

# ISSA Proceedings 2002 - Argumentation In Education: Issues Arising From Undergraduate Students' Work



## 1. Introduction

The field within which I'm working is argumentation in education; that is to say, it is an applied field of study in which relatively 'pure' studies of the discourses of argument find themselves grounded in educational contexts or purposes; and the emphasis is on argumentation as a process, rather than on argument as a phenomenon.

The particular sub-field for the present research is that of argumentation in higher education, especially within the discipline of Educational Studies itself.

In this paper, I will come to the question of argumentation in higher education through a selective literature review of approaches to argument and through a look at argument in a range of subjects in the secondary school. After discussing examples of student work in higher education, I will then reflect on further research that is needed in the field.

## 2. Literature review

My review of the literature from the past ten years or so is not systematic. Books and articles cover a wide and fascinating range. Those by George Myerson, like his *The Argumentative Imagination* (1992) - which studies dialogic and dialectical imagination in Wordsworth, Dryden, *The Book of Job* and *The Bhagavad Gita* - emphasize the literary, rhetorical dimension of argument. That position is more clearly set out in Myerson's *Rhetoric, Reason and Society* (1994) with its sub-title, *Rationality as Dialogue* or in his book with Dick Leith, *The Power of Address* (1989) which positions argument (which I want to distinguish from persuasion) at the rhetorical end of a spectrum which has at its other end: logic. At the logic end of the spectrum of argument and argumentation are works like Jane Grimshaw's *Argument Structure* (1990), a highly technical monograph on argument within the sentence and working within the discipline of linguistic enquiry; many of these studies see argument as sealed off from the world and operating behind the

closed doors of fabricated and made-up sentences and propositions: their tools are the enthymeme, logical relations; their *bête noire*, the fallacy. Their weakness, from where I stand, is that their own fundamental fallacy is an attempt to make verbal language do the job of mathematical language. Their propositional formulae do not translate readily above the level of the sentence.

If those are the two ends of the spectrum, what lies in between? One camp might be called the neo-Aristotelians; and in this camp I would see books deriving from Corbett's 1966 *Classical Rhetoric for the Modern Student*, like Robert and Susan Cockcroft's *Persuading People: an introduction to rhetoric* (1992) and Richard Fulkerson's *Teaching the Argument in Writing*. Both of these, in their different ways, take Aristotle at his word when he says rhetoric or argument is the 'art of persuasion'. They also draw on other classical rhetoricians, both pre- and post-Aristotle. The drive is toward classificatory taxonomies of argument, originally conceived for orators in the market-place and the forum but translated into *progymnasmata*, to use the medieval practice: exercises in writing for the college student. Pedagogically, these are primitive: the suggestion is that you learn by copying models. These exercises follow a formula: argumentation is bound by structures (anything between a two-part and a six-part structure) with a strong emphasis on proof. Consequently, arguments can be fallacious, undistributed, disjunctive and so on. They border on rhetoric manuals.

Also relevant to the present paper is the work of Deanna Kuhn, in, for example, *The Skills of Argument* (1991). This is a study of argument for high school and college students, and also for older participants in YMCA job re-entry schemes in New York City. It takes as its conception of argument a distinction between two main kinds: *rhetorical*, by which it means the restricted sense of an assertion with accompanying justification; and *dialogic*, which it takes to mean the juxtaposition of two opposing assertions. This appears to be a confusing distinction, because the very essence of a rhetorical view of argument and argumentation is its dialogic nature (and thus the dialogic nature of thought, if you scale up to the cognitive level). The problem might be in the pejorative use of 'rhetorical' argument and the somewhat sentimental use of 'dialogic'.

It is a strategically appropriate move to place my own position at the centre of the spectrum in that it allows me to weigh up the pros and cons of the various studies and to take some kind of triangulation – in the sense of navigational positioning – in relation to studies that have already been completed. It might also be a ploy to

convince you (persuade you) of my argument. We see such even-handedness deployed cynically by politicians, employers and by those in positions of power to sell a particular policy. My position, for what it's worth, isn't quite so – how shall I put it? – Blairite. Personally, I tend more toward the rhetorical side of the central point because I'm interested in argument in its applications in democratic processes; in contingency; rhetorical moves; its various manifestations and versions in different disciplinary settings, or different school subjects...rather than in the more formal aspects of argumentation.

