KNIGHTLY VIRTUES
ENHANCING VIRTUE LITERACY THROUGH STORIES
RESEARCH REPORT

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The University of Birmingham is a top ranking British University. Founded in 1900, it was England’s first civic University and has been ranked University of the Year 2013–14 by The Times and The Sunday Times.

The original Department of Education was founded in 1894 and became the School of Education in 1947. Ranked in the top 50 Schools of Education in the world today, it has a long-standing reputation as a centre of excellence for teaching and research, in a wide range of areas of educational practice and policy, with fields of expertise including disability, inclusion and special needs, education and social justice, and professional education.

Jubilee Centre for 
Character and Virtues

The Jubilee Centre for Character and Virtues is a unique and leading centre for the examination of how character and virtues impact on individuals and society. The Centre was founded in 2012, by Professor James Arthur, with a multi-million pound grant from the John Templeton Foundation. Based at the University of Birmingham, it has a dedicated team of 30 academics from a range of disciplines, including: philosophy, psychology, education, theology and sociology.

With its focus on excellence, the Centre has a robust and rigorous research and evidence-based approach that is objective and non-political. It offers world-class research on the importance of developing good character and virtues, and the benefits they bring to individuals and society. In undertaking its own innovative research, the Centre also seeks to partner with leading academics from other universities around the world and to develop strong strategic partnerships.

A key conviction underlying the existence of the Centre is that the virtues that make up a good character can be learnt and taught. The Centre believes that these have largely been neglected in schools and in the professions. It is also a key conviction that the more people exhibit good character and virtues, the healthier our society is. As such, the Centre undertakes development projects seeking to promote the practical applications of its research evidence.
The Jubilee Centre for Character and Virtues

Knightly Virtues
Enhancing Virtue Literacy Through Stories
Research Report

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‘IT IS CURIOUS THAT PHYSICAL COURAGE SHOULD BE SO COMMON IN THE WORLD AND MORAL COURAGE SO RARE.’
Mark Twain
Foreword
Professor Karen E. Bohlin

Only human beings can tell stories. And only human beings can pass them along. To communicate what matters most, we share great narratives from literature, as well as stories from our own lives. In *After Virtue*, Alasdair MacIntyre (1981: 216) argues that our lives are so deeply narrative that we can only answer the question: ‘What am I to do [with my life]?’ If we can answer the question: ‘Of what story or stories do I find myself a part?’.

Good stories meet Augustine’s criteria for good preaching—they ‘delight,’ they ‘instruct,’ and they ‘move.’ They delight and satisfy our appetite for enjoyment. They instruct the mind by prompting personal identification and reflection. They move the heart, awakening idealism and ambition. Good stories have staying power. Their characters become lifelong companions in our imaginations and memories. Good stories have universal appeal and resonate with the truth — the truth about what it means to be human, about how we ought to treat one another, and how we ought to conduct our lives as individuals and citizens.

What is the power of story in moral development? William Kilpatrick (1994: 23) points to an important relationship between the imagination and character formation in children: ‘In theory, reason should guide our moral choices, but in practice, it’s imagination much more than reason that calls the shots.’ The moral imagination is a place of identification, empathy, rehearsal, and vicarious relationships. It provides data for reflection, and can support or undermine healthy character formation.

If to understand ‘what we are to do’ we need to know the ‘story, or stories, to which we find ourselves a part,’ then the *Knightly Virtues Programme* and the Jubilee Centre for Character and Virtues research report deserves attention from researchers, educators, parents, and policy makers. Even though the stories focus on knights and the chivalric code, the virtues of gratitude, self-discipline, love, service, humility, courage and justice are universal, and cut across gender, culture and time.

The *Knightly Virtues* research opens the door to the development of additional programmes, organised around narratives for younger and older age groups. New programmes might consider looking at stories from other cultures and traditions, to reinforce the universality of virtue.

The *Knightly Virtues* experimental trial was conducted with scientific rigour and intellectual carefulness. The robust sample, elegant design, well-circumscribed conclusions and recommendations, make this study useful to anyone who takes seriously the importance of character education in schools, and the power of literature to shape both literacy and the moral imagination. The research report presents a clear and thoughtful case for the impact of the *Knightly Virtues Programme* on pupils’ understanding of virtues. The authors aptly identify this knowledge and skill as ‘virtue literacy.’ Virtue literacy, like numerical literacy, language acquisition, reading and writing literacy, requires context, instruction and practice. The research demonstrates that taken together, the *Knightly Virtues Programme*, student journal, and opportunities for parent engagement, provide pupils with consistent, academically contextualised practice reading, writing, reflecting on and talking about virtue, everyday.

One of the strengths of the *Knightly Virtues Programme* itself is that the lessons and teaching resources were conceived and developed by researchers, in collaboration with expert practitioners. This strength is paralleled in the research methodology. Teachers and students were engaged in refining the instruments and framing questions. This important collaboration between University researchers and classroom teachers is a model worthy of commendation and replication.

The report provides statistically significant evidence of pupils’ increased ability to apply virtue language and concepts to their personal lives; and qualitative data from parents, teachers and students indicates evidence of improvement in some student’s behaviour. The study also reveals that children in faith-based schools have statistically significant higher virtue literacy than students from non-faith-based schools. This last finding underscores, perhaps, the importance of practice and context to virtue literacy.

Faith-based schools tend to use virtue language within a tradition that consistently reinforces virtue throughout its ethos.

Even though the research report focuses mainly on the programme’s impact on pupils’ virtue literacy, the authors have collected an enormous amount of qualitative data, which promises to yield additional insights into student motivation and internalisation of virtue, as well as the impact of the programme on reading and writing literacy.

The research report yields implications for further study on several fronts, including:

1) The development of literacy-based character education programmes for older and younger children

2) Longitudinal qualitative study about the programme’s impact

3) An analysis on the impact of virtue literacy on behaviour outside the classroom

The most powerful education in virtue comes not from a lesson, but from a life. The *Knightly Virtues Programme* invites students to meaningfully encounter the lives of characters in literature, their aspirations, choices, and struggles. The stories themselves bring virtue to life, in a way that a poster on the wall, or mere exhortation to good behaviour cannot.

The *Knightly Virtues* research reminds us that being intentional about the stories and structured reflection we make a part of our pupils’ experience, not only shapes their vocabulary and understanding of virtue, but also ignites and builds their moral imagination, and, quite possibly, their aspirations to greatness.

Professor Karen E. Bohlin

*Boston University’s Center for Character and Social Responsibility, Boston, Massachusetts*

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Augustine, De Doctrina Christiana, 4.74–86

Executive Summary

There is a growing consensus in Britain on the importance of character, and on the belief that the virtues that contribute to good character are part of the solution to many of the challenges facing modern society.

Parents, teachers and schools understand the need to teach basic moral virtues to pupils, such as honesty, self-control, fairness, and respect, while fostering behaviour associated with such virtues today. However, until recently, the materials required to help deliver this ambition have been missing in Britain.

The Knightly Virtues Programme, devised by the Jubilee Centre for Character and Virtues, aims to help solve this challenge. The programme, designed for 9 to 11 year olds, draws on selected classic stories to help teach moral character in schools.

This approach has proved to be popular with children and teachers, with more than 5,000 pupils from one hundred schools having participated in the programme so far. Fifty-five of these schools (including thirty Catholic and Church of England) and 3,272 pupils (1,517 of which attended a Church school) were directly involved in different stages of the research.

Based at the University of Birmingham, the Jubilee Centre houses leading academics dedicated to researching the various ways in which good character, which underpins the building blocks of society, can be developed. Recent research from the Centre has shown that the qualities that make up character can be learnt and taught, and suggests that we need a new emphasis on their importance in schools and in professional education.

This report from the Centre into the use of classic literature within schools sets out the ways in which the Knightly Virtues Programme is able to develop the virtue literacy of school pupils, and the extent to which an understanding and awareness of good moral character can make positive changes to behaviour.

The impact of the programme has been tested using several rigorous research methods, detailed in this report alongside their findings, which provide substantial empirical evidence for the effectiveness of using stories to develop virtue literacy.

The findings specifically highlighted that the Knightly Virtues Programme:

- Significantly increases pupils’ ability to apply virtue language and concepts in personal contexts
- Improves the behaviour of certain pupils, as observed by parents, teachers and the participants themselves
- Closes the gap between pupils in faith and non-faith schools in their grasp of virtue language and concepts in personal contexts

Many schools have been so impressed by results that they have already embedded the programme into their curriculum and whole school ethos.

In addition to outlining the nature of our research and its subsequent findings, this report concludes by setting out key recommendations for policy makers, practitioners and researchers embarking on similar programmes.

These recommendations include:

- Advocating that all primary schools ‘teach’ character education through literacy-based programmes
- Encouraging opportunities to involve parents in character education programmes to improve home-school partnerships on virtue development
- All new character-education interventions should be rigorously evaluated using a mixture of research methods to enable a better understanding of ‘what works’

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1 All state schools in England are required by legislation to have a daily act of worship and teach religious education, which should normally be of a Christian character. In addition, a third of schools in England are run by religious bodies and these are predominantly Church of England (C of E) or Catholic. When this report refers to faith schools, it means C of E or Catholic (no schools of other denomination were involved in the research) whilst non-faith schools refers to all other schools not attached to or run by a specific religious body, of the schools directly involved with the research in this report 19 were Catholic (941 pupils attending these schools were research participants) and 11 were C of E (576 pupils attending these schools were research participants).
1 Purpose of the Report

The Knightly Virtues Programme was inspired by the idea that stories of literary significance might be used in primary schools for teaching and learning about qualities of virtuous character. Four stories, Gareth and Lynette, El Cid, Don Quixote and The Merchant of Venice, formed the basis of the programme for 9 to 11 year old pupils. The belief was that these stories are an attractive, potent and enduring source of insight into the following eight virtues of character: gratitude, courage, humility, service, justice, honesty, love and self-discipline. All participating schools were provided with a teaching pack consisting of lesson plans and accompanying resources. All pupils who participated were given a personal copy of a pupil journal containing the stories, as well as learning activities to complete during the programme.

The aim of the programme was to enhance the virtue literacy of the 9 to 11 year olds who took part. There are two stages to enhancing virtue literacy. The first is developing a knowledge and understanding of virtue terms. The second is developing the ability to apply virtues to real life contexts. Virtue literacy should be seen as necessary for both character building and societal flourishing.

The Knightly Virtues Programme was subjected, from the outset, to an experimental trial alongside other evaluative methods, such as interviews. It was hoped that rigorous analysis and interpretation of the data would support the case for the programme’s inclusion into the primary curriculum in England and elsewhere.

