

DEBATING THE **EVIDENCE**



Debating the evidence: an international review of current situation and perceptions

Research report

Rodie Akerman
Ian Neale



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The English-Speaking Union (ESU) is an educational charity, focused on promoting global understanding through the use of English, and helping to build confidence and effective communication skills to allow people to realise their potential. We have over 40 branches in the UK and operate in more than 50 countries worldwide, offering debating and public speaking training and development, along with other learning opportunities to people of all ages.

Established in 1918 by Sir Evelyn Wrench, the ESU has remained committed to these goals over our 90-year history. Headquartered at Dartmouth House in London, we have a network of global mentors and organisers who assist in the running of our programmes. These aims are achieved in a number of ways; from supporting scholarships and exchanges, including the Secondary Schools Exchange (SSE) between the US and UK and many parliamentary exchanges, to our literary awards for biographies, education texts and translations.

The ESU's objectives are three-fold: the running of prestigious competitions such as the International Public Speaking Competition, the International Schools Mace (international schools debating competition) and the John Smith Memorial Mace (international universities debating competition); the delivery of training through its longstanding teaching programme, Discover Your Voice, which trains in excess of 4,000 students per year; and the support of new and developing social advocacy and citizenship programmes across the Middle East, Africa and other developing parts of the world.

For more information on the English-Speaking Union please visit www.esu.org



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Foreword by Sir Jim Rose

Given their importance, it is hardly surprising that concerns about standards of literacy are constantly in the headlines. When most of us think about what it means to be literate we usually have in mind a secure command of reading and writing. However, in recent years, research has confirmed what common sense suggests: reading and writing feed off speaking and listening. In short, the spoken word remains our prime means of communication. It is the wellspring of literacy and much else – ‘if we can’t say it, we can’t write it’, and our ability to think critically is likely to be severely limited.

It follows that whatever we can do to strengthen children’s and young people’s spoken language and oratorical prowess, for example by enabling them to listen attentively, speak confidently in well-constructed language and engage in disciplined dialogue, will serve to widen their horizons, enrich their lives, and greatly increase their chances and choices of employment. The many benefits of debate discussed in this report are a sure means to achieve these outcomes.

The report assembles a convincing picture of high quality ‘debate activity’ as a very successful teaching technique, which facilitates learning in depth as students research and weigh evidence within and across subjects, learn to distinguish fact from opinion, and present well-considered argument.

Despite the excellent work done by the English-Speaking Union over many years, the educational benefits of debate are yet to be realised in many schools and colleges. CfBT Education Trust is therefore delighted to sponsor this report jointly with the ESU in the hope that it will help to promote this valuable activity.

We wish to thank all those who have contributed their time and expertise so generously to the evidence and best practice on which the report is based.

Sir Jim Rose, CBE
Chairman of the Education Committee, CfBT Education Trust



Foreword by Dame Mary Richardson

For more than ninety years the English-Speaking Union has been creating opportunities for young people to develop their speaking and listening skills by organising speech and debate competitions and overseas tours. Over the last two decades the ESU has widened its work with young people to include training programmes for speech and debate working with hundreds of schools and thousands of students. We are delighted to be joint sponsors of this project and are very happy with the findings. This report is a timely analysis of existing research from around the world which all points in the same direction – *‘engagement in debate activity impacts upon participants and generates benefits to support children’s and young people’s development.’*

The report highlights many positive outcomes for young people, from improved academic attainment and an increased desire to go on to higher education to greater self-confidence. Perhaps most interesting are the areas of the report which highlight improved skills in critical thinking, which underpins all future learning, and the wider social impact which debating has for participants as they are introduced to both new ideas and new people. I am especially pleased that the report shows debating helps young people to engage with and question *‘the current social order and how it can be changed; and, for students from disadvantaged backgrounds... [it can] ... equip them to see that disadvantages can be overcome.’* These are all things which the ESU is very pleased to support through our own work.

This is an important and useful report which justifies the investment of time and effort by so many teachers, volunteers and students over the years and I hope it will encourage others to start a debate club, get some training and enter young people in competitions because it is clear that the benefits are significant for everyone involved.

Dame Mary Richardson
Chairman of the English-Speaking Union



About EdComs

EdComs is an award-winning specialist education consultancy. Founded in 1995, we research, develop and implement high-calibre and innovative educational resources, programmes and research both in the UK and internationally. We work with government departments and agencies, other public sector bodies, voluntary and charitable organisations, as well as blue chip companies and international brands. Our work focuses on supporting clients to engage with learners, both to provide inspiration and to raise attainment.

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About the authors

This report was written by the Market Intelligence team at EdComs. We provide desk research and secondary data analysis, and are experienced at using evidence reviews to gain timely insights into public policy and market positioning.

Rodie Akerman, the report's lead author, specialises in education policy analysis, literature review and secondary data analysis. At EdComs she has worked for clients including higher education institutions, the Welsh Government, RBS, BP and Booktrust. Rodie came to EdComs from the Institute of Education, University of London, where she provided policy input to a range of Government-commissioned research reports focusing on the wider benefits of learning. She has recently completed an MA in policy studies in education.

Ian Neale was the supporting author, and specialises in market intelligence, economic analysis and return on investment. He was previously Research Manager at CFE, a research consultancy specialising in employment and skills, and has also held research roles at Leicestershire County Council, Jaguar and Marconi Communications.

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It is also important to recognise the contribution to this report made by an expert consultative group. This group consisted of prominent debating experts from across the world, who provided direction to additional sources of information and guidance around the development of the research. Thanks are given to Mark Gabriel, Sam Greenland, Steve Hind, Gaurav Keerthi, Debbie Newman, JJ Rodriguez, Kate Shuster and Suzanne Smith. Further information about the consultative group can be found in the Appendix.



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1. Key findings

Improvements in academic attainment

- Debate activities have a practical and meaningful influence on the attainment of young people from diverse backgrounds and, in particular, on the development of literacy skills. For example:
 - Debaters in urban American high schools were 25% more likely to complete school than non-debaters; African American males who took part in debate were 70% more likely to complete school than their peers.
 - High school participants in debate activities did significantly better than their peers in tests of English and reading, in a number of studies.
- Evidence exists for a link between debate activities in the classroom and improved subject knowledge in science (biology), history, art and English as a foreign language. For example:
 - Using debate as a teaching tool in history can deliver a depth of learning through enabling pupils to delve further than usual into historical events, and to understand historical contexts and differences between viewpoints from the past.
- Student perception data indicates that engaging in debate activities increases engagement and motivation in a subject, improves subject knowledge and helps students apply their learning to real-world situations.

Developing critical thinking

- Both qualitative and quantitative research suggests that participation in debate activities improves critical thinking. In particular a meta-analysis argues that participation in communication skills classes can increase critical thinking skills by as much as 44%.
- Students' own perceptions add weight to the argument that participation in debate activities leads to improvements in critical thinking. Competitive debaters reported better critical thinking among the top five benefits of taking part in debate.

Better communication skills

- Students' perceptions provide strong evidence that taking part in debate activities leads to improvements in their communication and argumentation skills, including improved English when it is not their first language.

Boosting aspirations, confidence and cultural awareness

- Evidence exists to support the claim that debate activities can increase participants' aspirations towards higher education, with school-aged debaters being more likely to plan to go on to higher education, even accounting for their academic achievement.
- Participation in both classroom and competitive debate can boost confidence, as evidenced through students' perceptions and by an Ofsted review into creative approaches to learning, which found that classroom debates helped students develop confidence and present their ideas more clearly.
- Broadening horizons, improving cultural awareness and the empowerment of young people are important elements of the value of debate activities in schools.



The internet and social media have brought people from all walks of life together to discuss, criticise and comment in a way never before known...

2. Introduction

2.1 Background to the research

In today's global society, the latest news stories and events from across the world, along with the opinions of others, are the subjects of constant debate. The internet and social media have brought people from all walks of life together to discuss, criticise and comment in a way never before known; whoever and wherever they are, individuals are almost always able to join in and make their voices heard. This places increasing demands on the individual, and the ability to analyse information and communicate knowledge effectively is a key feature of modern life.

At the same time, in the UK, concerns are expressed that young people who may be comfortable in front of a screen are lacking in the communication skills needed in the workplace and in life. In a world where increased employability is a key issue this is an important point and one that is highlighted by the most recent Confederation of British Industry (CBI)/Education Development International (EDI) Annual Education and Skills Survey¹, which found that 42% of employers are not satisfied with the basic use of English by school and college leavers.

It is in this context that activities involving debate, public speaking or other training in oral communication have a role in developing children's and young people's skills. Those closely involved in the delivery of debate activities² often hold strong beliefs regarding their value for young people, whether in terms of supporting their progress in education or in developing qualities such as confidence, which will stand them in good stead throughout life. The literature in this field discusses the fact that there is much testimonial evidence and, while a wealth of anecdotal evidence exists on the value and impact of these activities, no previous work has reviewed and analysed the empirical evidence base.

The purpose of this research was therefore to undertake such a review of what is currently known, in the hope of justifying these claims and providing a focus for the ongoing development of debate activities.

2.2 About this report

2.2.1 Methods used

The findings set out in this report are based on a rapid research review of relevant international literature around the impact and benefits of debate activities. Relevance was decided on the following criteria: publications had to take the impacts and benefits of debate activities as their primary theme; be dated not earlier than 1990 and be written in English. While young people of compulsory education age (5 to 18) were the main focus, evidence involving older students was not excluded where it was judged to be relevant. Searches were conducted through a number of academic databases, and further evidence in unpublished literature was sourced through searches in Google Scholar and Google, and through contact with a consultative group of experts in the field (see Appendix for further details).