There has been a great deal of work, in the last fifty years on what might be called 'applications of Toulmin', including by Toulmin and his associates. What inspired Toulmin was partly a dissatisfaction with the strictures of formal logic. His model moves us along the spectrum somewhat and has been developed by Douglas Walton and others in the informal logic movement. Somewhere between the informal logicians and the recent work of Mitchell and Riddle (2000), Mitchell and myself (2000) and myself and Mitchell (2001) is a vast shoal of studies on how Toulmin might be adapted for the classroom – and specifically for the writing classroom. One of the best of these is Hegelund and Kock (2000).

At the end of this brief and selective review of literature in the field in the 1990s, there are already gaps that are worth exploring in providing a background for studies of argumentation in higher education. First, there is a need for a systematic review[i]. Second, most of the studies mentioned to date operate within the Western rationalist, dualistic paradigm. That is to say, they take it is given that argument operates at both micro-, mezzo- and macro-levels in a Hegelian dialectical pattern of development: thesis, antithesis, synthesis. It would be useful to explore other paradigms in which argument had a different function within Education. Deborah Tannen's work on conversational discourse – eg *You Just Don't Understand* on differences in gender conceptions of argumentative discourse – point the way to what could be done in the educational context. Third, there is a need for studies of the choreography of argument: how do arguments start, how are they taken up, how do they develop and how do they end? Fourth, it would be interesting to apply the choreographic approach to places where argument studies have hardly reached: domestic settings, boardrooms, conferences, playgrounds etc. Fifth, there's always a pedagogical gap between understandings of the way argument works in informal and formal settings and its actual application in classrooms, seminars and tutorials

In another paper, written recently for the journal *Text*, I have discussed the range of models available for understanding issues of argumentation in education. I have arrayed a number of models along a spectrum from the logical to the rhetorical. This is not the place to rehearse that argument again, but what is needed at this point are descriptions, in the best anthropological tradition, of arguments taking place in educational and ostensibly non-formal educational settings to see how much space is given to the various participants to engage in argument. We know from studies going back to Language, *The Learner and the School* (Barnes et al, 1969) that schools and colleges can be places where argument is stifled because of the dominance of teacher discourse; that some speech genres in education are more argument-friendly than others; that essential elements in the encouragement of argument are an acceptance of the contingency of knowledge, a receptive classroom open to different interpretations and positions, enough space for learners to hypothesize and test ideas; and so on. It is ironic that some educational institutions, by their very layout and architecture, militate against the very higher- order thinking that they are supposed to encourage. Perhaps it is too naïve to hope that the presence of Citizenship as a new subject in the curriculum will lay sufficient emphasis on the processes of citizenship: argumentation, debate, exploration and resolution of difference; rather than teach young people the structures, history and obligations of citizenship as if it were a reified substance that had to be imparted to young, supposedly disaffected minds.

### *3. Issues of progression in curriculum subjects*

Some of the most interesting literature in the field in the last decade has been about the application of argumentation within school subjects. It is worth exploring some of this research before turning attention to argumentation in higher education.

For work on argument in English lessons, see Andrews (1995) and Andrews and Mitchell (2001).

There is also the work of Ros Driver, Jonathan Osborne and others at King's College London on science education (eg Newton, Driver and Osborne 1999; Driver, Newton and Osborne 2000; Osborne, Erduran, Simon and Monk 2001), or Peter Lee, Rosalyn Ashby and Alaric Dickinson on progression in children's ideas about History (Lee, Ashby & Dickinson 1996). There are observable changes in the National Curriculum for England and Wales, especially in the subject English, that suggest a much greater awareness of argumentation and its place in learning

- and furthermore, at a much earlier stage in young people's development than had previously been imagined or allowed. We can blame Piaget for the belief among curriculum designers and others that argument was simply not possible in children before the stage of formal operations; or you can subscribe to the conspiracy theory that argument was not encouraged among schoolchildren because it might give them 'ideas'. The work of those mentioned at King's and elsewhere is underpinned by notions of the social construction of disciplinary knowledge. Because knowledge is socially constructed or 'negotiated', to use Bruner's term, discursive activity (Vygotsky) and dialogue (Bakhtin) are valued as means to that end. Rhetoric in its contemporary political sense as the 'arts of discourse' and its agent, argumentation, have a more active role in this world. But there is an epistemological shift going on too. Both the science educators and the history educators are interested in education about science, education about history.