A key issue for research design was how much one might expect to measure through the experimental trial. It is reasonable to suppose that there could be no genuine development of key virtues, such as honesty, self-discipline and courage without some significant grasp of the meaning of such terms. However, it is unrealistic to hope that a programme of this scope could accurately measure the impact of such understanding on the wider everyday conduct of pupils. So whilst the interviews sought evidence from teachers, parents and pupils about the possible wider impact of the Knightly Virtues Programme on actual behaviour, the trial focused on the extent to which pupils’ knowledge, understanding and meaningful use of virtue language has been enhanced by participation in the programme.

In this regard, the Knightly Virtues Programme sought to address the following five research questions:

- Does the Knightly Virtues Programme enhance the knowledge and understanding of the language and concepts of moral virtues of 9 to 11 year olds?
- To what extent does the Knightly Virtues Programme assist the enhancement of the application and practice of moral virtue in 9 to 11 year olds?
- Does the impact of the Knightly Virtues Programme vary by gender of the pupils, or by the religious affiliation of the school?
- How might parents be involved in educational programmes of this sort to enhance home/school partnerships on character education?
- How can learning resources, such as the Knightly Virtues Programme, be evaluated to provide robust evidence about ‘what works’?

This report provides an account of the methods employed in implementing the Knightly Virtues Programme, the research methods used in its evaluation, and the findings. The authors of this report are confident that the evaluation provides strong evidence that using stories from a range of sources can enhance the virtue literacy of 9 to 11 year olds.

‘IF WE BECOME INCREASINGLY HUMBLE ABOUT HOW LITTLE WE KNOW, WE MAY BE MORE EAGER TO SEARCH.’

Sir John Templeton
2 Background

The Knightly Virtues Programme and supporting teaching materials were developed over the course of a year by academics from the University of Birmingham, in combination with head-teachers, teachers and pupils. The four stories of Gareth and Lynette, El Cid, Don Quixote and The Merchant of Venice were selected – following discussion and deliberation – from a wider list of initially proposed possibilities.

The research team was confident that the issues of moral virtue and character raised by aspects of each of these stories would be of interest to pupils, irrespective of gender and background. Each story was re-written with a view to highlighting the moral virtues exhibited by the main characters. Whilst all four of the stories offer rich opportunities for the exploration of a range of virtues, it was decided, for reasons of simplicity, to concentrate on two or more of the more conspicuous virtues shown in each of the stories (see Table 1).

Table 1: Stories and Featured Virtues

<table>
<thead>
<tr>
<th>Story</th>
<th>Featured Virtues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gareth and Lynette</td>
<td>Courage, Humility</td>
</tr>
<tr>
<td>El Cid</td>
<td>Humility, Honesty</td>
</tr>
<tr>
<td>Don Quixote</td>
<td>Love, Service</td>
</tr>
<tr>
<td>Merchant of Venice</td>
<td>Self-discipline, Justice,</td>
</tr>
<tr>
<td></td>
<td>Gratitude</td>
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The Knightly Virtues is, as far as we know, the only programme of its kind and scale in Britain. It draws on a long-standing tradition of regarding literature as conducive to the education of character – which is rooted in Aristotle’s Poetics. The following section outlines some recent developments in character education, as well as relevant theories and perspectives.

2.1 HISTORICAL BACKGROUND

2.1.1 Character Education

Character is the constellation of virtues possessed by an individual, and character education is the deliberate attempt to cultivate these virtues. There is a growing body of evidence showing that character can and should be part of the solution to many of the challenges facing society today. What has been missing to date, at least in Britain, are high quality character education teaching materials that have been rigorously evaluated and can be straightforwardly implemented in schools. The Knightly Virtues Programme aimed to offer a partial solution to this problem.

The Knightly Virtues Programme is continuous with a recent educational trend towards character education, that has spread across the globe. In Britain, as well as internationally, general concern with character has been implicated in wider debates about whether schools should be focusing upon promoting narrower goals of official or prescribed school curricula – more specifically, priming young people for passing set tests – or on preparing them more broadly for the unpredictable tests of post-school life. Concerning this question, there is a widespread groundswell of opinion that the education of young people should extend beyond the learning of academic subjects and/or useful skills, to comprehend the development of character. Character education, as the cultivation of virtue, is once again being seen as a legitimate aim of teaching (Arthur, 2003).

A recent Populus poll indicated that parents believe that schools can and should teach character. High profile politicians and ministers of state, such as Tristram Hunt and Michael Gove, have also endorsed this view (although it is not entirely clear if they all understand ‘character’ in the same way), whilst the Confederation of British Industry (CBI) has called for character education to become a more conscious part of schooling. It is generally acknowledged that most schools and teachers in Britain understand the need to teach basic moral virtues to pupils, such as honesty, self-control, fairness, and respect, as well as to foster conduct associated with such virtues. Such teaching has, for the most part, occurred largely unconsciously and has therefore often been conducted in informal and unstructured ways. However, parents, employers and increasingly politicians, now seem to be saying that it is time for character education to become an intentional, planned and conscious part of schooling. It is central to the mission of the Jubilee Centre for Character and Virtues to answer this call by providing evidence-based research to help make character education a more visible and conscious part of the everyday practice of schools.

The dominant latter day approach of moral theory to thinking about notions of character and virtue in Britain and elsewhere, is that of virtue ethics (Anscombe, 1958; Hursthouse, 1999; Foot, 2003) in the tradition of Aristotle. Moreover, it is clear that modern psychological and other research on moral character, particularly from the direction of positive psychology, has also drawn indirectly on Aristotelian virtue ethics (eg. Peterson and Seligman, 2004). Whilst this work shows that the virtues of good character are varied, and salient distinctions can be drawn between moral, performance, intellectual and civic virtues, the Jubilee Centre has to date, focused primarily on conceptual clarification and educational promotion of time-honoured moral virtues. It is against this backdrop of interest in the moral virtues of character education that the Knightly Virtues Programme was conceived.

2.1.2 Teaching Character Through Literature

Character education need not necessarily take place in specially designated classes, such as Personal Social Health Education (PSHE), Citizenship Education or Religious Education. There are at least two established parts of the school curriculum in which some understanding of the place and role of moral character and virtue in human life and affairs is inherently or inevitably implicated: one is history, the other literature. In both cases, whilst it may not always be the main aim of studying either history or literature to examine character, it is clear that both history and literature have narrative forms, in which human agency looms large and virtue or vice often determines the outcome of actions.

There has been a long tradition of promoting the use of stories as one of the most promising and potent educational routes to the teaching of moral character. Aristotle held that the stories

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2 “Should schools teach character” at www.jubileecentre.ac.uk/471/character-education/populus-survey
3 See www.gov.uk/government/speeches/what-does-it-mean-to-be-an-educated-person
4 See www.government-world.com/schooling-for-the-future-speech-by-tristram-hunt/
of cultural or literary inheritance have a power to illuminate moral and other aspects of human motivation, feeling and agency in a way that other sources (say natural or social scientific) of knowledge and insight are not necessarily equipped to do. Since Aristotle viewed the development of emotions and motivation as crucial to the cultivation of moral virtues, he regarded exposure to narratives as playing a large role in the education of the desires and emotions, which *phronesis* (practical wisdom or good sense) is particularly concerned to order and regulate.

Alasdair MacIntyre (1981) made a strong case for the role of imaginative stories in moral learning. He argues that it is not possible to understand or explain human identity, purpose and action in the causal or statistical terms of natural or social science. For him, human behaviour is characteristically rational, intentional and purposive, and human moral and other conduct cannot be understood as other than involving the adoption of reasonable means to desired goals or ends. Thus, MacIntyre goes so far as to say that it is only possible for us to see ourselves as human persons or agents – as creatures operating in a space of moral or other goals, purposes and choices – in terms of something akin to characters in a story. In short, narratives provide the logical form or contours of human self-understanding.

Much imaginative literature – from the great cultural narratives of religion, myth and legend to the poetry, drama and fiction of past and present day writers – has been precisely concerned with exploring the lighter and darker, heroic and demonic aspects of human character in all its diversity. Other writers in the field of education have recently recognised the potential and power of literature for understanding human moral life and character. For example, the work of Karen Bohlin (2005) has done much to show how teachers may use literature to help pupils better appreciate the ethical themes and issues of the stories they encounter in their studies of English literature (see also Carr and Harrison, 2015 forthcoming).

2.2 PROBLEM STATEMENT AND CONCEPTUAL CLARIFICATIONS

2.2.1 Virtue Literacy

The aim of the *Knightly Virtues Programme* was to develop the virtue literacy of the participants of the programme. Virtue literacy requires a wide range of virtues, intellectual, moral, civic and performance, which need to be taught, learned and cultivated. It consists of three inter-related components: virtue knowledge, virtue reasoning, and virtue practice. The first component is concerned with acquiring a complex language usage through familiarity with virtue terms. However, it must be recognised that knowledge of the virtues themselves will not necessarily change behaviour. The second component concerns making reasoned judgements, which includes the ability to explain differences in moral situations, such as moral dilemmas. This emphasis on acquiring judgement must be reflective to allow for the empowerment of the ethical self through autonomous decision-making. Both components relate to the acquisition of knowledge and understanding, but are also critically linked to the promotion of virtue practice. A child may acquire some cognitive understanding of what would be the desirable virtue to display in certain circumstances, but be unable to translate this knowledge and reasoning into virtuous action. Virtue practice, the third component, therefore constitutes the desirable and observable attitudes and behaviours demonstrated by a child.

The determination of whether a child is virtue literate should not be reduced to simple outcomes, but should consider all three components. Children need to be persuaded of the moral force of acting virtuously and can acquire virtue literacy, for instance as shown in this report, by means of a study of literature. Through such study they gain a practical conception of what virtues look like in life and how they can be operated. Schools need to provide opportunities for children to exercise the virtues in practice, as well as encourage a rich discourse of virtue language, understanding and reasoning. How children develop their virtue literacy is intrinsically a contextual matter and is not something that can be easily traced in a linear or developmental fashion. Socially sensitive virtue literacy concerns the ability to know, to understand, and to do what is morally appropriate in the given circumstances, and it requires considerable intuitive artistry – gained only through experience – in addition to a grasp of general moral truths.

2.2.2 Educational Problems with Teaching Virtues

How to teach moral virtues to young people has been frequently debated. In particular there has been a concern that moral virtues cannot be promoted without risk of indoctrination. Hence, much of the late twentieth century discussion of the teaching of morals – probably influenced by the psychology of ‘values clarification’ (see, for example, Simon et al, 1972) – focused on the possibility of the ‘neutral teacher’ (see, for example, Wilson, 1975). A major response to this issue was to reject the idea that moral virtues would have to be grounded in religious or other ‘ideological’ perspectives or worldviews (Hirst, 1974). In opposition to the perceived moral relativism of values clarification, the psychologist Lawrence Kohlberg (1984) pioneered a stage theory of moral development and education, firmly committed to the possibility of a moral reason entirely free of any compromising ideological baggage or socially conditioned ‘bags of virtues’.