¹ CBI (2011). *Building for growth: Business priorities for education and skills. Education and skills survey 2011*. London: CBI.

² A note on terminology: This review took into account a variety of debate, public speaking and other oral communication activities, and the majority of the evidence found focuses on the participation of children and young people in debate. In the rest of this report, we therefore use the general term 'debate activities' to cover any activity in this field, except where a more specific term is used in the research under discussion. For example, in the case of some US research, the term 'Forensics' is often used to denote competitive speech activities, including, but not limited to, debate (other activities include public speaking and dramatic interpretation of texts).

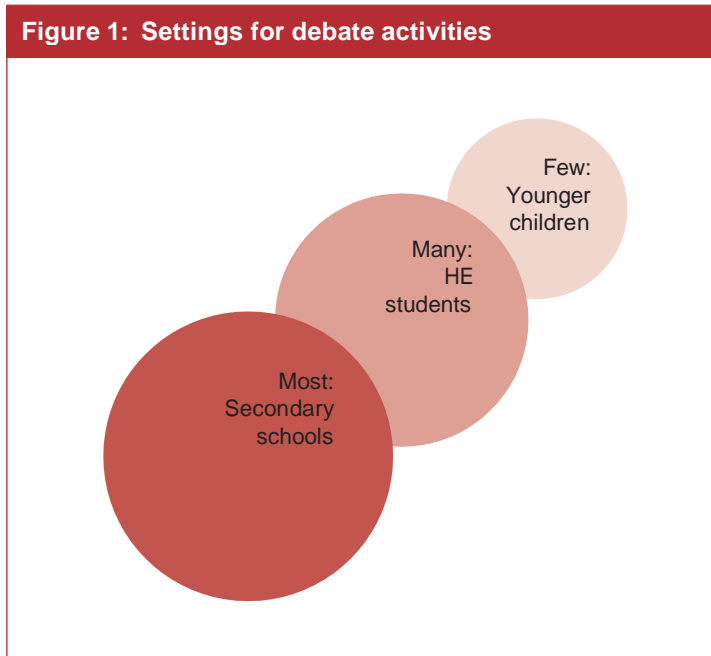


The initial searches identified over 800 references, which were narrowed to 59 titles through applying the criteria outlined above. These works were then assessed for methodological robustness, according to study design and sample size, leading to the identification of 51 studies that were eventually included in the detailed review.

2.2.2 Summary of the evidence base

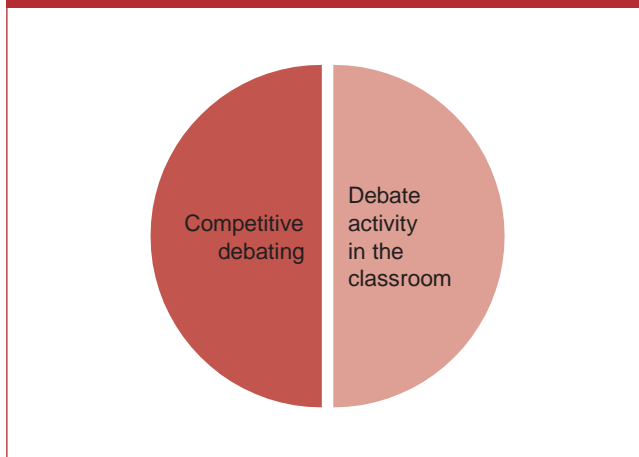
A detailed description of the evidence can be found in the Appendix; however, the evidence on which the findings in this report are based can be summarised as follows.

Key characteristics of the evidence base



Despite the fact that the review took into account a variety of debate activities, all of the studies found focus on debate activities in formal educational settings. The majority of studies focus on young people in secondary schools, although many also consider college or university students, with relatively few studies focusing on evidence from primary-aged children (Figure 1).

Figure 2: Environments for debate activities represented in the research



In terms of the environments for debate activities in the studies reviewed, roughly half look at the use of debate activities within the classroom and curriculum as a teaching tool and means of helping students to engage with learning. The remainder of the studies focus on inter-school or inter-college competitive debating (Figure 2).

Figure 3: Geographical spread of the research



Although the review put in place no geographic boundaries, the vast majority of the literature found originates in the US. Six of the 51 studies come from the UK; the other countries represented are Canada, France, Israel, Japan, Singapore and Hong Kong (Figure 3).



3. What is known about the impacts of debate activities

Broadly speaking, debate can be described as a formal discussion where two opposing sides follow a set of pre-agreed rules to engage in an oral exchange of different points of view on an issue.

3.1 How debate activities are used in education

Several different types of debate activities are identifiable in the literature reviewed, which discusses the differing characteristics of these approaches, and highlights how they are used to achieve impacts. In the main we have been able to establish literature focusing on the impacts of debate activities in relation to three key areas: (i) classroom debate; (ii) argumentation and oral communication classes; and (iii) competitive debate. First of all, it is important for this work to provide a definition of what the authors and project steering group consider to be *debate*.

What is debate?

Broadly speaking, debate can be described as a formal discussion where two opposing sides follow a set of pre-agreed rules to engage in an oral exchange of different points of view on an issue. Formal debates are commonly seen in public meetings or legislative assemblies, where individuals freely choose which side of an issue to support, and also in schools or university competitions, where the participants are often assigned a particular side for which to advocate.

Classroom debate

While debate activities can be used in a variety of settings, a body of evidence exists around the use of such activities specifically as a teaching tool. Typically, a school teacher or university lecturer might set a topic for debate and assign contrasting positions to individuals or groups of students. Students then conduct their own research into the issue and debate it in class. Much of the literature discusses the benefits of the active and in-depth learning that this involves, whether students have worked collaboratively or independently. Students may be cross-examined by their opponents, the teacher and/or observing class members, who may also act as judges. In some cases they are graded for their contributions; they may also have to write up their experience as an essay following the debate, or take tests on the subject matter as they usually would.

While this is the most common model found in the literature (e.g. Cronin 1990; Elliot 1993; Goodwin 2003; Vo and Morris 2006; Jensen 2008; Rao 2010), some teachers reported using organised discussion, whereby students were still assessed on the relevance of their spoken contributions, questions and responses, and use of evidence, but the competitive element was not present (e.g. Zohar and Nemet 2001; Simonneaux 2001; Simonneaux 2002). 'Constructive controversy' is also discussed in one piece (Johnson *et al.* 2000), whereby students work in groups, each presenting both sides of a proposition, and then work together to find a solution that is acceptable to all. This is somewhat similar to the 'deliberative debate' identified by Jerome and Algarra (2005), which is an exploratory activity with no pre-determined positions in which, ideally, a compromise is reached, in contrast with the 'adversarial debate' style usually found in competitions. A handful of the articles reviewed also discuss the benefits for learning of informal talk in the classroom, such as aiding creativity (e.g. Fisher 1993; Pan 2006).



... there is much perception on the part of authors... that debate activities should naturally provide important benefits to participants.

Argumentation and oral communication classes

Classes in argumentation or oral communication are most commonly found in the US (particularly at college level). Here, the object is not so much the learning of subject matter (although this may still be an outcome) but the improvement of skills in argumentation, communication or rhetoric. The development of argumentation skills is also a goal in some of the literature that deals with the teaching of certain subjects, particularly science, where the ability to investigate an issue and argue a position on the basis of evidence and logic is seen as a core skill for the discipline. Students may, in these cases, be called on to set out a position, but not necessarily within the context of a debate. As an example, in Zohar and Nemet's (2002) study, students were taught about genetics alongside argumentation techniques, addressing the knowledge through moral dilemmas and social issues. This seemed to generate interest in the subject and connections with students' lives outside of school.

Competitive debate

Competitive debating is the focus for much of the literature, particularly that from the US. This is no doubt due to the fact that many cities and states in the US have well-established debate leagues for both high school and college students, as well as (particularly in colleges) departments of Forensics, or competitive speech activities. Students may receive academic credit for participating in Forensics activities, or may take part as an extra-curricular pastime. While debate is a major activity within competitive Forensics, the literature that looks at the impacts of Forensics activities does not necessarily distinguish between debate and the other 'events' (e.g. Allen *et al.* 1999).

Debating competitions run according to a number of different styles, which govern such aspects as the topics under discussion and the number and length of speeches. In policy debate, for example, one topic is discussed over the course of a year, with students expected to develop their arguments as they progress through the competition, often delivering them at great speed in short rounds. By contrast, in parliamentary debate, a new resolution is debated in each round and may be announced only 15–20 minutes in advance; debaters may not bring in to the debate any material that was not prepared in that time. There are a number of debating associations, with their own styles of debate, particularly within the US.

3.2 The impact and benefits of debate activities

It is apparent from a review of the available evidence that there is much *perception* on the part of authors (which is not generally contested) that debate activities should naturally provide important benefits to participants. It is the purpose of this study to move beyond this testimonial evidence, and a number of studies are identified in the review that strive to explain more empirically what is known about the benefits and impacts of debate activities. The range of benefits and impacts identified in the literature can be grouped under the following themes:

- Academic attainment
- Critical thinking
- Communication and argumentation skills
- Personal and social impacts and benefits



Debate activities have a practical and meaningful influence on the attainment of young people from diverse backgrounds and, in particular, on the development of literacy skills.

In the remainder of this report, we take each theme in turn and critically discuss and contrast the range of evidence available to make judgements about what is known about the impact of debate activities. Both quantitative evidence and more qualitative studies are considered here, alongside research on students' perceptions about the impacts of their participation in the activities.