One of the interesting aspects of Osborne's work and those of his colleagues at King's is the use of a simplified Toulmin model to describe the operation of argument in science. In the EQuASS project (Enhancing the Quality of Argument in School Science) the model is distilled to data (grounds, evidence), claims (hypotheses) and warrants. The strength of this model is that it is an eminently pedagogic frame for understanding the operation of argument in the carrying out or exploration of science. In that regard, it has strong parallels with the model developed by Mitchell and Riddle for use with undergraduate education: the 'since-then-because' model. Both models are dynamic in a way that the original Toulmin model isn't. Another aspect of work here that has interested me is the classic scientific emphasis on data, evidence - and the implications for the nature of evidence. One insight afforded by this work is that a claim itself - light travels in straight lines - has been transformed, through the process of scientific testing and re-testing, into reified and reliable evidence. Perhaps Toulmin's model is more than a model for testing the soundness of arguments; perhaps it also embodies within itself the potential for renewal via the process of claims becoming evidence and for the generation of arguments. Furthermore, the perception that thirty or more years after the study by Barnes, Britton and Rosen on the paucity of talk by young people in the curriculum we are still not very far on is probably right; and that where small group discussion does take place, it is often brief and consensual: in other words, more like discussion than argument.

An interesting case of the application of argumentation within a school subject is that described by Lee et al. (1996) in their paper 'Progression in children's ideas about History'. The paper traces the move toward what it calls "second-order ideas" (p50), viz children's understandings of second-order concepts including evidence, cause, empathy, story and account - and away from first-order concepts such as 'king', 'peasant' and 'revolution'. In other words, it's a move toward what joins concepts together in the operation of History as a discipline and as a school subject; to what characterises History as History; to the backing and warrants of the field. Without going too far into the curriculum issues here, it becomes obvious that notions of levels and progression are closely tied into conceptions of the development of ideas about History - and, by implication, into the qualitatively different ways in which pupils and students argue about and within History as they move from primary to secondary school and beyond. Perhaps more than in any other subject - with the exception of Science - historians and students of history have paid a great deal of attention to the nature of claims and evidence, and to the relations between them.

There is also some current work on argumentation and the internet, being carried out by Lia Litosseliti at Royal Holloway College, London as part of a European network. The SCALE project (an Internet-based intelligent tool to Support Collaborative Argumentation-based Learning in secondary schools) involves partners in France, the Netherlands, Finland, Hungary and Portugal with the aim of developing an internet-based tool to facilitate the learning of argumentation in 16-19 year old students. The software "allows discussions to be represented in diagrammatic form in order to display the elements of an argumentative text. The tool... provides support for learning argumentation skills such as: how to explain relevant information; how to process information by integrating, reformulating and evaluating it; critical thinking; and adopting multiple viewpoints". One of the many interesting aspects of this project is that it is concerned not only to help students to improve their argumentative skills (learning to argue), but also to enhance the capacity to learn (arguing to learn), no doubt using the resources of dialogue and interaction to generate positionality within a socially-conceived model of learning. Another aspect is the gauging of the difference between arguing face- to-face on the one hand, and via the internet on the other.