More recent developments in psychology and philosophy have, either explicitly or implicitly, been critical of the general tenor and drift of Kohlbergian thought, and have tended towards reinstatement of the idea of (virtuous) moral character. Attempts to revive the notion of character were originally made by American psychologists and educational theorists, such as Thomas Lickona (1991) and Kevin Ryan (1995) who held that ‘academic’ Kohlbergian discussion of moral dilemmas would not necessarily produce the dispositions to right conduct that are surely required for full moral agency. In short, young people needed guidance or training, not just in moral reflection, but also in how to feel and act morally.

Recently, as already noted, there has been a resurgence of virtue ethics as a suitable philosophical basis from which to develop educational strategies to ‘teach’ character and moral education. Aristotelian inspired virtue ethics holds the view that a virtue is a state of moral character in which various forms of natural human affect, appetite and desire are shaped under the guidance of an appropriately developed capacity for rational reflection, which Aristotle termed *phronesis*. In this view, the moral educational task is to cultivate wise, critical and discriminating dispositions towards honesty, fairness, courage, temperance, benevolence, compassion and other moral virtues. It is a crucial requirement that such dispositions – whilst stimulated by real or fictional ‘moral exemplars’ – should be critical and discriminating. The *Knightly Virtues Programme* draws inspiration from this approach to teaching character.

2.2.3 Developing a Language of Character

On any conception of virtue ethics, the possession and exercise of moral virtue is a matter of rational agency or reason-responsive conduct, requiring reflection and deliberation. As such, it should be clear that there can hardly be virtuous conduct in the absence of some understanding of the very meaning of such virtue terms as honesty, justice, self-control, courage or compassion. For, as virtue-ethical critics of Kohlberg pointed out, whilst such rational understanding may not itself be sufficient for virtuous conduct, it should be clear that no conduct could be considered truly virtuous without some meaningful grasp of what this, and related moral terms, mean. From this viewpoint, recent educational research indicating
that contemporary youth are widely lacking an adequate language or vocabulary of character and virtue, may be regarded as worrying (Kesebir and Kesebir, 2012). The UK Learning for Life project (Arthur, 2010) conducted a survey of almost 80,000 young people from ages 2 to 25, which seemed to show a marked level of unfamiliarity with, if not actual ignorance of, basic moral terms as ‘character’ and ‘virtue’. The project report strongly recommended the revival or recovery of a language, in which we can publicly discuss and personally appreciate human character. Others (Lorimer, 2014; Vasalou, 2011) have sought to promote the insight that a mastery of language is indispensable for a mastery of virtue.

In this light, it has been one of the primary aims of the Knightly Virtues Programme to develop the knowledge and understanding of primary school pupils of the language of character and virtue; thus, tasks dedicated to this goal have featured conspicuously in the aims, objectives and lesson plans of the programme. The programme has also sought to press home to pupils that virtue terms are not ‘stand-alone’ or ‘unrelated’, but implicated in a complex web of moral discourse that calls for wider or more ‘holistic’ comprehension.

### 2.2.4 The Application and Practice of Virtue Concepts

A wider aspiration of the Knightly Virtues programme was not just to help pupils gain a clearer or deeper understanding of the language of virtue, but also to utilise such terms in the development, cultivation or improvement of their own moral characters. However, there would appear to be at least three problems with such an ambition: the first is ethical or normative; the second is practical; the third – at least from the perspective of researching any such aim or objective – is methodological.

The first – normative – problem is that there is clearly a question of whether schools are warranted or justified in going beyond their legitimate educational remit of helping pupils to try to understand the meaning of such moral terms as honesty, justice and courage. If that is the case, would not teaching the meaning of honesty, courage or justice be simply a matter of teaching one contestable meaning of these terms, and therefore be inevitably a matter of indoctrination? However, educational philosophers, such as Carr (2012) and Kristjansson (2013) have argued that the language of moral virtue and vice constitutes a common cross-cultural currency of moral evaluation that may be taught without any problematic commitment to morally controversial views. After all, good schools have always seen it as part of their educational business to foster truth telling, fairness, respect, courage and self-control in their pupils.

The second more practical problem is that of whether helping pupils to understand the meaning of such moral or virtue terms as honesty, courage and self-control is enough to make them more honest, courageous and self-controlled, although the significance of this problem has a tendency to be overstated. If moral virtue is a matter of the promotion or cultivation of a kind of reason-responsive agency – rather than blind indoctrination – then one might reasonably suppose that helping the young to understand the meaning and purpose of virtuous conduct in flourishing human life, while being morally motivating. Indeed, it is precisely in this light that the Knightly Virtues’ use of stories fairly graphically illustrating the positive practical contribution of virtues to flourishing and negative or dysfunctional effects of vice in human life, might be considered to be especially motivating. The Knightly Virtues stories illustrate, as well as might be wished, the good (moral, spiritual and material) ends to which the virtuous come and the bad ends which await the vicious. Moreover, the Knightly Virtues teaching and learning programme encourages pupils not just to think about the roles of different virtues in the stories, but also about how they might apply these concepts to their own moral lives.

The third – methodological – problem was the extent to which the evaluation of the Knightly Virtues would be able to demonstrate whether the programme is effective in actually improving the moral behaviour of pupils. Clearly, the evaluation of pupils’ responses to a few activities exploring the meaning of moral virtues in four stories could hardly be expected to provide weighty evidence of such improvement.

All the same, the researchers made considerable efforts to garner evidence to this effect and were eventually successful in doing so. Interestingly, it is worth noting at this point that Leming (2000) conducted an evaluation of a literature based character education programme and found that it has a positive effect on cognitive outcomes, but more mixed results were found on affective and behavioural outcomes.

### 2.3 OVERALL EVALUATIVE GOALS

Attempts to devise practical interventions devoted to character education have been few and far between in the UK context – despite the recent political and educational calls for character education to be made a visible and conscious part of everyday schooling. In this regard, it is clear that the Knightly Virtues Programme was pioneering in the field. As such, the programme sought to address three overall evaluative goals. These evaluative goals were then fed into the five more specific research questions that laid the research foundation of the Knightly Virtues Programme (described above in Purpose of the Report).

#### 2.3.1 How might a literature-based intervention designed to develop character and virtue be embedded and sustained in a school curriculum?

An initial goal was to address the pedagogical problem – how to implement the Knightly Virtues Programme into actual classroom practice. More precisely, this included which methods of instruction might be adopted, and teaching resources developed, for the most effective communication of the moral significance of the stories to pupils. A second goal was to address the curriculum – how to fit the Knightly Virtues Programme into the existing formal curricular provision. Here, whilst it cannot be denied that primary schools have often formerly employed stories for a variety of educational purposes – or that moral education in some form or other has always featured in the school curricula – the explicit use of classic stories for the purposes of learning about moral character breaks some new ground.
2.3.2 How might the partnership between teachers and parents on matters of character education be developed?

Strategies for encouraging teachers to work together with parents on matters of character education are neglected in some schools. It is widely held that parents have not just a responsibility, but a right to be the primary architects of their children’s characters, and this might explain why schools and teachers are often nervous about promoting beliefs or perspectives to which parents might object. Therefore, the issue of promoting home/school partnerships is sensitive and potentially contentious. However, if we believe character to be important, some serious practical cooperation between schools and parents, about how best to help young people to acquire sound moral values and form good character, is therefore vital. In this regard, Lickona (1996: 5) has observed ‘schools that reach out to families and include them in character-building efforts greatly enhance their chances for success with pupils’.

So whilst one might continue to insist that parents are – or should be – the primary agents of moral and character formation, schools and teachers might well be useful allies in this role. Indeed, such an alliance would appear crucial to the success of effective schooling and parenting; for there is small hope of nurturing such virtues as honesty, compassion and courage in schools, if these are to be neglected in the home – or vice versa. An evaluative goal of the Knightly Virtues Programme was to enable a better understanding of how one might begin to go about developing or promoting cooperation between schools and parents, in the weighty business of moral education and character formation.

2.3.3 Can the impact of character education interventions feasibly be measured?

To date, many character education interventions have used light-touch evaluative methods. A greater understanding of how more scientifically rigorous methods, such as an experimental trial, might be harnessed to measure the impact of educational interventions designed to develop character is needed. A greater understanding of how to measure impact will in turn provide a better understanding of ‘what works’ in character education. More robust evidence will be useful to make the case for character education, to both policy makers and practitioners.
3 Methodology

This section reports on the three methods employed to evaluate the Knightly Virtues Programme: an experimental trial; interviews with pupils, teachers and parents; and an analysis of the pupils’ journals completed during the programme. Combined, these three methods were designed to address the research questions outlined at the start of the report. A timeline explaining the phases of the research can be viewed in Appendix 1.

3.1 RATIONALE
An experimental trial was used as the primary method for the evaluation of the impact of the Knightly Virtues Programme. Trials are regarded as the gold standard of evidence about ‘what works’ in practice. Experimental trial in this research is understood as a before and after controlled trial. In educational contexts, such as that under the present consideration, experimental trials should help to ensure that only those pedagogical methods and resources that have been shown to have an effective impact are adopted for use in the classroom.

In order to illuminate and help explain the findings from the trial, two further methods were employed to gather evidence: group interviews with teachers, pupils and parents, and thematic analysis of the pupil journals. It has been shown (Arthur et al., 2014) that mixed method approaches to research into character education can help to deliver robust data and therefore, any conclusions drawn can be said to have a greater degree of validity. It was therefore important to conduct qualitative research into what, if any, impact the programme had.

3.2 RESEARCH DESIGN AND INSTRUMENTS
The first stage of the research was a large pilot study with twenty-six schools and 1329 pupils. Seven schools and 303 pupils were from urban locations (primarily London), and nineteen schools and 1026 participants were from rural locations (Derbyshire, Cheshire and Greater Manchester). During the pilot, the questions and choice of stories in the tests were evaluated and revised to ensure they would provide robust outcome measures. The pilot study provided the research team with confidence about preparations for the trial, and facilitated valuable knowledge about how best to manage the logistical challenges it would present.

The experimental trial took place between September 2013 and January 2014. Twenty-nine schools started the trial, as they sent back the pre-test data. Data from nineteen of these schools were included in the final in-depth analysis, eight of which were faith schools. Ten schools did not complete the Knightly Virtues Programme in time, or did not return the post-tests for both the experimental and control groups. In all, there were 47 classes in the trial, with an average class size of 23 pupils. There were 1089 pupils in the trial. 49% girls and 51% boys, and most reported being aged 9 (48%) or 10 (45%) at pre-test. 302 pupils attended Catholic schools, 151 attended C of E schools, and 636 attended non-faith schools (Table 2). See Appendix 2 and 3 for more demographic information about the participants and schools in the trial.