3.2.1 Debate activities and... academic attainment

An intuitive link

A strong theme in the literature is that debate activities involve practising skills that are generally agreed to be a 'good thing'. Practising oral communication skills is the most obvious example, but debate activities also often involve reading, writing and study skills (Reppert 1991). It has been argued that the quick pace of competitive debate and the need to back up one's arguments with evidence provide opportunities to develop students' research, organisational and argumentation skills (Arbenz 2001). Debaters will practise library research skills, self-managed study and time management, as well being exposed to, and made to grapple with, social issues of the day (Crenshaw 1998 in Arbenz 2001).

In addition, it is argued that debate in the classroom provides an opportunity for enlightening students and making them aware of choices, as well as for active participation in class and cooperative learning (Elliot 1993). Researching and then arguing about, and defending, an issue may well give students a more meaningful encounter with it than by 'merely reading about it in a textbook' (Tumposky 2004, p. 52).

Since participating in debate activities naturally provides students with the *opportunities* to practise these academic skills, there exists, for many of those involved, an intuitive link with the *development* of these skills. That is, there is an expectation that by practising the skills, participants are likely to see improvements in these areas or, at the very least, that participation is unlikely to do them any harm academically. It is from the basis of this intuitive link that a number of studies have attempted to evidence the nature of the relationship between debate activities and the attainment of students. This has been assessed both through measures such as test scores and through teachers' and students' own perceptions. The evidence below covers the link between debate activities and general academic attainment; how debate activities help improve subject learning; and what students themselves think about the academic benefits.

Can debate activities improve academic attainment?

Key findings

- Debate activities have a practical and meaningful influence on the attainment of young people from diverse backgrounds and, in particular, on the development of literacy skills. For example:
 - Debaters in urban American high schools were 25% more likely to complete school than non-debaters; African American males who took part in debate were 70% more likely to complete school than their peers.
 - High school participants in debate activities did significantly better than their peers in tests of English and reading, in a number of studies.



These studies suggest that debate does influence attainment, and that literacy skills development could be a mechanism through which this takes place...

Typical measures of attainment

The studies that focus on general academic attainment all originate in the US, and measure attainment in one or more of the following ways:

- GPA (Grade Point Average): the letter grades commonly awarded to students are given a numerical value and the average attainment calculated. This is not a standardised system.
- ACT® (American College Testing) scores: a standardised college entrance test that assesses high school students' English, reading, maths and science. A writing test may also be included.
- SAT (Stanford Achievement Test Series) scores: a standardised test for school students, in 13 levels roughly corresponding to school years. Subjects include reading comprehension, listening comprehension, language, spelling, maths, science and social science.
- High school graduation: students who reach state attendance and achievement requirements (often measured by standardised tests) receive a high school diploma, considered the minimum educational standard for college and many jobs.

Studies that attempt to find measurable academic gains linked to competitive debate activities suggest that debate has a practical and meaningful influence on the attainment of young people from differing backgrounds. The largest and most robust of recent studies found that debaters were 25% more likely to graduate from high school than a group of comparable peers (Mezuk *et al.* 2010). They scored significantly better in reading and English ACT tests, a benchmark for college readiness, scoring on average an extra 1.02 points on the reading test and 1.04 points on the English test.³ Male African American participants were 70% more likely to graduate from high school and three times less likely to drop out than non-participants, even when school attainment was taken into account (Mezuk 2009). These young men also tended to gain higher marks in reading and English than their peers in ACT tests.

The research by Mezuk and colleagues, which claims to be the most comprehensive evaluation available of debate in an urban setting, was based on 12,179 young people and compared the results of 2,449 participants in the Chicago Urban Debate League⁴ with randomly selected non-debaters from the same schools. The earlier study focused on African American males, as this group traditionally tends to have lower academic attainment than their peers (with 2,614 students in this group, of whom 458 participated in debate). The more recent work attempted to understand whether participation in debating might address gaps in attainment between black and white students, by looking at the results of young people from various backgrounds. It found that the effect of debate on high school graduation rates was slightly stronger for black and Latino students than for white students – suggesting that participating in debate might indeed help to close gaps for ethnic minority students – and stronger for females than males. The results in the subject tests were similar for black, white and Latino/Hispanic students.

These studies suggest that debate does influence attainment, and that literacy skills development could be a mechanism through which this takes place (fewer gains were found in test results for science and maths, suggesting that debate is more likely to impact on the academic skills most

³ An improvement of 0.5 points is considered 'practically important' by the operator of the test (ACT 2006 in Mezuk *et al.* 2010).

⁴ Urban Debate Leagues consist of policy debate teams from high schools in American cities. Participants tend to be from minority ethnic backgrounds.



As is the case with educational interventions in general, it is extremely difficult to prove a causal link between debate activities and outcomes such as attainment, because of the variety of other factors that might be at work.

closely associated with it). Furthermore, those who took part repeatedly fared better than those who took part only occasionally. This is further evidence of impact, since it is to be expected that, if debating is indeed effective in raising attainment, a higher 'dosage' of the activity would be more effective than a lower dosage.

The authors took steps to account for factors that could influence the results, such as bias from the fact that students self-selected into the group of debaters.⁵ While the 2009 study found that debating did attract more academically oriented students, this measure was a relative one and did not necessarily indicate that participants were of outstanding academic achievement. Nonetheless, in the later study the authors admit that unobserved factors, such as level of parental education, may still be at work to explain the differences that they find.

Mezuk *et al.* (2010) speculate that debate can also influence achievement indirectly, for example through the fact that debaters can develop mentoring-type relationships with teachers and fellow students. They cite previous research indicating that peer group attitudes towards school and teachers' expectations of achievement are related to scores in reading and maths tests (Rosignano 1998 in Mezuk *et al.* 2010), and that black students' achievement can be supported by having peers who are competitive but supportive of each other's success (Horvat and Lewis 2003 in Mezuk *et al.* 2010) – as can be facilitated through debate.

The positive findings of Mezuk and her colleagues are supported by another study of Urban Debate League participants, which found an improvement of 25% in the reading scores of 209 debaters versus 212 randomly selected non-debaters from the same schools (Collier 2004). When compared with the 64 high-achieving non-debaters within the control group, the increase was still 18%. The students undertook a standardised reading test both at the beginning of the school year and again seven months later. The debaters also fared better in terms of their general attainment. Students' GPAs were also measured at both points, and the later scores showed a significant increase in GPA for the debaters above that of the control group (an average of 3.71 as opposed to 3.5).

The author suggests that a possible reason for the impact on reading could be that the competitive nature and research-based demands of participating in debate increase the motivation to read and amount of reading undertaken by debating students, which in turn improves their reading skills. That is, wanting to win gives students a reason to read that they would not otherwise have. While this study made attempts to control for selection bias, the author admits that more experimental research is needed.

As is the case with educational interventions in general, it is extremely difficult to prove a causal link between debate activities and outcomes such as attainment, because of the variety of other factors that might be at work. Not all authors find improvements in attainment: a study by Shuster (2008) disputes Collier's findings. Shuster applied further statistical controls to the same data, to account more fully for self-selection bias and also for unobserved factors that might affect the results. In contrast to Collier, Shuster found little or no effect of participating in the competitive debates run by Urban Debate Leagues on GPA or reading test scores, once these controls were applied. Furthermore, the author argues that if participation were having an effect, it would be reasonable to expect greater effects the more that students participated in the activity. However, in contrast to the findings of Mezuk and her colleagues, no such 'dosage' effects were found in this data.

⁵ Meaning, for example, that those students who chose to take part in debate activities were already more motivated or academically gifted, rather than that those qualities were 'caused' by the activities.



Certain subjects in particular appear in the literature as lending themselves to teaching and learning through debate...

Nonetheless, a link between participation in debate activities and improvements in reading and writing has also been found in other studies. Participants in competitive speech activities (Forensics, i.e. debate, original oratory, student congress and oral interpretation) were found to gain statistically significantly higher scores in a state writing test and a national (ACT) reading test (Peters 2009). For example, the mean scores for Grade 10 students in the state writing test were 663.70 for non-participants in Forensics and 671.82 for participants, which was a statistically significant improvement ($\alpha = 0.03$). Interestingly, there were no significant differences in test scores between students who competed in the debate events as opposed to those who competed in the other speech events. The study took place in a single high school; the results of 32 high-achieving English students with Forensics experience and 205 similar students without such experience were assessed over four years for the state writing test, and 24 students with Forensics experience and 160 without were assessed over three years for the national reading test. This study resulted in some positive findings; however, as noted above, understanding impacts on attainment is a complex area, and the author admits that the effects found may be partly explained by the fact that Forensics participants are already likely to have higher levels of interest and achievement in language-related skills than non-participants (i.e. there may be a problem of self-selection bias).

The first study to look at the relationship between debating and standardised test scores (Barfield 1989 in Peters 2009) also found statistically significant gains in reading test scores and in GPAs for students after at least two years' active debating experience (10 tournaments per year), compared with non-participants with similar achievement in class (Barfield 1989). This research compared reading comprehension scores for 155 debaters and 155 non-debaters before and after participating in a debate programme in three private high schools in the US, as well as pre- and post-GPAs for 120 debaters and 120 non-debaters.

In summary, the evidence around reading and writing discussed here is somewhat inconclusive, mainly due to the lack of experimental research designs and other methodological difficulties. Researchers in the field recognise the issues of selection bias into debate activities and the additional influences that might impact upon attainment. However, the evidence reviewed covers the most robust studies available on participation in debate activities and it is noteworthy that these find no negative links, but rather suggest the presence of a positive link with attainment.

Can debate activities help improve subject learning?

