as ways of meaning. In B. Couture (Ed.), *Functional approaches to writing.* London: Frances Pinter.

Crammond, J.G. (1998). The uses and complexity of argument structures in expert and student persuasive writing. *Written Communication, 15*(2), 230-268.

Flockton, L. & Crooks, T. (1998). *Writing: assessment results 1998.* Dunedin, NZ: Educational Assessment Research Unit, University of Otago.

Glasswell, K., Parr, J., & Aikman, M. (2001). *Development of the asTTle writing assessment rubrics for scoring extended writing tasks* (Technical Report 6). Auckland: University of Auckland.

Harland, D. (2002). *Teaching argumentative writing to Year 9 students.* Unpublished Master of Arts thesis. University of Auckland, New Zealand.

Hattie, J.A., Brown, G.T.L., & Keegan, P. (2002). *asTTle writing manual.* Auckland: University of Auckland

Knudson, R.E. (1991). Effects of instructional strategies, grade and sex on students persuasive writing. *Journal of Experimental Education, 59*(2), 141-152.

Martin, J.R. (1985). *Factual writing: Exploring and challenging social realities.* Geelong, Australia: Deakin University Press.

Ministry of Education. (1994). *English in the New Zealand Curriculum.* Wellington, NZ. Learning Media.

Ministry of Education. (2003). *asTTle, Version 2, 2003* [Computer software]. Wellington, NZ. Learning Media.

New Zealand Qualifications Authority. (1999). *Chief marker's report and marking schedule: School Certificate English (New Zealand Qualifications 022).* Wellington, New Zealand Qualifications Authority Mana Tohu Maatauranga O Aotearoa.

New Zealand Qualifications Authority. (2000). *Chief marker's report and marking schedule: School Certificate English (New Zealand Qualifications 022).* Wellington, New Zealand Qualifications Authority Mana Tohu Maatauranga O Aotearoa.

Yeh, S.S. (1998). Empowering education: Teaching argumentative writing to cultural minority middle-school students. *Research in the Teaching of English, 33*(1), 49-83

Appendix 1.

Intervention Teaching Program

Sequence	Objectives	Method
1	What is an argument? What are the elements of argumentation?	Pair discussion to devise argument to convince teacher to give students free period. Class discussion of merits of various arguments. Definitions of argument derived focusing on purpose and audience.
2	How are the elements structured in a paragraph?	Read 3 texts and identify which one is an argument. Analysis of claims and explanations content and structure of argument.
3	How can I plan a piece of	Students read longer model text & complete comprehension questions of argument structure.
4	argumentative writing?	Rearrange sentences using claim/explain pattern as guideline to form paragraphs.
5		Rearrange sentences using claim/explain pattern as guideline to form essay.
6		Teacher presents strategy for beginning argumentative essay.
7	How to focus student attention on demands of writing prompt	Teacher presents writing prompt and class brainstorms possible arguments which are written on board. Teacher thinks aloud completion of Planning Think Sheet.
8	and monitor progress toward	Teacher explains Writing Frame Think Sheet Students complete Writing Frame for argument from previous sequence.
9	completion?	Students examine 2 completed argument essays and decompose claims and explanations onto Planning Think Sheet
10		Students compose paragraph starters from set of prompts using Writing Frame and Planning Think Sheets
11	What sort of language should students use when composing?	Teacher provides models of good writing. Teacher provides instruction in difference of oral and written language. Teacher provides exercises in choosing appropriately worded sentences to form a paragraph in an argument
12	What strategies allow a flexible response to writing prompts?	Teacher provides instruction on 2 introduction and 4 conclusion types. Guided practice offered. Integration of sub-routines into completion of an essay practiced. Self-regulation sheet provided and students prompted to use it during composition.

Appendix 2.

Intervention Think Sheets for Students

Planning

Writing Prompt:	
Opening Sentence	
Paragraph 1	**Claim:** **Explain:**
Paragraph 2	**Claim:** **Explain:**
Paragraph 3	**Claim:** **Explain:**

Writing Frames

Paragraph 1

	In my opinion	
OR	Firstly, I believe that ….	
OR	The main reason I think ….	

Paragraph 2

	I also feel that …….	
OR	Secondly, I believe ….	
OR	Another reason I think ….	

Paragraph 3

	The last reason I have for believing ….	
OR	My final reason for believing that ….	
OR	In addition, I think ….	

Self Regulation

As you write and again when you finish use the checklist as a guide.

Have you decided whether you agree or disagree with the writing prompt?	
Have you selected the ideas you will use in your writing?	
Have you completed a think sheet identifying the claims and explanations?	
Does each claim begin a new paragraph?	

Have you thought of a way to begin your writing?
 	
Are you going to   start with an opening sentence?
 	
                     give an opening sentence and list of claims?
 	
                     use a question starter?	

How will you end your essay?
 	
Are you going to   end with a summary?
 	
                     end by asking a question?
 	
                     end by giving advice?
 	
                     end by expressing emotion?	

Have you tried to counter other arguments?	
Have you decided to come to a compromise?	
Have you tried to use language similar to the exercises and resources?	
Is your spelling and punctuation accurate?	