Table 2: Breakdown of Pupils Attending Faith and Non-Faith Schools in the Trial

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catholic</td>
<td>302</td>
<td>166</td>
<td>136</td>
<td>88</td>
<td>72</td>
<td>6</td>
<td>53</td>
<td>70</td>
</tr>
<tr>
<td>C of E</td>
<td>151</td>
<td>77</td>
<td>74</td>
<td>35</td>
<td>37</td>
<td>5</td>
<td>27</td>
<td>43</td>
</tr>
<tr>
<td>Non-Faith</td>
<td>636</td>
<td>311</td>
<td>325</td>
<td>167</td>
<td>122</td>
<td>22</td>
<td>155</td>
<td>149</td>
</tr>
</tbody>
</table>

Pupils who participated in the programme before the post-test were in the ‘experimental’ group (n = 622) and pupils who did not were in the ‘control’ group (n = 467). Both experimental and control groups were from the same school, for two reasons: i) it is difficult to recruit schools to provide purely control groups, as there is no immediate benefit for them; and, ii) within-school matching means that the control group will be very similar to the experimental group and so minimises ‘imbalance across treatment groups’ (Campbell et al., 2004: 705).

To permit realistic pre- and post- testing, two versions of the test of equal style, length and difficulty were designed to assess:

- Pupils’ application of virtue concepts in modern day stories (Domain C)
- Pupils’ application of virtue concepts in historical stories (Domain D)
- Pupils’ application of virtue concepts in personal, social and cultural contexts (Domain E)

A group of six practising primary school teachers were recruited to give expert practitioner advice on the design of the tests. These teachers also marked the pupils’ answers in the tests. Their involvement in the trial was seen as crucial due to their understanding of the types of test, norms within primary schools, and general level of Year 5 and 6 pupils. Also, their experience meant that they were more able to assess pupil work accurately.

The pre- and post-tests were designed to have a similar structure to the primary English reading exam (SAT test) for 11-year-old pupils6, and had separate reading and answer booklets. Both sets of classes were to answer a test before and after the programme, simultaneously. To account for differences in the tests, about half the groups took Test A before the programme and Test B after; for the other groups, this sequence was reversed (see Table 3).

Table 3: Trial Design

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental 1</td>
<td>Test A</td>
<td>Knightly Virtues</td>
</tr>
<tr>
<td>Experimental 2</td>
<td>Test B</td>
<td>Knightly Virtues</td>
</tr>
<tr>
<td>Control 1</td>
<td>Test A</td>
<td>Normal teaching</td>
</tr>
<tr>
<td>Control 2</td>
<td>Test B</td>
<td>Normal teaching</td>
</tr>
</tbody>
</table>

6 See www.satspapers.org/englishKS2SATS.htm
To reduce the possibility of ‘contamination’ between classes, each trial school had one or more experimental classes in one year group, and one or more control classes in the other year group, except one school in which both experimental and control classes were in year 5. Attention was given to achieve a balance of faith and non-faith schools. Beyond this, no attempt was made to equalise the number of pupils in each group. None of the classes were organised by ability, so were deemed to be reasonably representative of the school as a whole. All pupils within the identified classes were eligible to participate, apart from 5, whose parents did not give permission to be in the trial and were withdrawn. The person who performed the allocation to test A or B, as the pre-test, had no contact with the schools or classes before allocating them, with the process being categorised as quasi-random. However, the decision to use either Year 5 or 6 classes as the experimental groups was undertaken by negotiation with individual schools, so this process was not random.

Six schools were involved in the interviews; in each, there were two group interviews with pupils (78 in total) and between one and three individual interviews with teachers (10 in total). Seven parents were interviewed in three of the schools. Interview schedules were piloted in advance and contained questions about the participants’ understanding of the impact of the Knightly Virtues. The interview schedules were semi-structured, allowing a flexible approach to questioning, and enabling the interviewer to investigate avenues of interest that may emerge during the interview.

The pupil journals contained sections designed to gather parents’ impressions of the programme. These were situated at the mid and end points of the programme of study. Teachers were asked to encourage parental involvement by allowing the books to be taken home by participants. A sample of 124 Knightly Virtues pupil journals were collected from participating schools, of which, 30% contained parents’ feedback.

### 3.3 DATA ANALYSIS

The trial was designed to investigate whether the scores given on the tests for the experimental group were significantly different from those of the control group. Each Domain was marked on a seven point scale from: 0 = no evidence to 6 = very strong evidence. A reading and writing comprehension level and sub-level was also assigned to each script. The assessors completed an initial moderation exercise to arrive at a shared understanding of the mark scheme. Each assessor was then sent a sample of scripts to mark, in which each script was sent to two separate markers. The inter-rater reliability (IRR) coefficients for each pair were sufficiently high to reassure, and thus the main marking commenced. Part way through this main marking, further duplicate scripts were sent out so that the IRR could be reassessed. Overall, the IRR ranged between 0.48 and 0.86 for the different Domains, which was considered good for a test of this type.

Data were entered into Excel and then transferred to SPSS version 21 for data checking, cleaning and analysis. Analyses included cross-tabulation, correlation (Pearson), analysis of variance (ANOVA), factor analysis and multiple linear regression. Factor analysis was principal component analysis, using varimax rotation with cases excluded pairwise. We employed common practice in educational research in using these statistical tests, although they are based on several assumptions that may not be appropriate to the setting. Perhaps the most problematic statistical assumption is that all pupils act independently of each other, whereas pupils in the same class are likely to learn from each other.

Initial tests on consistency of data from pre- to post- suggested the data received were predominantly accurate. The initial tests also found that the control group was disproportionately in year 5 and there was a correlation between the scores and the reading and writing comprehension levels; so these were both controlled for in the analysis.

A more detailed description of the analysis described in this section is provided in Appendix 3.

The interviews were conducted over a period of 3 months, in the spring of 2014. Each school was visited and the interviews conducted by members of the research team. The interviews resulted in over 6 hours of recorded data; the average duration of the group interviews was 30 minutes (range 20m – 50m). The recordings were then transcribed and checked for accuracy.

A thematic analysis of the transcripts was then conducted; Krueger (1994) suggests the notion of ‘theoretical saturation’, by which the author refers to a tipping point, at which patterns and repetitions become pervasive through familiarisation with the available data. This approach was adopted and the transcriptions studied carefully and then coded using NVIVO. A similar approach was adopted to analyse sections of the pupil journals.

### 3.4 LIMITATIONS

There are several limitations to the trial.

The experimental and control groups were not randomly assigned, so there is a possibility of systematic bias, with schools possibly selecting ‘better’ classes for the experimental group. Also, for practical reasons, both groups were in the same schools at the same time.

Therefore, contamination of the control group is possible, either by being taught in some way, or by resentful demoralisation (being unhappy to be excluded). Finally, the schools were in control of many important features of the trial, especially the number and length of sessions devoted to the Knightly Virtues Programme, the timing, duration, setting and conduct of the tests, and inclusion of assemblies and wall displays relating to the programme.

There are three principal limitations regarding the interviews. First, there is potential for selection bias, as the schools were selected based on established relationships with the research team, or independently expressed interest in the Knightly Virtues Programme. Therefore, it is possible that these teachers had pre-existing favourable attitudes towards the programme and character education.

Secondly, whilst representative samples of pupils were requested from the participant classes, schools may have offered the more articulate or enthusiastic pupils to reflect better on themselves as institutions. The third limitation is that evidence is self-reported; so interviewees may have exaggerated, or otherwise misrepresented, certain aspects of the Knightly Virtues’ Programme.

### 3.5 ETHICAL CONSIDERATIONS

For each of the methods, ethical approval was granted by the University of Birmingham Ethics Committee. We regarded adherence to ethical considerations as essential, given the fact the research was being carried out with young people. A member of staff from each school was required to agree to the nature of the trial, and gave permission for their pupils to be involved. Letters were sent to pupils and parents explaining the Knightly Virtues activities and evaluation, stressing confidentiality and their right to withdraw from the trial at any time.
4 Findings

In this section, the experimental trial findings are reported initially, followed by the interview and pupil journal findings, which are reported together. In the Interpretation and Discussion section that follows, the findings from all three methods are considered together.

4.1 FINDINGS FROM THE EXPERIMENTAL TRIAL

4.1.1 Knowledge, understanding and application of virtue language and concepts

Analysis of variance (ANOVA) was used to determine if the test scores of the experimental Knightly Virtues Programme group improved relative to the control group. The basic ANOVA was Knightly Virtues (experimental versus control) by time (pre- and post-test) by paper version (A versus B) by Year (Year 5 versus Year 6). In addition, the pupils’ assessed pre-test reading and writing comprehension level was included as a covariate, as prior analysis showed that this is likely to have an impact on the results.

For all Domains, the mean mark for the experimental group increased from pre- to post-test. Potential reasons for these increases include simple maturation, i.e. pupils are a few months older, and so likely to perform better. This is why the reading and writing comprehension level was used as a covariate, as prior analysis showed that this is likely to have an impact on the results.

For all Domains, the mean mark for the experimental group increased from pre- to post-test. Potential reasons for these increases include simple maturation, i.e. pupils are a few months older, and so likely to perform better. This is why the reading and writing comprehension level was used as a covariate, as prior analysis showed that this is likely to have an impact on the results.

Possible reasons for these differences include the experimental group being proportionately more in Year 6, and that the fact that teachers may have been more motivated towards the Knightly Virtues Programme. Therefore, the important comparison is the change from pre- to post-test between the two groups, which show that in all Domains, the experimental group improves more than the control group. The results are displayed in the four charts below (see Appendix 4 for a table of the results including significance levels). The possible scores for each Domain ranged from 0, indicating no evidence to 6, signifying very strong evidence.

Chart 1: Impact of the Knightly Virtues Programme on the knowledge and understanding of virtue language (Domain B).

Chart 1 shows the trend (not quite significant) for the experimental group to improve at a greater rate than the control group ($p = .1$). The evidence for this Domain was collected from all the questions in the test and the assessors were looking for knowledge and understanding of virtue language beyond the vocabulary used in the reading booklet.

Chart 2: Impact of the Knightly Virtues Programme on the application of virtue concepts in modern day stories (Domain C).

Chart 2 shows the trend (not quite significant) for the experimental group to improve at a greater rate than the control group ($p = .09$). The evidence for this Domain was collected from the section where participants were asked to answer questions about situations relating to modern day stories presented in the reading booklets.

‘THE ORDER OF NATURE IS THAT INDIVIDUAL HAPPINESS SHALL BE INSEPARABLE FROM THE PRACTICE OF VIRTUE.’

Thomas Jefferson
Chart 3: Impact of the Knightly Virtues Programme on the application of virtue concepts in historical stories (Domain D).

Chart 3 shows the trend (not significant) for the experimental group to improve at a greater rate than the control group. (p=.3). The evidence for this Domain was collected from the section where participants were asked to answer questions about situations relating to the historical stories presented in the reading booklets.