Key findings

- Evidence exists for a link between debate activities in the classroom and improved subject knowledge in science (biology), history, art and English as a foreign language. For example:
 - Using debate as a teaching tool in history can deliver a depth of learning through enabling pupils to delve further than usual into historical events, and to understand historical contexts and differences between viewpoints from the past.

In addition to the general academic benefits that have been related to competitive debate activities, a further group of studies reports the impacts of debate activities as used in the classroom, often as a strategy for helping students to engage with subject learning. Certain subjects in particular appear in the literature as lending themselves to teaching and learning through debate – most obviously when two or more viewpoints exist on the subject matter – with evidence arising from test results



Debate was found to engender a sophisticated discussion among a class of 10 to 11 year old pupils when used as an exercise in perspective-taking.

and from teachers' observations. The evidence on classroom debate activities indicates that there is a link with increased subject knowledge and achievement in science (biology), history, art and English as a foreign language, and suggests that using debate as a teaching tool can deliver a greater depth of learning.

In biology, for example, secondary school students were found to learn more when they took part in a course in argumentation alongside their subject teaching. Zohar and Nemet (2001) conducted an experiment in which students in Israel were explicitly taught the principles of good argumentation, along with knowledge of dilemmas in human genetics and with opportunities to construct arguments using that knowledge. The experiment group gained higher scores in tests of the knowledge compared with a control group, and made more references to specific, correct subject knowledge in their arguments. A French study also found some success in using argumentation training in the secondary biology classroom to enable students to better understand the subject matter (Simonneaux 2001, 2002).

While it was not possible to identify studies across an extensive range of subjects to understand why certain subjects may benefit from debate activities more than others, it may be the case that the characteristics of scientific subjects do lend themselves better to a debate-led pedagogy. Proulx (2004) points out that the similarities between scientific method and the skills of critical thinking (i.e. starting from facts, developing an idea or hypothesis, testing and assessing this and drawing conclusions) are all skills which are practised through participation in debate. Proulx points to a study that used debates with secondary school students to help them realise that the solutions to environmental problems are complex and controversial (Zipko 1991). The adult participants in Proulx's own very small study, who were introduced to the steps of scientific method and critical thinking, seemed able to respond to an argument against their own point of view calmly and rationally, using critical thinking to judge different viewpoints in the debate.

In a similar vein, there is evidence from two qualitative studies that focus on the use of debate in the context of teaching history. Debate was found to engender a sophisticated discussion among a class of 10 to 11 year old pupils when used as an exercise in perspective-taking (Jensen 2008). According to their teacher (the author), pupils in this US study were able to delve further than usual into historical events and to understand historical contexts and differences between viewpoints in the past. The debate also revealed some misunderstandings on the pupils' part, allowing the teacher to re-teach these aspects of the topic.

A major benefit of classroom debate with university students of history was reported as helping them to see that historical knowledge is produced collaboratively and is never final (Musselman 2004). The author also observed an improvement in students' writing skills, as well as a greater willingness to evaluate multiple perspectives. Indeed, this 'trying on', through debate, of perspectives not their own allowed students to work beyond their initial responses to historical texts to reach more sophisticated conclusions.

An isolated study from Hong Kong focused on the teaching of art and the links between the use of speech and creativity (Pan 2006). While not examining debate activities as such, this study found that when teaching approaches allowed the expression of ideas, students tended to use speech to develop their creativity – for example, to plan activities and to solve problems. The extent to which students appreciated their own ideas seemed related to their artistic performance and conversely, in the absence of verbal communication, art education did not seem to promote creative thinking (Pan 2006).



Student perception data indicates that engaging in debate activities increases engagement and motivation...

In considering these subject-specific impacts and benefits, it seems important also to consider the benefits for communication in English of utilising debate activities in the classroom, particularly among non-native speakers of the language. Authors have discussed that one obvious benefit of debate activities is their ability to sharpen and hone the communication skills of participants (e.g. Colbert 1985), which will be explored further below as regards communication skills in the general sense. Given the international nature of participation in debate activities, however, it might be expected that benefits would be evident for the development of English language skills in particular.

Two of the studies reviewed involved participants debating in English when this was not their first language. Anitha and Anitha (undated) offer reflections based on their observations of debate as a tool for language learning at primary, secondary and junior college level in Singapore, and consider that the focus on form in debate, and the fact that debate constitutes a 'meaningful communicative task' (p.4), helps students to convey their meaning as accurately as possible (Swain and Lapkin 1995 in Anitha and Anitha). In addition, university students in Japan, responding to a survey of competitive debaters, listed improved English as a benefit of their participation (Inoue and Nakano 2004). Of 109 participants in parliamentary debate, 56.9% felt that debating improved their English, while 46.6% of 58 participants in National Debate Tournament-style policy debate identified this as a benefit. However, given this limited evidence, firm conclusions are difficult to make in this area.

In addition, some interesting work has compared the outcomes of different kinds of debating technique used in the classroom (Johnson *et al.* 2000). The authors describe a technique used with their university students known as 'constructive controversy', which is similar to debate but distinguished from it by the fact that after debating both sides of a position, the group of students work together to find and write about a solution that is acceptable to all the participants. From the authors' 30 years of experience and a meta-analysis of available evidence, they conclude that constructive controversy activities produce higher achievement and subject learning than do debate, concurrence-seeking (an activity in which controversy is minimised in order to find agreement quickly) or individual learning, and that the participants also tend to be more motivated than those in the other activities.

In summary, the evidence outlined in this section on classroom debate activities indicates a link between the activities and subject knowledge or achievement in science (biology), history, art and English as a foreign language. This is not to say that debate activities do not help with other subjects, but merely that no studies focusing on other subjects were found. However, with science and history in particular, an intuitive link exists between aspects of the practice of these disciplines (e.g. formulating a hypothesis, assessing evidence to back it up, testing arguments and drawing conclusions) and the process of debate, suggesting that debate activities could help students to progress in these disciplines.

What do students think about the academic benefits of debate activities?

Key finding

- Student perception data indicates that engaging in debate activities increases engagement and motivation in a subject, improves subject knowledge and helps students apply their learning to real-world situations.

A separate body of evidence based on students' perceptions of taking part in debate activities supports the argument that participation helps develop academic skills and contributes to



Involving students as judges increased the number in the class participating in the debate, as did following the debate with a class discussion.

improvements in academic performance and subject learning. This evidence largely, although not exclusively, relates to classroom debate among US college students, who report a number of specific benefits that chime with the evidence discussed so far. This evidence has been treated separately from the more empirical studies as, while providing valuable context and direction for more robust investigation, these studies rely on student perceptions and testimony of academic impacts, sometimes as reported by their teachers.

Firstly, students have reported that participating in a debate in class increased their engagement with the subject matter and motivation and enjoyment in learning. Of the 52 students responding in Goodwin's (2003) 70-student class of English undergraduates, the majority (79%) reported that the classroom debate had encouraged them to engage with and learn the course content, whether more deeply, through delving into the issue; more broadly, through considering other viewpoints; or more personally, by becoming actively involved. Furthermore, Elliot (1993) describes an intervention whereby participation in debate was a requirement for undergraduates on a course in the Psychology of Women. Involving students as judges increased the number in the class participating in the debate, as did following the debate with a class discussion. The author pointed out that signing up to a particular debate almost guaranteed students' attendance that day. The author concluded that the debates helped students to feel that they had an active role in class and a responsibility to their peers. In similar findings, 65% of undergraduate students in the six classes (covering various subjects) in Cronin's (1990) study liked participating in classroom debates, with 83% feeling that debate should be used again in the course and 71% agreeing that the inclusion of debate had made the course better. Comments made by the business undergraduate and graduate students in Rao's (2010, p. 241) study included:

'great learning experience'

'made me apply what I learned'

'wish we could debate in all my classes'

– while a student in Goodwin's (2003, p.161) class of university communications students commented:

'By having debates at the end of every week, we would be thinking about the material all week long.'

Secondly, and on a related note, participants in several studies said that debate had helped to improve their subject knowledge and understanding of course material. For example, the business students mentioned above (Rao 2010) also reported that classroom debates contributed to their understanding of the subject (82% of 68 students) and topic (88%), and enriched the course (88%), with the lecturer also observing increased motivation and excitement among the students. University business students (n=97) were also surveyed by Vo and Morris (2006) after participating in a classroom debate, and three quarters reported that the debate was helpful for their learning and understanding of the course material. Of the 87 student teachers who participated in class debates in Kennedy's (2009) study, 13 reported that participation contributed 'some' to their knowledge of the topic, and 64 that it contributed 'a lot'. Even observing the debate was thought to contribute to their knowledge (41 'some' and 37 'a lot'). In Cronin's (1990) study mentioned above, 66% of students felt that they would have learned less without the debate component of their course. Most of the undergraduate students of Child Welfare Policy in Keller *et al.*'s (2001) study reported significant gains in their knowledge and skills from participating in



'I finally decided to switch my thinking cap around and convince myself that maybe my previous conviction was based on one-sided information...'

debates (22 students provided responses both before and after the debates; four debates were held and each student participated in two), although merely observing the debate seemed to provide only the same gains as traditional teaching methods. One commented on the effects of the experience:

'I finally decided to switch my thinking cap around and convince myself that maybe my previous conviction was based on one-sided information, that there might be some truth to the other beliefs. To my surprise, I was amazed how quickly my stand and attitude changed.'

Thirdly, studies have identified a connection between taking part in debate and the ability to see the relevance or application of course material to the real world. In Vo and Morris's (2006) study of university business students, three quarters of the students surveyed reported that the debates helped them to appreciate the real-world significance of economics, and 72% indicated that they had learned something about analysing real-life situations. Similarly, 87% of those in Rao's (2010) survey of business undergraduate and graduate students said that the classroom debate helped them make practical applications of their knowledge.