#### *4. Some examples of undergraduates encountering argument as a field of study*

I teach an undergraduate module called 'Argumentation in Education'. As an

optional module within a programme on Educational Studies, it is attracting an increasing number of students from the department of Educational Studies, in which I work, and from other disciplines across the University, including Psychology, Sociology, Politics, Mathematics, Archaeology and Linguistics. It is not so much the module itself that is of interest in this paper, but the students' writing in response to it. I gave them a range of possibilities for an end-of-module 5,000 word assignment:

- one chose to undertake research into 5/6 year old children's ability to argue by eliciting dialogues from children in a local school
- one chose to write about her son's anger at having to do a modern foreign language at GCSE
- one wrote a critical review of the literature on argumentation at pre-school and primary school levels
- one asked the question 'Should there be a specified role for emotion in contemporary theories of argumentation?'
- four explored the question as to whether it is possible to argue visually
- two composed an argument on a topic about which they felt strongly
- and one discussed Toulmin's model, comparing it to others

I will focus on just two kinds of these. And then, from experience of teaching the module and responding to students' interests, I will try to make some general points about argumentation and pedagogy. The two types of essay I want to focus on are the attempt to answer the question 'Should there be a specified role for emotion in contemporary theories of argumentation?' and those essays that explored the possibility of visual argumentation.

Because argument (in the academy at least), can be seen a local sea connected to larger seas and oceans in the Western hemisphere, it has come to be seen as rationalist, cool and level-headed *as opposed to* passionate, emotive and full of feeling. Such a dichotomy wasn't the case for Aristotle: his *Rhetoric* and other works on the subject in the classical Greek and Roman periods admitted emotion as part of the repertoire of the orator. But the student who wrote about emotion in contemporary theories of argumentation is right that post-Enlightenment argument has been scientific in spirit. After a rhetorically clever opening in which she erects *ad hominem* arguments in order to disprove them, she goes on to trace various ways in which emotion can be incorporated into a basically Toulminian model of argument: her basic line of argument is that emotion can be

incorporated as an element of rebuttal. In other words, you can strengthen an argument by recognising emotional appeals or objections to your premise or line of argument and then rebutting them (and possibly qualifying your argument in the process). But that particular function of emotion can be seen to marginalise emotion in argument. Looking at the issue from another direction, if you add emotion to an argument you can increase its persuasiveness. This seems an obvious point (and was well charted by Aristotle in *Rhetoric*) but few students seem able to get beyond the Aristotelian position of rhetoric as the art of persuasion: they tend to see argument *as* persuasion.

I hinted at this conflation earlier, and perhaps it is worth exploring the distinction further. Argumentation is a process of establishing a position and then defending or adapting it via the use of evidence, logic, negotiation, backing and so on. It's a fundamental rhetorical operation in the business of social and political interaction. Persuasion is an aspect of presentation, and thus part of one stage of the rhetorical process. You can make an argument more persuasive with the addition of some gadgets of surface rhetoric; but to make your persuasion more effectively argumentative, you have to do a lot more than tinker with the surface. During the essay, the student explores examples of speeches (eg the British Labour politician Neil Kinnock on the eve of the 1983 election) to push her argument further. She sees emotion as often being an unacknowledged trigger for an argument. Her conclusion, after adapting Toulmin to add emotional grounds and emotional rebuttal to the model, is:

Emotion should have a specific role within contemporary theories of argumentation. The role is not a major one - and does not necessarily have to be included for an argument to be complete. Emotional involvement acts as a motivator for our initial involvement in argument...Emotion can be used to strengthen a rational argument [or] it could serve to identify irrational opposition to an argument.

The interesting dimension of her work is that she uses a dialectical approach (argument with emotion, argument vs emotion) to suggest that a solution to the problem of the lack of emotion in models of argument is really to be found one level up, in conceptions of the relationship between rationality and feeling. Her escape route at the end of the essay, then, is via the 'backing' door.

Briefly, essays on the possibilities of visual argumentation tread that narrow path between argument and persuasion. One student used Trudy Govier's work on the distinction between a question, description, explanation and argument (basically,



exposition as opposed to argumentation) to examine a photo of Jean Shrimpton, images from a semi-pornographic website on anorexia, a Silk Cut advertisement and an advert from *FHM* magazine. What we explored in the sessions were questions of when a single image could be considered to argue a point (conclusion: when there was opposition within the image, as in the case of Jean Shrimpton at the Melbourne races), when and how two images could be said to be arguing a point (there are many examples, eg the billboard advertisements of wasted legs in an Christian Aid poster juxtaposed with those in a Pretty Polly advert) and so on to sequences of images as in photo-essays and in due course to the moving image.