Chart 4: Impact of the Knightly Virtues Programme on the application of virtue concepts in personal, social and cultural contexts (Domain E).

Chart 4 shows the trend (highly significant) is for the experimental group to improve at a greater rate than the control group (P<0.001). The evidence for this Domain was taken from the final section of the test where the participants were asked to answer questions about their own personal, social and cultural contexts, unrelated to anything presented in the reading booklets.

4.1.2 Individual and School Effects

As application of virtue concepts in personal, social and cultural contexts, demonstrated highly significant (P<0.001) improvement in the experimental group this Domain was chosen to investigate any potential individual and school effects. For each potential effect, an ANOVA was undertaken with ‘application of virtue concepts in personal, social and cultural contexts’ used as the dependent variable.

4.1.2.1 Faith and Non-Faith Schools

Pupils (in both the control and experimental groups) from faith schools started with significantly higher test scores for the application of virtue concepts in social, cultural and personal contexts, compared to the pupils attending non-faith schools (p < .05) – see Chart 5. Taking non-faith as the baseline, students from faith schools pre-test scores were 21% higher (95% confidence interval 6 to 39%) whereas their post-test scores were only 5% higher, than those from non-faith schools (95% confidence interval -8 to 19%). The Knightly Virtues Programme was also highly significant (P<0.001) in improving the experimental pupils in the faith schools application of virtue concepts in social, cultural and personal contexts, compared to the control pupils.
There was also a non-significant trend that pupils (experimental and control combined) from the Catholic schools had higher pre-test scores than pupils from the Church of England schools (Chart 6), but this reduced during the trial.

4.1.2.2 Other Individual and School Effects

When considering gender (p = 0.08), the interaction with the Knightly Virtues Programme was non-significant, with neither female nor male pupils performed any better than one another. Special Educational Needs (p = 0.07) and English as an additional language (p = 0.5) were also non-significant (for these two variables, the data are drawn from the whole school, rather than for individual pupils).

The location of the school (rural, urban, or semi-rural) was highly significant (p < 0.001) with the improvement of the experimental group relative to controls greater in semi-rural schools, weaker in urban schools and negative in rural schools. We are unclear as to possible explanations for this, although it may partly be confounded with the faith variable; it may also be spurious due to the clustered nature of some of the data. Therefore, we must be cautious about interpreting this result, particularly as we do not know of any literature or theory that supports this finding.

4.2 FINDINGS FROM THE INTERVIEWS AND PUPIL JOURNALS

4.2.1 Knowledge and Understanding of Virtue Language and Concepts

Parents, teachers and the pupils reported that participants’ knowledge and understanding of virtue language had increased as a result of taking part in the programme. All participating pupils were asked at the start of the interviews to complete an exercise, naming and defining the virtues taught in the programme. A high percentage of these pupils who recalled the virtues, were able to define them as well as relate them to both stories in the programme and stories about their own lives. The role of the virtues in narrative context seemed to help participants to form cognitive links, separate to the stories themselves, with one teacher reporting ‘...they actually found there was a link between the virtues and the stories and that it related to their own lives.’

It was evident that the teachers appreciated the introduction of virtue language into the classroom, and also that it was used beyond the Knightly Virtues lessons. A recurrent theme of these interviews was that pupils would regularly use virtue terms in their conversations, as well as point out when they had demonstrated a particular virtue. Some teachers reported that the impact of the new virtue language was particularly beneficial for the male pupils. For example, one teacher stated:

*I think the wider the boys’ vocabulary, the more they’re able to articulate their understanding and their own feelings. And I think, I mean, boys from research do not have as wide a vocabulary as girls do at the same age, so you’re already at a slightly lower plane. But that’s what they find difficult, is to articulate their ideas. So the more vocabulary you can put in, the better, and I think that that idea of the virtues lets them do that to a greater degree.*

Parents explained that whilst the concepts of ‘the good’ and ‘the bad’ were often ‘covered’ or ‘done’ at home, the introduction of more complex vocabulary helped their children verbalise their ideas in more precise terms: ‘We have strived to give [child’s name] a good understanding of right and wrong but this project has perhaps helped her pin-point things better.’ Many of the comments from parents reported that the programme had helped their child to better understand their relationships with other people, and indeed themselves; ‘It has helped [child’s name] to define the virtues and has helped her put names to the feelings and qualities she already sees in herself and others’.

4.2.2 Application and Practice of Virtues

Although the primary intention of the Knightly Virtues Programme was to improve participants’ knowledge and understanding of virtue language and concepts, it also sought to have an impact on the actual behaviour of those who participated. There is credible evidence in the interviews with teachers, parents and pupils, that the programme did have a positive effect on the practice of virtues, although this is hard to assess.
Numerous examples where pupils had enacted the Knightly Virtues in their lives were reported in the interviews and pupil journals. In fact, it quickly became apparent during the coding process that much of the participants’ understanding of virtue terms was intrinsically linked to their own personal experiences, rather than the stories in the programme. Likewise, participants were able to apply the Knightly Virtue concepts beyond the ‘historical’ contexts in which they were presented. This is perhaps unsurprising as much of the work undertaken in the pupil journals required pupils to reflect on how they have used (or have not used) a virtue in their own lives. It was commonplace during interviews, for participants to use themselves as examples when explaining a character’s actions. For example phrases such as ‘like when I…’ or ‘like when you…’ were common.

We try and show what happened to the main characters in the story. Like, if one of them showed more, like, love than you would, like, they’d be quite inspirational to you and you’d try and show, like, as much love as they would.

Furthermore, some pupils also talked about how their behaviour had changed as a direct result of experiencing the programme. These included pupils reporting that since the programme, they had become more self-disciplined with their homework, shown courage to stand up to bullies, were more grateful to their teachers and were providing service to others. Pupils felt the virtues would help them understand their relationships with others, but furthermore, they wished to use the virtues in their daily lives, finding them inspirational. Parents also reported a difference in the behaviour of their children after the programme, for example one said “[child’s name] has learnt a lot about character and different virtues and she is displaying the virtues more”. However, some parents also said they had not seen any behaviour changes in their children as a result of the programme.

4.2.3 Retention of Virtue Language and Concepts

In one school, the interviews were conducted six months after the programme had finished, in order to assess the retention of virtue knowledge and understanding. During the interview it was apparent that whilst the pupils’ knowledge of the Knightly Virtues stories had less complexity than in the interviews conducted immediately after the programme had ended, their ability to define, apply and use the virtue terms was undiminished. These participants had received no additional tuition beyond the prescribed lesson plans and yet their retention of, and access to virtue concepts remained strong.

4.2.4 Faith and Non-Faith Schools

Several of the teachers from faith schools talked about how the programme and its focus on virtues fitted in with the religious ethos of the school, which was why they were initially motivated to get involved. Some commented on how they already teach many of the virtues in the programme, both in assemblies and classroom lessons. For example one teacher stated:

I think in church schools we talk quite a lot about qualities that make you a good person and how you should treat other people and how you should behave. So we use a lot of that language.

In addition, participants from faith schools generally showed better understanding and application of the virtues in early pupil journal extracts than those from non-faith schools. However, this difference became less evident towards the end of the pupil journals. This closing of the gap is evident in the group interview data, with little discernible difference in the use of language by faith and non-faith school pupils, suggesting perhaps that the Knightly Virtues Programme has a greater impact on those pupils for whom virtue language and concepts may be less familiar.

4.2.5 Parents and Teachers Working in Partnership on Character Education

The parents interviewed were very much in favour of both the Knightly Virtues and character education in general. Parents were asked in the pupil journals ‘What do you think your child has learned about the importance of character?’ and ‘Do you think your child has developed an understanding of the eight virtues?’ The responses were both in favour of the idea of character education, and somewhat defensive of the parents’ position as a moral educator. The pupil journals responses praised the programme’s aim of giving pupils a deeper understanding of virtue terms, its design, and its ability to motivate and inspire participants. One such comment reads ‘I am so pleased to see that [child’s Name]… has not only been keenly interested, but he has tried really hard to do his best writing and sometimes the programme as a whole experience (underlined by the parent) has been most valuable’.

The notion of schools educating for character might be seen as problematic as there is potential for conflict to arise between school and home values, especially with increasing religious and cultural diversity amongst the UK society. However, it became clear during conversations with the parents interviewed, that any reservations they may have had, regarding the endeavour being ‘paternalistic’, were limited. The eight Knightly Virtues were described as ‘universal’, ‘necessary’ and ‘sensible’ by interviewees. One parent felt that the virtues, upon which the programme is based, crossed over any religious or cultural differences and went to the ‘heart of what it is good to be [sic]’.

The literacy based approach, and the universality of the virtues, proved to be most popular with parents. They were impressed and pleased that participants were being introduced to narratives of such complexity at a young age. Also, parents valued the fact that these stories focused on moral and ethical complexities which ‘go beyond and deeper than what he usually brings home’.

The enthusiasm shown by participants for the narratives selected, has transferred itself to parents through homework interactions, with parents reporting that their child “…seems to have really enjoyed the journey”, and that the programme is an ‘interesting take on applying historical characters to values which are timeless’. The stories themselves were applauded by parents as ‘ambitious’ and ‘challenging’, with one interviewee stating:

Because they are doing literacy everyday or whatever [implies boredom], but this book contains more than just verbs and nouns and the rest, it challenges them to think and understand the meaning and intentions of the characters. I think it is valuable.

4.2.6 Embedding the Knightly Virtues into the Primary School Curriculum

It became clear early on during the recruitment process that many teachers and schools, who had become involved in the programme, did so because of the quality of the resource itself. These teachers had often been recruited via colleagues who had used the resource before (during the pre-pilot and pilot stages of development). One of the main ‘selling points’ for these educators, who were perhaps less inclined towards the teaching of character education, was the quality of the Knightly Virtues package. This ranged from admiration of the pupil journals, to an appreciation of the complete lesson plans, and multimedia embellishments provided by the research team.
I really liked it, what I really loved, what made me want to do the programme when I first got the books, I think it was [NAME] that sent the book out originally and the fact that the children get to have one of these books, I thought the books were really high quality and I thought the stories were really good as well.

This appreciation for the resources often developed into an appreciation of the package as a whole, as teachers began to understand the versatility within the package. Teachers in all the schools visited spoke of using the Knightly Virtues resources, not just as a stand-alone lesson, but also as a resource for other subjects. The lessons were reportedly used in Literacy, History, Religious Education, Ethics, PSHE and Geography. Teachers readily described the ‘links’ they were able to make with other areas, and how a ‘topic based’ approach, being more ‘joined up’, allowed them to look at the virtues in greater detail.