Fourthly, in addition to outcomes that tend to be of a short-term nature and relate to subject learning, some more general, longer-term outcomes, which contribute to an individual's academic performance, were reported in this set of studies. These include gains in critical thinking, better analysis skills and collaborative learning (reported respectively by 84%, 84% and 89% of the 68 students) in Rao's 2010 study, and in oral communication skills, reported by 74% in Cronin's study (1990). Critical thinking was also mentioned by 61% of students in Vo and Morris (2006). It is interesting that despite the evidence outlined above regarding the academic benefits associated with debate, slightly fewer students seemed to think that participating improved their grades or their research and writing skills compared with the other benefits: in Rao's study, 50% thought that debate contributed to their grades, and 54% to research skills, while 53% of Vo and Morris' participants thought that it helped their research and writing skills.

Research skills were, however, mentioned frequently by students in a series of surveys focusing on competitive debaters. These asked students to name the top three benefits that they experienced through participating, and the authors then analysed the answers to produce a list of the top five benefits mentioned. The surveys covered university students (286 students responding in Williams *et al.* 2001) and high school students (193 respondents in Littlefield 2001) in the US, and university students in Japan (167 respondents in Inoue and Nakano 2004). Both the school and university students from the US mentioned improved research skills as a top benefit, while in all three surveys, increased knowledge and/or help with their education appeared among the top five benefits, with high school students mentioning benefits for reading and writing in particular.

Several authors suggest, on the basis of previous literature and their own observations, that a reason for the reported gains in learning could be the interactive nature of the debate activities, meaning that learning is 'socially constructed' rather than merely taught, and that it therefore remains embedded for longer (e.g. Vygotsky 1962, Billig 1987 and Rogoff 1990 in Andrews 1994; Rao 2010; Zohar and Nemet 2002; Keller *et al.* 2001; Bellon 2000; Elliot 1993). Fisher (1993), for example, reports on a study of pupil to pupil (rather than teacher to pupil) classroom talk as a learning strategy and identifies a form of discussion that the author calls 'exploratory talk', characterised by suggestion, challenge and counter-challenge, which might offer a means of extended learning as pupils debate informally with one another.



Both qualitative and quantitative research suggests that participation in debate activities improves critical thinking.

In summary, the benefits identified by participants themselves offer support to the idea that debate activities can have academic benefits in terms of increased motivation, engagement and knowledge; the ability to connect their learning with the 'real world'; and specific skills such as reading and writing, as well as in more general skills such as critical thinking. This is valuable evidence in identifying trends in the data and in developing indicators that can be tested in future empirical work. As has already been seen, critical thinking is often discussed together with academic benefits in the literature reviewed, and improvements in critical thinking skills are often seen as underlying academic gains. Nonetheless, it features enough in the literature to warrant the separate discussion that follows.

3.2.2 Debate activities and... critical thinking

Key findings

- Both qualitative and quantitative research suggests that participation in debate activities improves critical thinking. In particular a meta-analysis argues that participation in communication skills classes can increase critical thinking skills by as much as 44%.
- Students' own perceptions add weight to the argument that participation in debate activities leads to improvements in critical thinking. Competitive debaters reported better critical thinking among the top five benefits of taking part in debate.

Defining critical thinking skills

There are frequent links made between critical thinking and debate activities in the literature; however, there is no single definition of what is meant by the term, or of how 'critical thinking skills' might be measured. Several studies (e.g. Colbert 1995) use the well-established Watson Glaser test to define and measure critical thinking, testing for impacts on test scores of participating in debating or Forensics activities. The test measures five abilities: defining a problem; selecting relevant information for its solution; recognising assumptions; formulating and selecting relevant hypotheses; and drawing valid conclusions and judging the validity of inferences.

Others take a looser definition of critical thinking as being about engaging with arguments, including those with which the participant might not personally agree, and assessing the strength of evidence and the conclusions based on it. For example, critical thinking is described by Proulx (2004, p. 27) as the process of identifying an idea and analysing and evaluating the sources of information and evidence on which it is based, in order to evaluate and accept, reject or suspend judgement about the claim. Elsewhere the concept is described as 'the process of reasonably deciding what to do and/or believe. This means individuals should be able not only to assess their own and others' arguments but also construct good arguments' (Dorn 1987 in Green and Klug 1990, p. 465).

Regardless of the definition, it is clear that critical thinking skills are as crucial to today's young people as they have ever been. The importance of the ability to analyse information and communicate relevant knowledge effectively in a society where information is constantly 'on tap' has already been noted. This ability is also important if students are to succeed in education – a requirement put bluntly by Proulx (2004, p.27): 'Opposing viewpoints may confuse students if they are not familiar with critical thinking'.



Other studies that argue for the existence of a link between debate activities and critical thinking include several from the field of higher education...

An intuitive link

On the basis of any of the definitions of critical thinking, an intuitive link again exists with debate activities, in that they involve a process that demands that a problem be addressed; arguments made, contested and defended; evidence presented and assessed; and conclusions drawn. This case is set out by Fine (2000) on the basis of his ethnographic research with debaters in two high schools. He states that debate participants must learn what and whose evidence is credible, set it in context and describe its significance, not leaving it to 'speak for itself'. They must make claims on the basis of their judgements about evidence, organise their talk within a timeframe, tune their message to their audience and counter potential opponents. These skills themselves require sophisticated reasoning skills and the ability to process information and retrieve data; they must be learned rather than being acquired naturally, and debate provides an opportunity for this to happen (Fine 2000).

Warner and Brusckhe (2001) also argue, on the basis of their coaching experience, that participating in debate gets students into the mental habit of questioning the claims of others, thinking through possible objections to any knowledge claims and developing questions about them. This, in turn, gives debate a potential role in empowering its participants, discussed further in the section below on the personal and social benefits of debate activities.

Other studies that argue for the existence of a link between debate activities and critical thinking include several from the field of higher education, such as Elliot (1993), Garrett *et al.* (1996) and Darby (2007), which report from the educator's point of view on the use of debate as a teaching strategy in their own classes, highlighting the fact that it provides an opportunity for students to develop these kinds of skills. Elliot, for example, points out that debate necessarily involves analysing complex evidence and developing a logical position, while appreciating the position of the opponent. Cronin's (1990) study, which reports on the opinions of 1,814 university students who took part in classes where debate was used as a learning tool, concludes that debate gives students the opportunity to practise and develop the critical thinking 'dispositions' identified by Ennis (1987): seeking a clear statement of the thesis or question; seeking reasons; seeking to be well informed; using credible sources; considering the whole situation; remaining relevant to the main point; looking for alternative solutions; being open-minded; taking, and changing, a position when the evidence is sufficient to do so; seeking as much precision as the subject permits; dealing in an orderly manner with the parts of a complex whole; and being sensitive to others' feelings, level of knowledge and degree of sophistication.

The empirical evidence for such a link is, however, complex and contested. Issues arise that are common to those surrounding the impacts of debate activities, such as difficulties in ascertaining what precise aspects of the activities might be responsible for which precise impacts, especially as the same students may also be exposed to other experiences that might impact on their critical thinking. In addition there are the usual problems of self-selection bias. In this case this issue manifests itself in the literature as discussion of the 'chicken and egg' scenario, that is, a dispute over whether those who already have well-developed critical thinking skills are more likely than others to take part in debate, or whether debate engenders these skills in participants (e.g. Colbert 1995).

Can debate activities improve critical thinking?

The strongest argument for a relationship between debate activities and critical thinking is made in a meta-analysis of 19 studies, which concludes that training in communication skills measurably improved participants' critical thinking (Allen *et al.* 1999). In sum, the authors argue, the evidence



... students learn that 'a position can be legitimately argued from either side and that, in practice, one's opponent is not one's enemy'...

(which covers the period from the 1940s to the 1990s) indicates that participating in communication skills classes generates a 44% increase in critical thinking ability. Increases were found regardless of the measurement used (most, but not all, of the studies used the Watson Glaser test; other measures found larger improvements), the type of research design employed (longitudinal or cross-sectional), and the type of communication skills taught. The authors were also able to consider the impact of different types of speech and communication skills training, and found that participation in competitive Forensics activities demonstrated the greatest improvements, compared with public speaking and argumentation classes. Their analysis concludes that 'public speaking instruction may be improved by incorporating more aspects of argumentation into the curriculum', and that 'Forensic participation (as well as other forms of public communication instruction) can be justified on the basis of the critical thinking improvement offered' (p.27).

An illustration of how the evidence in this area is contested is provided by two other (earlier) reviews (Hill 1993 and Greenstreet 1993), which conclude that while it is likely that a link between debate activities and critical thinking exists (the latter admitting that a large quantity of testimonial and survey evidence supports this), the available evidence is not sufficient to prove it. Hill, for example, finds methodological flaws in some of the studies reviewed by Allen *et al.* On the other hand, Colbert's (1995) review of research (some of it again going back to the 1940s), which is, in part, a response to Hill, concludes that the evidence around competitive debate does point to a measurable link (using the Watson Glaser test) – particularly for those who participate in debating for a year or longer. He admits that regarding classroom debate activities, evidence for a link remains inconclusive as existing studies are too dissimilar to compare.

There is also some further qualitative evidence to suggest a relationship between debate activities and the development of critical thinking skills. 'Modest' gains were found in critical thinking for university students who participated in classroom debates in five classes, compared with two control classes (Green and Klug 1990). This was evidenced by the quality of arguments in their written work before and after participation and, perhaps, by the interesting fact that students who found themselves debating for a position that they were initially personally opposed to, or felt neutrally about, tended to switch opinion to agree with the position they advocated in the debate. Similarly, between 31% and 58% of the 87 student teachers participating in debates in Kennedy's (2009) study changed their opinion having taken part in a classroom debate, suggesting that the debate had an effect on their thinking processes.