Again, one can think of many advertisements that are persuasive without being at all argumentative; and many other texts that are the reverse.

Those examples are from undergraduate education. At postgraduate level, where the thesis is the genre for demonstration of capability at Masters' or doctoral level, argument is just as important. Indeed, one of the meanings of 'thesis' is "a position or that which is set down or advanced for argument", interestingly related to a down beat in a bar or metrical foot and so having a rhythmic identity as well as a discursal one. In a recent thesis I read for the Institute of Education (Jeong 2001), the candidate, in exploring empowerment in media education, gave an account of "the most difficult discussion that [a youth project group] had throughout the entire process of production" in collaborating on the making of a trailer for a gangster film set in London:

When the discussion began, the group quickly agreed that they needed slow music with the sound of a gunshot, considering the trailer would begin with the funeral of a character... Then Kat told the group that she had found a good piece of music... In response to her suggestion, Jake suggested that they should listen to the track before they decided on it, which was reasonable. The conflict between Kat and Jake began, however, when Jake said he would like to compose the soundtrack by sampling from different music, using the facilities he could get access to in the Music department, "if Kat's music was not good enough" (p294)

The situation created tension in the group - and not surprisingly, between Kat and Jake. The role of teachers and youth workers was to provide the *grounds for negotiation* to enable the participants to resolve the situation for themselves - an intervention that I've seen operate successfully in primary schools over the issue of bullying. The *deus ex machina*, in the form of the teacher/youth worker,

remained *ex machina* are the critical points of resolution, which was based on three grounds: the theoretical (the soundtrack needed to reflect or take a tangential position in relation to the genre of the gangster film); the personal and democratic (Jake and Kat needed to be able to work out a strong compromise); and the practical (the students learned how to combine technically two different pieces of music). The researcher suggests that grounds for negotiation like these are necessary unless students are lucky enough to fall into complementary and harmonious groups in the first place – which doesn't always happen. Argument, in this case, acted as the grit in the oyster. My main point here is to suggest that conflict resolution is an important function of argument at all stages of education – and indeed, beyond education.

On the thesis itself, as an example of argument, I'll just comment briefly to say that it was an elegant, well-integrated piece, using case studies to illustrate and explore a research question rather than to prove or disprove a hypothesis. In that sense, it worked within a qualitative, humanistic paradigm.

Indeed, argumentation in education is always subject to argument in society. We might be able to change pedagogic practice in classrooms and seminar rooms, but the reception of argument and argumentation outside the classroom – for example when students argue for change within the institution or within the local community – is essential oxygen for the life of argument (and, by implication, rationality). In other words, you won't get pedagogical evolution or revolution without a change in the climate beyond the classroom. It is well to remember, too, that if – like the Japanese/American liberal imperialist Fukayama – you believe that ultimately the forces of reason will survive and prevail over the current world turbulence, you must accept the paradox or irony that the defence of reason and of the chance to argue is currently being carried out by force. One of the reasons that argumentation is so compelling within education is that it *has* to make connections with the world outside school and outside the academy; whereas, you could argue that fiction is a safe bet for schools and universities because it posits possible worlds that can be explored and to an extent contained within framed educational spaces.

#### *4. Discussion of undergraduate teaching in argumentation*

The module, 'Argumentation in Education', is the first such course at The University of York and possibly in any English university. It is taught within the Department of Educational Studies, though it is available to any undergraduate student from any discipline. Because there are students from a number of

disciplines, the challenge has been to design a course that is generic enough to be of interest and use to all students, but specific enough to be valuable within their own disciplines.

Such a balance is essential for courses in higher education, where disciplines and disciplinary discourses have a much greater influence of students' thinking and study practices. In Toulminian terms, the discipline informs the conduct of argument – and even what counts as argument and evidence – from the position of the 'backing'. During the course students from each of the disciplines interpreted the various models for themselves. Different disciplines show different degrees of awareness and application of argument, with Politics, Sociology and Philosophy being perceived as the most argumentative, and Mathematics, Biology and Economics being seen as the least argumentative.