4.2.7 Pupils’ Engagement with the Programme
The Knightly Virtues stories, whilst being complex and perhaps more difficult than the work Key Stage 2 pupils are familiar with, are widely engaged with and enjoyed. Conversations with teachers pointed to all pupils being engaged by the stories, but highlighted improved engagement by male pupils of lower literacy ability or aptitude. One teacher commented on the engagement of her lower ability boys:

The gains of the real level 3 writers who we worked so hard to get them writing and suddenly Yeah! it’s about Knights, yes come on, we’re writing.

This is indicative of many comments received from teachers, who felt that the traditionally male content had an effect on the male pupils’ engagement. However, these teachers also reported that the stories were not ‘lost’ on the girls and they were, generally, just as engaged. There does appear to be a link between the quality of work undertaken by male pupils and the content upon which it is based.

There was evidence that most pupils connected with the Knightly Virtues stories and understood the importance of the messages about virtues in them. It was clear from the interview data, as well as the reflective statements, and the level of completion and writing within the pupil journals, that they engaged with the stories and understood why learning about character virtues was important. Pupils also repeatedly mentioned that they found the stories to be ‘fun’, ‘enjoyable’ and ‘not like real schoolwork’, and wished they could ‘do it again’.

4.3 OVERALL FINDINGS
Overall the main findings from the research are:

- The Knightly Virtues Programme increased pupils’ ability to apply virtue language and concepts in personal contexts by 24%7 compared to the control group; this is statistically highly significant.

- The Knightly Virtues Programme improved the virtuous behaviour of certain pupils, as observed by parents, teachers and the participants themselves.

- Pupils from faith schools had significantly higher scores in the experimental trial pre-test, indicating that they had a more developed initial grasp of virtue language and concepts compared to the pupils from non-faith schools. The gap reduced from 21% to 5% during the trial.

- The trial provides some evidence that the Knightly Virtues Programme increased pupils’ knowledge and understanding of virtue language, which was seen by parents, teachers and pupils in the interviews as an important ‘building block’ of character formation. There is evidence from the interviews with the participants, that they retain this language over time.

- Male pupils respond well to the ‘Knightly’ theme of the stories and this has benefited both their literacy skills and character development. However, there is no indication of a loss of engagement from female pupils, and the trial showed no significant difference between the impact of the programme on male and female pupils.

- The programme successfully brought together teachers and parents to address serious questions of character and moral virtue.

- Teachers, parents and pupils like the design and content of the Knightly Virtues Programme and schools recognise the benefits of embedding it into their core curriculum.

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7 Percentages are rounded
5 Interpretation and Discussion of Findings

This section considers the findings in light of the five research questions stated at the start of the report.

5.1 DOES THE KNIGHTLY VIRTUES PROGRAMME ENHANCE THE KNOWLEDGE AND UNDERSTANDING OF THE LANGUAGE AND CONCEPTS OF MORAL VIRTUES OF 9 TO 11 YEAR OLDS?

The experimental trial shows a non-statistically significant trend that the Knightly Virtues Programme improved the participants’ knowledge and understanding of virtue language. Further support for this trend comes from the interviews and analysis of the pupil journals, which indicated that participation in the programme appeared to provide the pupils with a better understanding of virtue terms such as courage, gratitude, service, self-discipline and love. Although the experimental group in the trial performed better than the control group, the result was not significant, and this might be explained by ‘contamination’. Interviews with teachers, as well as visits by the research team to the schools, showed that some schools displayed posters of the virtues in the programme around the school, including in some cases in the classes of the control group. Other examples of possible contamination include the experimental group leading assemblies on the Knightly Virtues to other pupils, and some schools adopting the Knightly Virtues as their ‘whole school’ virtues. As such, the control groups in many schools were exposed to the virtue language. This is likely to have influenced the trial results, and may possibly explain why the knowledge and understanding of virtue language also improved over the duration of the trial in the control group. As such, it could be argued that the whole ethos of the school, in relation to the development of virtue language, has been raised by the schools’ participation in the programme.

The teachers, parents and pupils in the interviews viewed virtue language as an essential building block of character, as it provides young people with the tools to articulate their own assessments on their virtue strengths and weaknesses. As Vassalou (2012: 86) argues ‘the task of learning, or recovering, the language of the virtues is one that each individual may need to undertake in their efforts of moral self-education’. It is this language that enables young people to have a vocabulary to reflect critically on their own character virtues, to judge other people’s actions and behaviour, and to express either concern or delight when they witness the good or bad actions of others. An interesting finding from the interviews was that the pupils in one school retained the knowledge and understanding of the virtue language for more than six months after taking part in the programme, which provides hope that the learning from the programme is implanted in the participants.

5.2 TO WHAT EXTENT DOES THE KNIGHTLY VIRTUES PROGRAMME ASSIST THE ENHANCEMENT OF THE APPLICATION AND PRACTICE OF MORAL VIRTUE IN 9 TO 11 YEAR OLDS?

The trial has demonstrated, significantly, that the 9 to 11 year olds who participated in the Knightly Virtues Programme were able to apply through writing, virtue concepts such as gratitude and service in their own contexts, and make judgements about how others should act in any given situation, to a more meaningful extent than those who did not participate in the programme. Participants were encouraged to use the stories as vehicles for reflection on their own moral character strengths, weaknesses and aspirations, although it is difficult within the scope of the trial, to determine whether the participants’ practice had actually improved over the course of the programme. For example, many of the activities the pupils completed in their journals encouraged them to apply the virtuous actions they had read about in the stories to real life examples in their own social and cultural contexts. So it might be expected that those who took part in the programme would have enhanced their ability to apply learning about virtue from one context into their own. This distinction is significant and echoes earlier work (Arthur et al., 2014) pointing to guided self-reflection as an important tool in the development of character in young people. This finding is also important in responding to a common misgiving about character education; namely that the virtues learnt are inherently context-dependent and situation-specific. Judging from this finding, it is arguably safe to assume that the activities within the pupil journals have created the cognitive connections required for participants to ‘think’ in terms of virtue concepts, when required, along a wide spectrum of circumstances. Asking participants to focus on the virtues displayed in the stories, and to then apply these virtues to their own life, seems to have allowed a personal understanding to be formed, by which the virtue knowledge is integrated within the self.

The research team was concerned that those with higher reading and writing comprehension might do better on the test. This was why the assessors were asked to give a reading level and sub-level for each script – which was used as a control variable. It was discovered that this reading level loaded heavily onto all the Domains, apart from Domain E – the application of virtue concepts in personal, social and cultural contexts (see Appendix 3). This suggests that any improvement independent of reading comprehension is most likely to be demonstrated in Domain E, which probably explains why it is the only one that is highly statistically significant. It is not surprising that knowledge and understanding of virtue language (Domain B) is highly dependent upon general reading comprehension. What is more surprising is that application of virtues concepts in modern stories (Domain C) and historical stories (Domain D) appeared also to be tests of reading comprehension. Perhaps this is because this style of test is similar to the reading tests routinely used in schools. This finding indicates that written tests designed to assess learning of virtues of a similar nature, would be wise to control for reading and writing comprehension.

Despite the previously noted difficulties about the prospect of any reliable or accurate monitoring or tracking of actual (behavioural) moral improvement – especially over the short period of the Knightly Virtues Programme – many parents, teachers and pupils themselves did report changes in virtuous behaviour as a result of the programme. The positive evidence for the enhanced application in writing, and possible practice, of virtue is of course truly encouraging. Although it was anticipated that the programme would develop the virtuous language of the pupils who participated, there was less expectation that this would extend to their actual practice. However, it is of course the ‘real world’ contexts of young people today that the programme hoped to have the most impact on.
The research shows that ultimately the Knightly Virtues Programme achieved its aim of enhancing the virtue literacy of the 9 to 11 year olds who participated. The participants both developed their knowledge and understanding of virtue language, as well their ability to apply this virtue knowledge to real life contexts.

5.4 HOW MIGHT PARENTS BE INVOLVED IN EDUCATIONAL PROGRAMMES OF THIS SORT TO ENHANCE HOME/SCHOOL PARTNERSHIPS ON CHARACTER EDUCATION? A deliberate attempt was made with the Knightly Virtues Programme to facilitate a partnership between teachers and parents on matters of character education. Parents were encouraged throughout the programme to share or contribute to the learning experiences of their children. Specifically, they were invited to read the stories alongside their sons and daughters, as well as undertake some of the learning activities in the pupil journals. The parents were also expected to report the progress of their children mid-way through and at the end of the programme.

The feedback from parents was largely supportive of both the aspirations of the programme and in favour of schools teaching character education. This mirrors the finding of the Populus poll, previously reported, and highlights a growing feeling that character cannot be ignored in schools. One concern raised in the feedback was that parents felt that their child ‘was already learning these things at home’. However, this was tempered by the appreciation of learning the vocabulary in the Knightly Virtues Programme and an understanding that, since schools are the primary place young people learn about social interactions with their peers, it was important for concepts such as those contained in the Knightly Virtues to be introduced.

The evidence in the interviews from teachers and parents provides some justification for the claim that the programme has brought teachers and parents together in a spirit of enthusiasm for joint learning about profoundly educationally relevant questions of how we might morally live.

5.5 HOW CAN LEARNING ACTIVITIES, SUCH AS THE KNIGHTLY VIRTUES PROGRAMME BE EVALUATED TO PROVIDE ROBUST EVIDENCE ABOUT ‘WHAT WORKS’?

As previously noted, there are often limits to methods that claim to measure the impact of educational programmes designed to develop character and virtues. As such, few ‘off the shelf’ measures are readily available, and the methodology employed for evaluating the impact of the Knightly Virtues Programme had to be developed from scratch. Some discussion about the suitability of the chosen method is therefore appropriate at this stage.

The evaluation of the Knightly Virtues Programme, reported here, demonstrates that it is possible to conduct meaningful trials to assess the effectiveness of interventions against pre-stated character development aims. A major success of the research is the development of an outcome measure, that has led to some significant results. Using a test format familiar to the pupils seems to enable assessment of real learning about character and virtues. The research team was right to assume that there would be a high correlation between literacy and results on the test; hence it proved a wise decision to measure this and to account for it in the analysis. Furthermore, the use of a teacher assessment group to develop the test and to assess learning was both feasible and desirable, as their experience and knowledge helped ensure the validity of any findings. A positive sign of the success of the assessors was the sufficiently high inter-rater reliability of their marking. Finally, the logistical and practical challenges of running trials in schools were summated and a successful trial was conducted in a suitable number of schools across Britain, involving pre- and post-tests, with both control and experimental groups.