Meanwhile, students who took part in debates in another university class (Goodwin 2003) commonly reported that they believed debate to be important for helping them to 'recognize and deal with a diversity of viewpoints' (p.163). Teachers of secondary school students taking part in the London Debate Challenge (Jerome and Algarra 2006) reported that participating in competitive debate helped to develop students' skills in selecting evidence and structuring and summing up an argument, with potential 'knock-on' benefits for their written work, as well as developing their speaking and listening skills. A Year 10 student in this study summed this up:

'I am becoming more objective and enjoy being able to challenge our teachers.'

According to Fine (2000), through taking part in debate, students learn that 'a position can be legitimately argued from either side and that, in practice, one's opponent is not one's enemy' (p.106). Equally, they learn that the ability to argue for one position in a debate does not mean that they cannot embrace a different position in other contexts. Most of the 14 debate coaches taking



As regards communication skills in general, students' own perceptions seem to indicate that taking part in debate activity does provide a boost.

part in Fine's study believed that debate is beneficial for teaching respect for different opinions, for being able to take on multiple perspectives, and for highlighting the dangers of absolutism, in addition to providing training in the analysis of public policy.

Respondents to the surveys of competitive debaters mentioned above also reported improved critical thinking among the top five benefits of taking part in debate. This was the case for the Japanese university students in particular, with 65.5% of the policy debaters and 37.6% of the parliamentary debaters mentioning this benefit (Inoue and Nakano, 2004). Of the US university students, 11.8% mentioned improved analytical and critical skills (Williams *et al.* 2001).

The literature reviewed here makes a clear theoretical case for a link between debate activities and the development of critical thinking skills. While there is a lack of consistency in how these skills are defined and measured, and while the empirical evidence is somewhat contested, it seems that qualitative and quantitative research suggests that debate activities play an important role in developing critical thinking.

3.2.3 Debate activities and... communication and argumentation skills

Key finding

- Students' perceptions provide strong evidence that taking part in debate activities leads to improvements in their communication and argumentation skills, including improved English when it is not their first language.

Skills in communication and, particularly, argumentation, might be seen as a subset of the kinds of critical thinking skills discussed above. However, they appear often enough in the literature reviewed to warrant separate treatment. Following the pattern set out for academic benefits and critical thinking skills, it is unsurprising that many studies make the claim that since debate activities necessarily involve oral communication, and generally require participants to set out logical arguments, the practice of these skills through debate activities should lead to their development in participants. Our focus here is therefore those few studies reviewed that report more specific outcomes in this area.

As regards communication skills in general, students' own perceptions seem to indicate that taking part in debate activity does provide a boost. Evidence from US college students participating in classroom debate in various subjects has highlighted that the activity improved their communication skills, with 74% of students from six university classes agreeing to this (Cronin 1990). Furthermore, an improvement in communication and speaking skills was perceived as the most important benefit of competitive debate in surveys of 286 university and 193 high school students in the US (Williams *et al.* 2001 and Littlefield 2001).

This finding is supported by evidence from Japanese participants in parliamentary debate, who also ranked improved speaking and communication skills, and improved English, as their top benefits. Although those involved in policy debate ranked improved analytical and critical skills as top, improved English and speaking and communication skills still featured highly (Inoue and Nakano 2004).

A study of high school students debating controversial public issues as part of sociology classes found that students' ability to participate successfully in the discussions increased with practice



... there is some evidence that argumentation skills do indeed improve with practice in the classroom situation...

over time, as scored by the teacher for the contribution of relevant comments and questions, backing up points with evidence, summarising the discussion, etc. (Hess and Posselt 2002). Even students who did not normally take part in classroom discussions showed a small improvement. The authors' suggestions as to why this might be included the new value placed on discussion in class and the opportunity to practise speaking. The grouping of similar students together, so that more outspoken individuals did not dominate, may also have led to increased confidence among some students.

As regards specific techniques of argumentation, groups of 9th grade students in two schools in Israel, who had been taught principles of argumentation, produced arguments of higher quality (supporting their points with relevant evidence, etc.) than a control group, and seemed able to transfer their reasoning abilities to other dilemmas outside of the genetics topic they were considering in class (Zohar and Nemet 2001). The authors suggest that the dramatic gains in argumentation ability, apparent after very little intervention, could be explained by the increase in students' awareness of how they think and argue generally, and/or by the change in what was valued in the science class. Students had perhaps been encouraged to use patterns of thinking that they possessed all along but did not normally utilise in the classroom, or had reinforced skills that were already present but not usually valued in class.

Class discussion, role play and debate might all help students to develop argumentation skills, according to Simonneaux (2001; 2002), who used various techniques for the development of argumentation, again in the biology classroom. In evidence of this the author points to the fact that some students changed their opinions after the activities, and to literature concluding that being confronted with opposing arguments helps to clarify one's thoughts (Barnes and Todd 1977 and Lewis *et al.* 1999 in Simonneaux 2002). While the former study finds few significant differences between the arguments put forward by a group who had participated in role play compared with one that participated in debate, the latter concludes that the quality of arguments developed by students depends on the type of intervention (role play or different kinds of debate, not described in the article), as well as on what is being discussed. Simonneaux describes argumentation skills as 'key to the build-up of knowledge' and 'a crucial aspect of democratic-scientific education' (2002 p.9).

In a discussion piece based on his experience in school classrooms, Andrews (1994) maintains that argument is vital to the health of democracy and should have a place in the curriculum, since it is the 'principle means by which decisions are reached and democratic processes are seen to work' (p.63). Since much argument takes place in speech, the role of speaking and listening in the curriculum is to be supported. Andrews argues that it is important that students are able to use language to persuade, as well as to be critical about the way in which others use language 'to persuade and control (especially [when they are] those in power)' (p.64).

In summary, there is some evidence that argumentation skills do indeed improve with practice in the classroom situation, with studies indicating that the value of providing instruction in argumentation is to unlock skills that students already possess. Students' own perceptions also seem to indicate that taking part in debate activities provides a boost to communication skills, with a particular international angle to this through the benefits for improved English, as well as for speaking and communication skills reported by Japanese students. These conclusions are, however, based on a limited number of studies, and further investigation could usefully inform this area, particularly around the experience of students for whom English is a second language.



... debate gives young people the opportunity to practise skills that are valued in the workplace, such as organisation, reasoning, oral communication and listening.

3.2.4 Debate activities and... personal and social impacts and benefits

Key findings

- Evidence exists to support the claim that debate activities can increase participants' aspirations towards higher education, with school-aged debaters being more likely to plan to go on to higher education, even accounting for their academic achievement.
- Participation in both classroom and competitive debate can boost confidence, as evidenced through students' perceptions and by an Ofsted review into creative approaches to learning, which found that classroom debates helped students develop confidence and present their ideas more clearly.
- Broadening horizons, improving cultural awareness through meeting new people and spending time with others from diverse backgrounds, and the empowerment of young people are also important elements of the value of debate activities in schools.

While impacts in the broad area of academic skills and attainment are an important focus in the literature reviewed, it is also possible to identify a wider range of benefits related to debate activities, which have to do with personal and social development and which are valuable in and of themselves. An important finding is the relationship that participating in debate activities can have with raising children's and young people's confidence, aspirations around education and cultural awareness, and empowerment in terms of feeling able to overcome disadvantage and address social problems. The fact that relatively few of the studies offer evidence of these personal and social benefits is likely to be explained in part by difficulties of measurement.

Educational aspirations

Raising young people's expectations and aspirations around education is a critically important aspect of education policy. Evidence exists to support the claim that debate activities can in fact increase participants' aspirations towards higher education. Participants in US high school Urban Debate Leagues were found to show an increased commitment to attend college, in comparison with their non-debating peers (Collier 2004; Shuster 2008). This was the only non-academic outcome to emerge from Shuster's study, showing a small but statistically significant increase even when many other factors, including achievement, were accounted for (such that debate accounted for one twentieth of the difference between planning to go to college and not).

Aspirations around college attendance are also highlighted as an outcome of participating in Urban Debate Leagues in Arbenz and Beltran's (2000) literature review. This review is concerned particularly with the children of immigrants to the US, and points out that debating affords participants the opportunity to develop friendships with others like them, who value education and may be the first in their family to aspire towards a college education. Furthermore, it provides the opportunities to visit colleges and meet college students that may raise their aspirations further (Arbenz and Beltran 2001) – and also the opportunities to take on leadership roles within the debating teams and competitions. Leadership is also taken up by Parcher (1998). His is an argument piece in favour of the benefits of debate rather than an objective review, but he highlights the fact that debate gives young people the opportunity to practise skills that are valued in the workplace, such as organisation, reasoning, oral communication and listening.



Increased confidence was the benefit reported most frequently among young people and their teachers taking part in the London Debate Challenge...

Confidence and self-esteem

Increased confidence emerges as a further important outcome of debate activities, according to both observers and participants. A review by Ofsted (2010) of 44 UK schools highlights debate within the classroom as a teaching strategy commonly used in schools that successfully employed creative approaches to learning. Students who were encouraged to debate, present and reflect critically enjoyed the challenge and had a sense of personal achievement. The confidence they gained encouraged them to develop and present their ideas with greater imagination and fluency. The authors note that careful planning was needed on the part of teachers for enquiry, debate, speculation, experimentation, review and presentation to be productive, and that teachers' subject knowledge needed to be secure and extensive in order to support these activities by their students. The report also points out that schools that used creative learning techniques effectively were able to incorporate them across the curriculum including in science and maths, although debate is not mentioned specifically here.