On the other hand, the generic or core elements should not be underestimated. Currently in English higher education, there is an emphasis on core or key skills. These are skills generic to a course or to an entire degree programme: skills that the student will take with them and that will be of use in the search for employment. Such skills include research skills, communication skills, problem-solving, literacy and numeracy skills, information and communication technology (ICT) skills. It is interesting to note that, to date, argumentation has not been recognised as one of the key skills of higher education. It is a tacit skill; a skill which is embedded in each of the disciplines and which lecturers expect from their students. But it is not always clear to students what these particular skills are nor how they are supposed to incorporate them in their work.

By studying argumentation in education – from pre-school to higher education – students become aware of the sources of argument, the social contexts for it, the nature of it and of its applications. They become aware of the relationship between argumentation and cognitive development; between argumentation and problem-solving; of the functions of argument in domestic, civic and academic contexts; of constraints and possibilities within the curriculum and within educational institutions more generally; of the power relationships that are so important to the conduct and results of argument. Through such academic study, they also improve their own argumentation in debate, essays, discussion and other formats. They become skilled in translating spoken argument into written argument (so often a transition where much is lost); in using the various models to be critical about their own work; and in listening to each other's arguments. Although it is too early to say what the long-term effects of the module are on

student performance and capability, the early results are encouraging: students who took the module on argumentation in their second year had results in the first and upper second class that exceeded their previous performances and which seem to have affected their subsequent performance[**ii**].

Finally, students have found that each of the models that describe argument – Toulmin, Mitchell and Riddle, Kaufer and Geisler and others – have their own functions. Put simply, Mitchell and Riddle’s model is a good preparation for argument because it works at macro-, mezzo- and micro-levels in the composition of an essay. Kaufer and Geisler works during the writing of an essay because of its sensitivity to writing process and the use of sources to define one’s line of argument. Toulmin works best on completion of the first draft, when the model can be used as a critical ‘check’ on the soundness of the argument.

There is room for further teaching development and for further research in the field of argument in higher education. What follows is a pointer to other areas of argumentation that require further research in the field.

#### *5. What research is required in argumentation in higher education?*

By way of summary, let me set out some of the possibilities for further work in argument and argumentation studies in undergraduate education. We need to know more about:

- differences between subjects and disciplines in the way that argument operates; argument and epistemology
- the pedagogy of argumentation in different disciplines
- the pedagogy of argumentation via different communication channels, eg face-to-face as opposed to via the Internet
- how best to resolve conflict and controversies through argument, with the proviso that we need to provide the grounds for negotiation rather than – or as well as – the solution.
- cultural differences and similarities with regard to argument (eg is argumentation considered a reasonable way to proceed) and in the operation of argument (do you argue differently from the way I argue?)
- existing research and what it suggests; and where the gaps are; there is a need for an international systematic review.
- how the education system relates to the wider political context; if and how argument is encouraged
- specifically: how people argue domestically, and in local, regional and

national/international political contexts

how argument takes place in different media, eg the visual

## *6. Coda*

What is so attractive about argumentation is that it is so closely connected to the operation of the mind, to social interaction, to politics; and also to change and the exploration and resolution of difference or controversies – and thus to teaching, learning and education. Habermas (1984) states the case clearly. If we needed more reasons to continue to research in the field of argumentation, these surely are as good as any:

The rationality inherent in [achieving, renewing and sustaining consensus] points to the practice of argumentation as a court of appeal that makes it possible to continue communicative action...For this reason I believe that the concept of communicative action can be adequately explained only in terms of a theory of argumentation.

This rationality remains accidental if it is not coupled with the ability to learn from mistakes, from the refutation of hypotheses and from the failure of interventions.

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## **NOTES**

**[i]** Systematic reviews of research literature in Education are being undertaken by review groups associated with the Evidence-Informed Policy and Practice Initiative (EPPI), based at the Social Science Research Unit of the Institute of Education, University of London. See [www.eppi.ioe.ac.uk](http://www.eppi.ioe.ac.uk)

**[ii]** In England, degree performance is marked on a scale from 1st – the best performance – to a Pass degree. Between the two extremes are an Upper 2nd or 2.1, a 2.2 (the average performance), and a 3rd. You can equate these as Excellent, Very Good, Good, Satisfactory and Barely Satisfactory respectively.

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