However, there are some lessons to be learned from the trial. Despite significant steps taken to ensure that the trial was carried out in schools, in accordance with the trial protocol (such as requiring them to agree to some compulsory requirements), there were still concerns about contamination. Potential steps to alleviate this would be to spend more time and effort training teachers to be ‘researchers in situ’ and to explore the possibility of recruiting control and experimental groups from separate schools, using a waiting list design i.e. control groups use the Knightly Virtues materials after the trial has finished. However, the latter solution presents its own methodological and logistical challenges, such as randomising control and experimental groups. At several stages during the research, a difficult balance had to be struck between insisting that trial schools follow a strict protocol, and working around their own constraints. Because of these concerns about running trials in schools, it is recommended that evidence drawn from other methods also be employed in any evaluation of character education interventions. Utilising qualitative data allows for the possibility of illustrating, as well as explaining the trial results.

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8 *Should schools teach character* at www.jubileecentre.ac.uk/471/character-education/populus-survey
6 Recommendations

The research summarised in this report demonstrates the significant impact of the Knightly Virtues Programme on the 9 to 11 year old pupils who participated. The research evidence shows that the programme has re-introduced, using contemporary language and modern teaching methods, classical and time-honoured understandings of the virtues. This has helped pupils unfamiliar with this language to nurture and apply them. Ultimately, it has made them more virtue literate.

Based on the findings from the research, this report concludes with some recommendations for consideration by practitioners, policy makers and researchers interested in character education. These are that:

- Primary schools should reflect critically on their current curriculum in order to identify opportunities to teach about character and virtues through existing subjects and current programmes of study. Opportunities to teach character through literature are particularly promising.
- Narratives of cultural and literary inheritance should be harnessed as the basis for the education of moral character. A stronger case should be made for the inclusion of classic stories, such as those in the Knightly Virtues Programme into the curriculum as a platform from which to teach character.
- Opportunities to involve parents in character education programmes to improve home/school partnership on virtue development, should be encouraged.
- The use of personal pupil journals should be encouraged and seen as the basis for young people turning abstract character virtue concepts into steps for practising them in their everyday worlds. Providing structured opportunities for pupils to reflect critically on their own character strengths and weaknesses and to internalise and personalise key character concepts and messages is important for development.
- The link between virtue literacy and virtuous behaviour requires further research and exploration.
- Character-education interventions and resources should be evaluated rigorously. Evaluation could include experimental research in schools, alongside qualitative research, such as interviews, and analysis of pupils’ work. Researchers developing the trial design must understand the context of the school, and teachers must be closely involved in the planning and conception.
- Reading and writing comprehension should be controlled for in written tests designed to measure character and virtue.

‘TO EDUCATE A MAN IN MIND AND NOT IN MORALS IS TO EDUCATE A MENACE TO SOCIETY.’

Theodore Roosevelt
References


‘HUMILITY IS NOT THINKING LESS OF YOURSELF, BUT THINKING OF YOURSELF LESS.’

C.S Lewis
Appendices
Appendix 1: Programme Timeline

**JANUARY 2012**
Literature review
Focus was on selecting appropriate stories for use in the programme and previous research in the field including appropriate methods for evaluation.

**FEBRUARY 2012**
Advisory group formed
Educational professionals from schools and universities met to advise on stories, teaching pack, pupil journals and activities.

**MARCH 2012**
Stories piloted
Stories trialled at Ilam C of E Primary School, Derbyshire and St. Brigid’s Catholic Primary School, Birmingham.

**JANUARY 2013**
Analysis of pre-pilot data
Pre- and post- tests were reviewed and revised by research team.

**FEBRUARY – APRIL 2013**
Teachers and pupils focus groups
5 focus groups held to assess effectiveness of the Knightly Virtues Programme and evaluation tools and methodology.

**APRIL 2013**
Teachers and pupils focus groups
5 focus groups held to assess effectiveness of the Knightly Virtues Programme and evaluation tools and methodology.

**APRIL – MAY 2013**
Pre- and post-tests subject to review and final versions prepared for full trial.

**MAY 2012**
Teaching pack, activities and pupil journals piloted
Materials trialled at Ilam C of E Primary School, Derbyshire and St. Brigid’s Catholic Primary School, Birmingham.

**MAY – JUNE 2012**
Teaching pack, activities and pupil journals piloted
Materials trialled at Ilam C of E Primary School, Derbyshire and St. Brigid’s Catholic Primary School, Birmingham.

**AUGUST 2012**
Knightly Virtues teaching pack and pupil journals launched
Final Knightly Virtues teaching pack and pupil journals designed and printed.

**SEPTEMBER – DECEMBER 2012**
Pre-pilot
Knightly Virtues materials used by 6 pre-pilot schools.

**2013**
2012

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2 The Jubilee Centre for Character and Virtues
OCTOBER 2013
Trial Starts
Knightly Virtues materials used by 29 trial schools (19 of which completed the trial). Control and experimental pupils completed pre-tests.

JUNE 2013
Teachers Assessment Group recruited and consulted
The group consulted on the mark scheme to evaluate the development of knowledge, understanding and application of virtue language.

SEPTEMBER 2013
Trial tools designed and printed
A and B versions of pre- and post-tests, designed to reflect SATs tests, finalised and approved by research team.

OCTOBER 2013
Trial Starts
Knightly Virtues materials used by 29 trial schools (19 of which completed the trial). Control and experimental pupils completed pre-tests.

FEBRUARY 2014
Focus groups
Focus groups conducted with teachers, parents and pupils in 6 schools.

JUNE 2014
Pupil journals analysed
124 pupil journals from 10 schools were collected and analysed, with particular focus on parents’ comments.

FEBRUARY – APRIL 2014
Focus groups
Focus groups conducted with teachers, parents and pupils in 6 schools.

JUNE – JULY 2014
Data analysis
Main data from the trial, interviews and pupil journals analysed.

MARCH – MAY 2014
Pre and post-tests marked
Teachers Assessment Group mark pre- and post-tests. Data was returned to research team and entered into spreadsheet.

SEPTEMBER 2013
Trial tools designed and printed
A and B versions of pre- and post-tests, designed to reflect SATs tests, finalised and approved by research team.

2014
The Jubilee Centre for Character and Virtues
Appendix 2: Description of the Trial Schools

Information about the 19 schools in the trial was sought from websites, Ofsted reports and by asking the schools directly.

<table>
<thead>
<tr>
<th>School</th>
<th>Experimental Group</th>
<th>Control Group</th>
<th>No. of Pupils in School</th>
<th>Urban/Semi-Rural/Rural</th>
<th>Faith/Non-Faith</th>
<th>Ofsted Status</th>
<th>Gender of pupils in trial</th>
<th>Number of English as an Additional Language (EAL) pupils</th>
<th>Number of Special Educational Needs (SEN) pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Yr 6</td>
<td>Yr 5</td>
<td>200</td>
<td>Urban</td>
<td>Catholic</td>
<td>Good</td>
<td>Mixed</td>
<td>Above average</td>
<td>Above average</td>
</tr>
<tr>
<td>B</td>
<td>yr 6</td>
<td>Yr 5</td>
<td>475</td>
<td>Semi Urban</td>
<td>Catholic</td>
<td>Good</td>
<td>Mixed</td>
<td>Below average</td>
<td>Below average</td>
</tr>
<tr>
<td>C</td>
<td>yr 6</td>
<td>Yr 5</td>
<td>451</td>
<td>Urban</td>
<td>Non-Faith</td>
<td>Good</td>
<td>Mixed</td>
<td>Below average</td>
<td>Above average</td>
</tr>
<tr>
<td>D</td>
<td>Yr 6</td>
<td>Yr 5</td>
<td>500</td>
<td>Urban</td>
<td>C of E</td>
<td>Good</td>
<td>Mixed</td>
<td>Well above average</td>
<td>Below average</td>
</tr>
<tr>
<td>E</td>
<td>Yr 6</td>
<td>Yr 5</td>
<td>235</td>
<td>Semi Urban</td>
<td>Non-Faith</td>
<td>Requires Improvement</td>
<td>Mixed</td>
<td>Well below average</td>
<td>Below average</td>
</tr>
<tr>
<td>F</td>
<td>Yr 5</td>
<td>Yr 6</td>
<td>210</td>
<td>Semi Urban</td>
<td>C of E</td>
<td>Good</td>
<td>Mixed</td>
<td>Below average</td>
<td>Well below average</td>
</tr>
<tr>
<td>G</td>
<td>Yr 6</td>
<td>Yr 5</td>
<td>236</td>
<td>Urban</td>
<td>Non-Faith</td>
<td>Outstanding</td>
<td>Mixed</td>
<td>Below average</td>
<td>Below average</td>
</tr>
<tr>
<td>H</td>
<td>Yr 5</td>
<td>Yr 6</td>
<td>490</td>
<td>Urban</td>
<td>Non-Faith</td>
<td>Outstanding</td>
<td>Mixed</td>
<td>Above average</td>
<td>Below average</td>
</tr>
<tr>
<td>I</td>
<td>Yr 6</td>
<td>Yr 5</td>
<td>237</td>
<td>Semi Urban</td>
<td>Non-Faith</td>
<td>Good</td>
<td>Mixed</td>
<td>Above average</td>
<td>Above average</td>
</tr>
<tr>
<td>J</td>
<td>Yr 5</td>
<td>Yr 6</td>
<td>472</td>
<td>Semi Urban</td>
<td>Non-Faith</td>
<td>Good</td>
<td>Mixed</td>
<td>Well below average</td>
<td>Below average</td>
</tr>
<tr>
<td>K</td>
<td>Yr 6</td>
<td>Yr 5</td>
<td>231</td>
<td>Semi Urban</td>
<td>Catholic</td>
<td>Good</td>
<td>Mixed</td>
<td>Well below average</td>
<td>Above average</td>
</tr>
<tr>
<td>L</td>
<td>Yr 6</td>
<td>Yr 5</td>
<td>247</td>
<td>Semi Urban</td>
<td>Non-Faith</td>
<td>Good</td>
<td>Mixed</td>
<td>Average</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>Yr 5</td>
<td>Yr 6</td>
<td>648</td>
<td>Semi Urban</td>
<td>Non-Faith</td>
<td>Outstanding</td>
<td>Mixed</td>
<td>Well above average</td>
<td>Average</td>
</tr>
<tr>
<td>N</td>
<td>Yr 5</td>
<td>Yr 6</td>
<td>188</td>
<td>Rural</td>
<td>C of E</td>
<td>Good</td>
<td>Mixed</td>
<td>Way below average</td>
<td>Above average</td>
</tr>
<tr>
<td>O</td>
<td>Yr 5</td>
<td>Yr 6</td>
<td>468</td>
<td>Urban</td>
<td>Non-Faith</td>
<td>Good</td>
<td>Mixed</td>
<td>Well above average</td>
<td>Above average</td>
</tr>
<tr>
<td>P</td>
<td>Yr 6</td>
<td>Yr 5</td>
<td>283</td>
<td>Semi Urban</td>
<td>Non-Faith</td>
<td>Good</td>
<td>Mixed</td>
<td>Above average</td>
<td>Above average</td>
</tr>
<tr>
<td>Q</td>
<td>Yr 5</td>
<td>Yr 6</td>
<td>410</td>
<td>Semi Urban</td>
<td>Catholic</td>
<td>Requires improvement</td>
<td>Mixed</td>
<td>Above average</td>
<td>Above average</td>
</tr>
<tr>
<td>R</td>
<td>Yr 5</td>
<td>Yr 5</td>
<td>231</td>
<td>Rural</td>
<td>Catholic</td>
<td>N/A</td>
<td>Boys</td>
<td>Well below average</td>
<td>Well below average</td>
</tr>
<tr>
<td>S</td>
<td>Yr 6</td>
<td>Yr 5</td>
<td>250</td>
<td>Semi Urban</td>
<td>Non-Faith</td>
<td>Good</td>
<td>Mixed</td>
<td>Average</td>
<td>Well above average</td>
</tr>
</tbody>
</table>