Increased confidence was the benefit reported most frequently among young people and their teachers taking part in the London Debate Challenge, when speaking of the advantages of participating in debate (Jerome and Algarra 2006). A Year 9 student commented (p.32):

'I have learnt to debate against other people who are just as opinionated as myself... I have also gained confidence. When debating if you stand up and are not sure about your argument or yourself, your opponent will pick up on it and use it against you, so you have to be able to stand up and present yourself with confidence, which I learned to do at the London Debate Challenge.'

Students in the London Debate Challenge also thought that taking part in this competition helped to prepare them for future career roles (Jerome and Algarra 2005). These findings were based on 772 student questionnaire responses and 96 teacher responses, supplemented by interviews with some of the pupils and teachers.

It is also worth noting that improvements in self-confidence and the ability to handle stress was one of the benefits most frequently cited by US high school students taking part in competitive debate (Littlefield 2001), while positive impacts on self-esteem, motivation to learn and the students' social support for one other were also found in the study focusing on constructive controversy as a teaching technique, based on the authors' observations and a meta-analysis of available evidence (Johnson *et al.* 2000). It is possible that increases in confidence come about simply through providing the opportunity for students to speak out more than they might usually: Elliot (1993) observed that participating in classroom debate gave students an opportunity to think about and voice their own position, within a non-threatening environment.

The empirical evidence around the benefits of debate activities for confidence and self-esteem is however more inconclusive than for other outcomes. While Collier's (2004) study reported that participation in debate diminished risk-taking behaviour, no significant increases in self-esteem were found and debaters already tended to score highly on this measure. Similarly, competitive debate was not found to have an impact on self-esteem in Shuster's (2008) study of the same data. Rather, both high self-esteem and a low propensity to take risks were shown by the data to be predictors of debate participation rather than outcomes.



*... competitive
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Broadening horizons

The fact that competitive debate involves meeting new people and spending time with those from diverse backgrounds was mentioned by respondents to the surveys of competitive debaters discussed above as an important benefit of participation (Williams *et al.* 2001; Littlefield 2001; Inoue and Nakano 2004). Social benefits were ranked particularly highly by the Japanese students (37.9% of the policy debaters and 38.5% of the parliamentary debaters listed them among their top three benefits of debate), but they appeared among the top five benefits for the US high school and university students too.

The opportunity to meet others is also highlighted by Warner and Brusckke (2001, p.9):

'there is a large amount of 'down time' before and after debates that affords ample opportunity for informal conversation [...] By meeting different people from different cities, seeing different sights and campuses, the students are exposed to a way of life different (if only by degree) from their own.'

Wider benefits still are suggested by Bellon (2000), who argues that enhanced language skills, as supported by debate activities, are associated with lower aggression, and that 'debate intensive instruction' (p.174) can improve human relationships and help participants find non-violent ways to resolve conflicts.

Non-academic gains such as confidence could, in turn, have further benefits: Fine (2000) argues on the basis of his ethnographic research that 'The satisfaction of winning or even losing well provides the speaker with confidence in addressing social problems'. It has indeed been argued that:

'debate promotes civic engagement and might provide a venue for citizens, particularly members of socially disadvantaged groups, to empower themselves through the provision of social capital acquired by voicing and defending their concerns in a public arena'

(Mitchell 1998 in Mezuk *et al.* 2010, p.7).

Empowerment, as also discussed in the section on argumentation and communication skills above, is mentioned by Warner and Brusckke (2001) as a benefit of debate that comes through the development of the mental habit of questioning knowledge claims; through engaging with questions around the current social order and how it can be changed; and, for students from disadvantaged backgrounds, through debating and winning even against those from elite backgrounds, which can equip them to see that disadvantage can be overcome and to take on those in positions of power in other situations. This theme is given a more light-hearted treatment by a participant in Jerome and Algarra's (2005) study, who 'delighted in "the chance to get one up on adults who don't know everything about the topic"' (p. 496).

The student experience of debate activities

Students' views on the benefits of participating in debate activities have already been discussed above (e.g. Williams *et al.* 2001; Littlefield 2001; Inoue and Nakano 2004). It is worth taking into account some of the disadvantages of participation also considered by this set of studies, in order that they might be addressed in future activities. The main disadvantage reported by surveys of competitive debaters is the time commitment involved. This was so for university and high school students in both the US and Japan. The survey of US university students' perceptions ranked the



... increased aspiration, confidence, self-esteem, and a broadening of horizons are the main 'wider' outcomes linked with debate activities...

next greatest disadvantages of debate participation as being the extra academic burden, effects on social life, financial costs, and concerns around stress, health consequences and lack of sleep (Williams *et al.* 2001). These responses were largely the same regardless of the style of debate that students took part in. The high school students also ranked the next greatest disadvantages after time commitments as being stress, effects on social life, the tendency for debate to foster unhealthy choices (such as lack of sleep or drug use) and financial costs, and also a negative stigma attached to debate by others, and negative perceptions of themselves and other debaters (Littlefield 2001). Japanese university students listed costs to health and sleep as the second greatest disadvantage, followed by financial costs, the extra academic burden and the effects on social life (Inoue and Nakano 2004).

Some students in Goodwin's (2003) small study reported disadvantages connected with classroom debating (25, or 48%, made negative comments), although no single criticism stood out. Some felt that being an observer of the class debate was too passive and uninformative a role, or disliked the competitive element, believing for example that it artificially polarised discussion of the issue. Based on her experiences with university students, Elliot (1993) recommends that reminding students that they are all taking part in the same project and can learn from each other, and that there are not necessarily right or wrong answers for the issues being taught, might help to overcome these kinds of problems should they arise in classroom debates.

Fine (2000) in his ethnographic research found that participants in the 'game' of debate worried that the strategic skills they learned could 'bleed into other domains in which a connection is expected between the beliefs of the speaker and his or her public claims' (p.112) and that participants might become known as those whose statements are not to be believed. He notes that it is also possible that arguing both sides of cases could lead students to develop a 'casual, dismissive attitude to the truth' or find their own beliefs 'eroded' (p.113). A coach taking part in this study pointed out that while outside of the tournament itself, there are considerable educational benefits to debate, once in the room the debate becomes a 'game' with the focus on winning at all costs. Whether it is acceptable for debate to be principally a game, or whether it should have at its heart the seeking after truth, is itself a subject for debate.

In summary then, increased aspiration, confidence, self-esteem, and a broadening of horizons are the main 'wider' outcomes linked with debate activities in the literature reviewed. Relatively few of the studies identified for review deal with these kinds of outcomes, such that the evidence base here is more inconclusive than for the academic benefits. However, the trends that have been identified provide useful direction for further empirical studies, if difficulties around measurement of these 'softer' outcomes can be addressed, ideally alongside evaluation of the more academic benefits. Similarly, relatively few studies address the question of whether there are any disadvantages to participation in debate activities, making firm conclusions in this area difficult. What evidence is available focuses on students' perceptions and identifies their concerns around the time commitment of engaging in competitive debating, and its impact on other aspects of their lives.



4. Conclusions

Given the pace of change and complexity of modern life, it is important that children and young people develop the ability to think critically.

The objective of this international literature review was to scope what is currently known about the impacts and benefits of participating in debate activities. In reviewing the available evidence it becomes apparent that there is a great deal of agreement that debate activities *should* support learning and provide important benefits to participants. Debate can be seen as a way of promoting active learning, with advocates arguing that researching, discussing and defending an issue may well give students a more meaningful experience than simply learning about it from a textbook.

The strongest body of evidence exists around the relationship between participation in debate activities and academic attainment. A range of studies suggest that debate activities have a practical and meaningful influence on the attainment of young people from diverse backgrounds, and in particular on the development of literacy skills. As is the case with educational interventions in general, it is extremely difficult to prove impacts on attainment because of the variety of other factors involved. This is not to say that a positive link does not exist; more that an assessment of impact and causality is problematic.

An important learning point from this literature review is that the use of debate activities is not just confined to competitive debating and that equally prominent in the literature is classroom debate and the use of debate activities as a teaching tool. There is evidence for a link between debate activities in the classroom and improved subject knowledge, with the use of such activities as a teaching tool being associated with a greater depth of learning. Being isolated studies, these tend to have issues of replicability, although they indicate the presence rather than the absence of a link. This evidence is supported by a strong body of student perception data indicating that engaging in debate activities increases engagement in and motivation towards a subject, improves subject knowledge and helps students apply their learning to real-world situations.

Given the pace of change and complexity of modern life, it is important that children and young people develop the ability to think critically. The relationship between the practice of participating in debate activities and the development of critical thinking skills is a strong theme in the literature, with both qualitative and quantitative research suggesting that participation can improve critical thinking. However, there is some conjecture around such improvements in critical thinking skills, given that there is a lack of consistency in how these skills are defined and measured.

What is apparent from the existing studies is that debate activities have the power to contribute not only to educational achievement, but also to a range of wider outcomes that work towards developing more rounded and confident individuals for later life. An important finding is the positive influence that participating in debate activities can have on improving children's and young people's confidence, aspirations around education and cultural awareness. This evidence highlights some of the ways in which debate activities can be used in education to support the development of young people; however, more examples are needed of how these impacts can be realised for children and young people from different backgrounds and in different educational contexts.