Frequency tables were viewed for all variables to obtain an idea of their distribution and to look for errors. Data from 1,089 pupils were included in the dataset. Most reported being aged 9 (48%) or 10 (45%) at pre-test. At post-test, 75% reported the same age, 24% a year older; however 2 (0.6%) reported being a year younger and 1 (0.1%) 2 years older. There were also missing data for 11 (1%). This gives us some idea of the accuracy of data received (about 98%). It also suggests that on average, the post-test was about 3 months after the pre-test.
Appendix 3:
Overview of the Trial Data

YEARS 5 AND 6
The experimental group consisted of 622 pupils, compared with a smaller control group of 467. 55% of the pupils were in Year 5, the rest in Year 6. The control group was disproportionately in year 5 (63%) rather than year 6 (37%); the skewing of the control group to year 5 was significant and therefore controlled for in the analysis.

READING AND WRITING COMPREHENSION
The correlation between pre- and post-test school national curriculum level was 0.76, indicating reasonably good stability. Between pre- and post-test reading levels, as judged by the scripts, the equivalent correlation was 0.49, either suggesting that it is harder to judge the reading level from just one exercise, or that individual pupils varied considerably in how well they performed on the two tests. Within the pre-test, correlations are fairly high between the 5 Domains and the reading and writing level. This was expected, which is why it was measured, so that it could be taken into account.

With factor analysis, we might expect Domain A, and reading and writing comprehension to be one factor, and the other Domains to be a second factor. Therefore, factor analysis was undertaken with 2 factors extracted separately for pre- and post-test scores (see table below). The table below indicates that Reading Level and Domains A, B and C load heavily upon the first factor, which we have called ‘General reading comprehension’. Only Domain E loads heavily on the second factor, which we have called ‘specific virtues comprehension’. This suggests that any improvement independent of Reading Level is most likely to be demonstrated with Domain E. As this is indeed the case, more needs to be done to disentangle the Reading Level from the other Domains.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test factor loadings</th>
<th>Post-test factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General reading</td>
<td>Specific virtues</td>
</tr>
<tr>
<td></td>
<td>comprehension</td>
<td>comprehension</td>
</tr>
<tr>
<td>A</td>
<td>.850</td>
<td>.374</td>
</tr>
<tr>
<td>B</td>
<td>.786</td>
<td>.464</td>
</tr>
<tr>
<td>C</td>
<td>.857</td>
<td>.257</td>
</tr>
<tr>
<td>D</td>
<td>.540</td>
<td>.735</td>
</tr>
<tr>
<td>E</td>
<td>.275</td>
<td>.925</td>
</tr>
<tr>
<td>Read</td>
<td>.807</td>
<td>.339</td>
</tr>
</tbody>
</table>

PAPER VERSIONS A AND B
There were two versions of the test; A and B, so that students answered different questions pre- and post-test. Sixty-one per cent of pre-test papers were version A, but the proportion for control and experimental was the same. For both pre- and post-test, Domains A and B and the reading and writing levels showed no significant differences between versions A and B. For Domain C, non-significantly (p=0.055) higher scores were obtained post-test with version B. For Domain D, higher pre-tests scores were with version A (p=0.03). With Domain E, higher scores with version A were evident pre-test (0.27 scores higher, p=0.004) and marginally significant post-test (0.20 scores higher, p=0.045). As the proportion of students taking paper A pre-test is the same for both control and experimental groups, this should not affect the overall results.

MARKING PROCEDURE
There is potential for assessors to mark more leniently if they think it is a post-test from the experimental group. To minimise this risk, the front cover of each test, which contained the pupil’s name, class and school, was removed and replaced by a unique randomly generated number. Each assessor was sent representative samples, ie. an equally large random allocation from within each group.

ESTIMATION OF INTER-RATER RELIABILITY
For inter-rater reliability (IRR), a 2 way mixed average measures with absolute agreement. This is mixed as teachers considered a fixed effect, but papers/children are a random sample. For the initial exercise, IRR varied between 0.65 for Domain C and 0.86 for Reading Level. In the second pre- and post-test exercises, this dropped to between 0.48 for Domain C post-test and 0.76 for Reading Level post-test. Explanations for higher initial IRRs could include taking more care initially and some conferring between assessors. However, these differences are non-significant. As an example, the 95% confidence interval for the post-test Reading Level IRR is between 0.55 and 0.87.

‘A COUNTRY CANNOT SUBSIST WELL WITHOUT LIBERTY, NOR LIBERTY WITHOUT VIRTUE.’
Jean-Jacques Rousseau
## Appendix 4:
Experimental Trial Results

<table>
<thead>
<tr>
<th>Domain</th>
<th>Experimental group</th>
<th>Control group</th>
<th>Difference in means (E-C)</th>
<th>Difference in change during programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge and understanding of virtue language</td>
<td>2.626</td>
<td>2.872</td>
<td>0.246</td>
<td>2.591</td>
</tr>
<tr>
<td>Application of virtue concepts in modern day stories</td>
<td>2.998</td>
<td>3.155</td>
<td>0.157</td>
<td>3.108</td>
</tr>
<tr>
<td>Application of virtue concepts in historical stories</td>
<td>2.279</td>
<td>2.661</td>
<td>0.382</td>
<td>2.253</td>
</tr>
<tr>
<td>Application of virtue concepts in personal contexts</td>
<td>1.522</td>
<td>2.231</td>
<td>0.709</td>
<td>1.574</td>
</tr>
</tbody>
</table>

NB: These results are estimated marginal means from the ANOVAs, i.e., they are controlled for other variables in the model.

In addition to the appendices above, the following materials from the programme can be found on the Jubilee Centre for Character and Virtues website at [www.jubileecentre.ac.uk](http://www.jubileecentre.ac.uk):
- The *Knightly Virtues* teaching pack and pupil journals
- The pre- and post-tests
- A description of the marking scheme
Research Team

JAMES ARTHUR
PRINCIPAL INVESTIGATOR
Professor James Arthur, Director of the Jubilee Centre for Character and Virtues, is the Head of the School of Education and Professor of Education. He has written extensively on the relationship between theory and practice in education, particularly the links between communitarianism, social virtues, citizenship, religion and education. A leading expert in the field of character and values, James is also Editor of the British Journal of Educational Studies and Director of CitizED, an organisation in higher education promoting citizenship.

DAVID CARR
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‘COURAGE IS THE MOST IMPORTANT OF ALL THE VIRTUES, BECAUSE WITHOUT COURAGE YOU CAN’T PRACTICE ANY OTHER VIRTUE CONSISTENTLY. YOU CAN PRACTICE ANY VIRTUE ERRATICALLY, BUT NOTHING CONSISTENTLY WITHOUT COURAGE.’

Maya Angelou
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- Hook Lane Primary School, Kent
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- Brooklands Primary School, Blackheath
- Lee Manor Primary School, Lewisham
- Cherry Orchard Primary School, Greenwich
- Bursted Wood Primary School, Bexleyheath
- Gunter Primary School, Birmingham
- St Andrew’s C of E Junior School, Glossop
- Arden Primary School, Birmingham
- Benson Community School, Birmingham
- Paget Primary School, Birmingham
- SS. Mary and John Catholic Primary School, Birmingham
- St Joseph’s Catholic Primary School, Swansea
- St Columba’s College, St Albans
- Topcliffe School, Birmingham
- St Thomas More Catholic Primary School, Bexleyheath
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- Holy Innocents Catholic Primary School, Bromley
- St Luke's C of E Primary School, Glossop
- Tintwistle C of E School, Glossop
- St James’ C of E Primary School, Glossop
- St Willfrid’s Catholic Primary School, Cheshire
- St Mary’s Catholic Primary School, Marple Bridge
- St Anne’s Catholic Primary School, Buxton
- St Clare’s Primary School, Chester
- Atherton St George’s C of E Primary School, Manchester
- Burnt Oak Junior School
- Naima JPS, London
- Nishkam School, Birmingham
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- Our Lady of Grace Primary School, Charlton
- Brindishe Green School, Hither Green
- St Brigid’s Catholic Primary School, Birmingham
- St Matthew’s C of E School, Birmingham
- Firs Primary School, Birmingham
- George Dixon Primary School, Birmingham
- Kingaland Primary School, Birmingham
- St Francis Catholic Primary School, Birmingham
- Glenmead Primary School, Birmingham
- Holy Innocents Catholic Primary School, Kent
- Loyola Prep School, Essex
- Brindishe Lee Primary School, London
- Holy Trinity C of E Primary School, Birmingham
- St John’s and St Peter’s C of E Academy, Birmingham
- Meridian Primary School, Greenwich
- St James’ C of E Primary School, Derbyshire
- Kehelland Village School, Cornwall
- Edenthorpe Hall Primary School, Doncaster
- Our Lady of Fatima Catholic Primary School, Birmingham
- Hill West Primary School, Birmingham
- Forestdale Primary School, Birmingham
- John Wollaston Anglican Community School, Australia
- Cuckoo Hall School, Edmonton
- Cottesbrook Junior School, Birmingham
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- St Anne’s Catholic Primary School, Derbyshire
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- St Mary’s C of E School, Birmingham
- St Jude’s RC Junior and Infant School, Birmingham
- Pegasus Primary School, Oxford
- Ealderham Primary School, London
- George Heriot’s School, Edinburgh
- Woolhampton C of E Primary School, Reading
- Holbeach Primary School, Lewisham
- Whitehouse Common School, Birmingham
- Millennium Primary School, London
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‘INSTILLING A SENSE OF SELF-DISCIPLINE AND FOCUS WHEN THE KIDS ARE YOUNGER MAKES IT SO MUCH EASIER BY THE TIME THEY GET TO HIGH SCHOOL.’

Professor Amy Chua
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The *Knightly Virtues* teaching pack and pupil journals are available for free to any school interested in using them. Additional stories and accompanying teaching resources, inspired by the *Knightly Virtues*, are also in development. If you would like to find out more about running the programme in your school, and to request free copies of the resources please contact the Jubilee Centre for Character and Virtues.