The international evidence reviewed in this report provides valuable information for understanding how engagement in debate activity impacts upon participants and generates benefits to support the development of children and young people. Debate activities can be used in a variety of educational contexts, and constitute a valuable teaching tool outside of more formal competitive



debating competitions. The suitability of debate activities for supporting young people's education is an important finding of this review, and it is hoped that the evidence discussed here will help policy makers and education professionals to understand the value of debate and increase its use across the education sector.



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6. Appendix

Methods

This study has been completed using a rapid research review of relevant literature around the impact and benefits of debate activities. The methodology for this study consisted of a staged approach. It was intended to provide a robust and rigorous evidence base from which material could be drawn, which in turn would develop the knowledge and awareness of practitioners and other users of the research regarding the value of debate activities.

Scope and boundaries of the review

The first stage of the project was to establish the scope and boundaries of the review. The boundaries of the review were based on:

- publication age
- age of target group
- language
- country
- availability of abstract
- theme
- education setting
- study design (methodological robustness).

Inclusion/exclusion criteria

To support the efficient identification of literature a set of inclusion/exclusion criteria was established against which to select and assess for inclusion within the boundaries of our review. The criteria for inclusion/exclusion for this study were agreed as follows:

Publication age

From an initial survey of the literature it was decided that for the database searches, incorporating articles published since 1990 would be fruitful (in terms of returning useful evidence that does not depart too far from the current educational context) and reasonable (in terms of returning a manageable body of literature to review). At the review stage, the focus was on the most recent and robust evidence, but judgements were made so as not to exclude very relevant older articles.

Age of target group

The inclusion criteria for this review were set to include evidence that focused on participants who were of compulsory education age (5–18). Nonetheless, it was also agreed that any robust evidence identified that focused on undergraduates and postgraduates would also be included if deemed to be of significant value.

Language

The review was restricted to research available in English.



Country

This review was intended to provide an international analysis, and any evidence from any country that was uncovered in the course of the database search or through the expert interviews, providing that it met the search criteria and was available in English, was included in the review.

Availability of abstract

Only studies for which an abstract was available were included in the review, since the abstract allows for themes, robustness and findings to be considered.

Theme

For inclusion in the review, a study had to take the impacts or outcomes of debate activities as its primary theme. 'How to' articles or ideas for debate activities were not included in this review unless accompanied by evidence of their impact. Studies focusing on communication skills for children and young people with particular speech and language needs were also not included, as this is a field distinct from that of debate activities.

Education setting

Inclusion criteria were set so that evidence from both classroom and extra-curricular activities would be included, as well as from informal learning situations, such as youth clubs and other organisations working with young people, where available.

Search strategy

Sources

Searches for academic articles were conducted through ATHENS, in the British Education Index, Australian Education Index, ERIC and PsychInfo. In addition, further evidence and 'grey', unpublished literature was sourced by conducting searches in Google Scholar, Google and enquiries with relevant organisations across the UK and internationally. The searches were supplemented by interviews with expert members of the consultative group to guide the search phase and identify further evidence.

Search terms

The search terms used in this study included combinations of the following:

- Debate/debating
- Speech/speaking
- Competitive debate
- Forensics
- Oral language skills
- Oral communication skills
- Impact
- Outcome
- Benefit
- Confidence
- Critical thinking



- Analytical thinking
- Thinking skills
- Education
- School
- Class
- Young person/young people/youth

Combinations of the above terms, together with the Boolean operators AND, OR and NOT, were used in the electronic search in order to obtain the most specific and relevant results possible.

Consultative group

To support the effective identification of relevant literature, and to guide the development of this literature review, a consultative group was established. Members of this group were selected based on their knowledge of the topic area and to provide a geographic spread of input from around the world. The consultative group consisted of the following individuals:

- Mark Gabriel (World Schools Debating Championships Chief Adjudicator 2007 and Tournament Director 2002; former Vice-Chairman and Secretary of the World Schools Debating Council Executive Committee; current Tournament Director of the Singapore Secondary Schools Debating Championships; European Universities Debating Championships Grand Finalist 1999)
- Sam Greenland (Former coach of the Hong Kong team for the World Schools Debating Championships; Semi-finalist of the World Universities Debating Championships; independent researcher on debate)
- Steve Hind (World Universities Debating Champion 2010; World Schools Debating Champion; winner of the Australasian Intervarsity Debating Championships; coach of the New Zealand team for the World Schools Debating Championships)
- Gaurav Keerthi (President, Debate Association of Singapore 2006–2010)
- Debbie Newman (Former coach of the England national team for the World Schools Debating Championships)
- JJ Rodriguez (Former coach of the US team for the World Schools Debating Championships and Grand Finalist of the World Universities Debating Championships)
- Kate Shuster (Co-director of Claremont McKenna's Middle School Public Debate Program, the world's largest debating initiative for young people; former US national university debating champion and coach of five national champions; coach of the American high school national debating team; author of nine books on debating and critical thinking instruction; educational researcher with a PhD in educational studies, focusing on quantitative programme evaluation)
- Suzanne Smith (National Association of Urban Debate Leagues: Director of research and evidence).

Alfred 'Tuna' Snider (Lawrence Professor of Forensics, University of Vermont) also assisted by sending out a call for evidence through his websites.

The consultative group was asked to send or highlight to us any research of which they knew that could inform the review. A call for evidence was also sent to the email groups Britishdebate, Idea



and WSDC. Through this search activity, over 800 references were found and, through an initial application of the inclusion and exclusion criteria, 110 references were identified. After further application of our inclusion criteria we established 59 references for classification and more in-depth methodological assessment.

Selection of documents for review

The specific inclusion and exclusion criteria detailed above were used to identify 59 references that met our inclusion criteria. These publications were then assessed for their methodological robustness and quality of findings, taking into account sample size, appropriateness of the methodology and independence of the researchers, to ensure that the most reliable evidence was included in the review. By applying these tests we identified 51 references to be included in the review.

Synthesis and gaps analysis

Having selected all relevant literature, the documents were categorised into a table highlighting their themes. The evidence collected and categorised was then mapped against emerging themes and analysed by the characteristics of the literature. This enabled us to reveal where evidence was abundant and where it was lacking.

The evidence base

Types of debate activities

The discussion in this section is based on the 51 studies identified by the review. Despite the fact that the review took into account a variety of debate activities, all of the studies found focused on debate activities in formal educational settings. As detailed below, the majority of studies focused on young people in secondary schools, although many considered college or university students. Roughly half looked at the use of speech and debate within the classroom and curriculum, as a teaching tool and means of helping students to engage with learning. Most focused on classroom debates, with or without a competitive element, although some considered organised discussion or other speech activities. The other half of the studies focused on inter-school or inter-college competitive debating.

Age and geographic coverage

Twenty-three of the studies reviewed focused on young people in secondary or high school, with the majority referring to competitive inter-school debate in the US. Since so much literature is also available that focuses on inter-collegiate debate with older students in the US, a number of studies that involved these older students as well as or instead of younger students were included in the review. Four studies covered both school and college students, and four were included that detailed interesting findings although the work was with adult students. Three studies involved children younger than secondary school age. In the remaining cases no target age group was stated.

Although the review put in place no geographic boundaries, the vast majority of the literature found originated in the US. Six of the 51 studies came from the UK; the other countries represented were Canada, France, Israel, Japan, Singapore and Hong Kong. It should be noted, however, that the literature reviews and meta-analyses treat literature from across the world, so this is certainly not excluded from the findings represented here.



Themes

In terms of the broad impacts of debate activities, most studies focused on the academic impacts of participation, whether in terms of general academic benefits (such as writing skills and performance in reading tests), or in terms of the benefits for particular subject learning. A large body of studies also focused on the impacts of debate activities on participants' critical thinking abilities, relating these to academic achievement to a greater or lesser extent. Several referred to the benefits of participation for developing students' skills in oral communication and argumentation, although relatively few attempted to measure these. Relatively few (around 15) studies either considered personal and social impacts and benefits directly, or reported them among students' perceptions of the benefits of debate activities.

Research study type

Nine studies could be classed as literature reviews rather than studies of individual interventions, and one (Allen *et al.* 1999) was a meta-analysis (one of the literature reviews, Johnson *et al.* 2000, also contained an element of meta-analysis). Of the remainder, the majority were primarily qualitative in nature, with the largest category of these examining either participants' own perceptions of the benefits of taking part in debate activities, or teachers' and instructors' perceptions of the benefits for their students (often based on their own work with their classes). Of the quantitative studies, most were small; a few had sample sizes in the hundreds, and only two used a large dataset (the same one), numbering in the thousands, to try to measure the effects of participating in debate.

Quality of the evidence base

Relatively little empirical research was identified in this review and, indeed, those studies that discuss the evidence base regarding the effects of debate activities tend also to observe the lack of such evidence. Just over half of the studies considered here appear in academic, peer-reviewed journals. While the studies by Collier (2004), Shuster (2008) and Mezuk and her colleagues (2009; 2010) seem to represent the closest attempts available to demonstrate the causal impacts of participating in debate activity, the lack of randomised control trials means that those quantitative studies that do exist still raise methodological issues; in particular, that factors other than participation in debate activities could explain the outcomes observed. Furthermore, the question is raised as to whether debate activities, when they are voluntary, tend to attract students who already have high levels of those attributes that some studies conclude are the effect of participation (the problem of self-selection bias).

However, the simple fact that it is difficult to prove a link does not mean that one does not exist. It is here that the large body of qualitative evidence around debate activities comes into play. While many studies are small and have not been replicated, the very fact that they are present in large numbers means that it is possible to start to build conclusions about the kinds of impacts that these activities can have for young people.



CfBT Education Trust
60 Queens Road
Reading
Berkshire
RG1 4BS
0118 902 1000
www.cfbt.com